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## **GRADUATE SCHOOL**

#### The Graduate School

2022 - 2023 Bulletin • Volume 125 • August 2022

## **Purpose of this Publication**

This publication provides a description of those programs and activities of Baylor University which are indicated in the title and text. It is not an offer to make a contract.

The administration and faculty of Baylor University believe that the educational and other programs of Baylor University, including those described herein, are effective and valuable, and that they provide skills and/or understanding in keeping with the subject matter of the program.

The ultimate results of programs offered, however, in terms of achievement, employment, professional licensing, or other measure, are also dependent on factors outside the programs, such as the personality and energy of the students, governmental or institutional regulations, and market conditions. Therefore, except as specifically stated herein, Baylor University makes no representation or contract that following a particular course or curriculum will result in specific achievement, employment or qualification for employment, admission to degree programs, or licensing for particular professions or occupations.

It is sometimes necessary or appropriate to change the programs offered. Baylor University retains the right to terminate or change any and all aspects of its educational and other programs at any time without prior notice.

## **Notice of Nondiscriminatory Policy**

Baylor University complies with all applicable federal and state nondiscrimination laws, and does not engage in prohibited discrimination on the basis of race, color, nationality or ethnic origin, gender, age, disability or veteran status in either employment or the provision of services. The University is governed by a predominantly Baptist Board of Regents and is operated within the Christian-oriented aims and ideals of Baptists. Baylor is also affiliated with the Baptist General Convention of Texas, a cooperative association of autonomous Texas Baptist churches. As a religiously-controlled institution of higher education, Baylor University is exempted from compliance with some provisions of certain civil rights laws, including some provisions of Title IX of the Education Amendments of 1972.

## **Equal Access to University Educational Programs**

Baylor University provides equal access to all University educational programs to every qualified student. However, if any student requires special personal services or equipment, the student will be responsible for the expenses thereof. This policy includes the expense of providing personal tutors, personal attendants, medical technicians, and so forth. The Office of Access and Learning Accommodation (OALA) will assist such a student in communicating with the proper community or governmental agency to secure any available financial assistance to meet his or her needs.

## **Directory Information**

Directory information is that information that is customarily made public without the written consent of the student. However, under the provisions

of the Family Educational Rights and Privacy Act of 1974, a student may ask Baylor University not to disclose directory information by making written notice to the Office of the Registrar. Requests for nondisclosure will be honored by the university until notified in writing that information should no longer be withheld. Directory information includes: name, address, telephone number, e-mail address, dates of attendance, level and classification, university ID card photograph, previous institution(s) attended, field(s) of study, awards, scholarships, honors, degree(s) conferred and date(s), full-time/part-time status, earned hours, expected graduation date or degree candidacy, thesis and dissertation titles and advisors, past and present participation in officially recognized sports and activities, physical factors of athletes (e.g. age, height, weight), and date and place of birth.

## **Legal Notice**

If you are applying for admission to a program that may prepare you for an occupational license and/or if you later decide to change to such a program, Texas law requires that Baylor notify you of your potential ineligibility to obtain a license due to prior criminal convictions. For more information visit https://www.baylor.edu/admissions/index.php? id=948617 (https://www.baylor.edu/admissions/?id=948617).

### **Student Aid Information**

Financial aid programs available to undergraduate students include academic and need-based scholarships, grants, Federal Work-Study, federal educational loans, and alternative loans through various private lenders. Students interested in consideration for financial aid should complete the Free Application for Federal Student Aid (FAFSA) online at www.studentaid.gov (http://fafsa.gov). Incoming students interested in consideration for university need-based scholarships should complete the CSS Profile online at www.cssprofile.org (https://cssprofile.collegeboard.org/?excmpid=vt-00231) during their incoming year. Visit the Student Financial Aid Office website at www.baylor.edu/sfs (https://www.baylor.edu/sfs/) for additional information regarding the financial aid application process.

The provisions of this catalog do not constitute a contract, expressed or implied, between Baylor University and any applicant, student, student's family, faculty, or staff member. Baylor University reserves the right to withdraw courses at any time, or change fees, tuition, rules, calendar, curricula, degree programs, degree requirements, graduation procedures, and any other requirement affecting students. Changes will become effective at the time the proper authorities so determine, and the changes will apply to both prospective students and those already enrolled. This catalog is a general information publication only and it is not intended to nor does it contain all regulations that relate to students.

## **Mission Statement**

The mission of Baylor University is to educate men and women for worldwide leadership and service by integrating academic excellence and Christian commitment within a caring community.

Chartered in 1845 by the Republic of Texas and affiliated with the Baptist General Convention of Texas, Baylor is both the state's oldest institution of higher learning and the world's largest Baptist university. Established to be a servant of the church and of society, Baylor seeks to fulfill its calling through excellence in teaching and research, in scholarship and publication, and in service to the community, both local and global. The vision of its founders and the ongoing commitment of generations of

students and scholars are reflected in the motto inscribed on the Baylor seal: *Pro Ecclesia, Pro Texana* — For Church, For Texas.

Pro Ecclesia. Baylor is founded on the belief that God's nature is made known through both revealed and discovered truth. Thus, the University derives its understanding of God, humanity, and nature from many sources: the person and work of Jesus Christ, the biblical record, and Christian history and tradition, as well as scholarly and artistic endeavors. In its service to the church, Baylor's pursuit of knowledge is strengthened by the conviction that truth has its ultimate source in God and by a Baptist heritage that champions religious liberty and freedom of conscience. Without imposing religious conformity, Baylor expects the members of its community to support its mission. Affirming the value of intellectually informed faith and religiously informed education, the University seeks to provide an environment that fosters spiritual maturity, strength of character, and moral virtue.

Pro Texana. Integral to its commitment to God and to the church is Baylor's commitment to society. Whereas that society in the mid 1800s was limited to Texas, today Baylor's sphere of influence is indeed the world. The University remains dedicated to the traditional responsibilities of higher education — dissemination of knowledge, transmission of culture, search for new knowledge, and application of knowledge — while recognizing the global proportions these responsibilities have assumed. Moreover, within the context of an ethnically and culturally diverse community, Baylor strives to develop responsible citizens, educated leaders, dedicated scholars, and skilled professionals who are sensitive to the needs of a pluralistic society. To those ends, Baylor provides expanded opportunities for civic education and for church and community service at home and abroad.

Pro Ecclesia, Pro Texana. Baylor University is committed to excellence at the undergraduate, graduate, and professional levels. Within the undergraduate programs, the University seeks to familiarize students with the principal bodies of knowledge, cultural viewpoints, belief systems, and aesthetic perspectives that affect the world in which they live. Within the graduate and the professional programs, the University provides advanced educational opportunities to develop ethical and capable scholars and practitioners who contribute to their academic disciplines, professional fields, and society. Baylor encourages all of its students to cultivate their capacity to think critically, to assess information from a Christian perspective, to arrive at informed and reasoned conclusions, and to become lifelong learners. Beyond the intellectual life, the University pursues the social, physical, ethical, and spiritual development of each student.

Aware of its responsibility as the largest Baptist educational institution in the world and as a member of the international community of higher learning, Baylor promotes exemplary teaching, encourages innovative and original research, and supports professional excellence in various specialized disciplines. Advancing the frontiers of knowledge while cultivating a Christian world-view, Baylor holds fast to its original commitment -— to build a university that is *Pro Ecclesia, Pro Texana*.

# Historical Highlights of Baylor University

Baylor University was founded under the leadership of Judge R.E.B. Baylor, Reverend James Huckins, and Reverend William Milton Tryon, three visionary pioneer missionaries working through the Texas Baptist Education Society. They, along with other associations, sent

representatives in 1848 to create the Baptist State Association, which later became the Baptist State Convention.

Year	Highlight
1845	Baylor chartered on February 1 by the Republic of Texas.
1849	Instruction in law began.
1857	School of Law organized.
1883	School of Law closed.
1920	School of Law reorganized.
1886	Baylor merged with Waco University and moved to Waco.
1903	College of Medicine organized in Dallas by assuming responsibility for operations of the University of Dallas Medical Department.
1943	Moved to Houston.
1969	Given independent status.
1903	College of Pharmacy organized in Dallas.
1930	College or Pharmacy terminated.
1905	Theological Seminary organized in Waco.
1907	Separated from Baylor University.
1910	Moved to Fort Worth.
1918	College of Dentistry organized in Dallas by taking over the State Dental College, founded in 1905.
1971	The College was separately incorporated in 1971, although Graduate programs continued to be offered through Baylor University.
1996	The College became a part of the Texas A&M System on September 1.
1919	Baylor Hospital organized in Dallas, now Baylor University Medical Center.
1919	College of Arts and Sciences organized.
1919	College of Fine Arts organized, which consisted of offerings in music and in expression.
1921	Terminated in favor of the present School of Music.
1919	School of Education organized.
1921	Training School of the Texas Baptist Memorial Sanitarium, originally organized as a diploma-granting program in 1909, incorporated into Baylor University as Baylor Hospital School of Nursing.
1950	The School of Nursing reorganized as an academic unit of Baylor University offering a Bachelor of Science in Nursing degree.
2000	Renamed Louise Herrington School of Nursing in honor of Louise Herrington Ornelas.
1921	School of Music organized.
1923	School of Business organized.
1959	Renamed Hankamer School of Business in honor of Mr. and Mrs. Earl Hankamer of Houston.
1947	Graduate School organized. (Graduate study and degrees have been offered since 1894.)
1951	Graduate program in hospital administration established in conjunction with the Army Medical Field Service School, Fort Sam Houston.
1971	Graduate program in physical therapy added at Fort Sam Houston.

1971	Program in physician's assistant added in collaboration with the Army Medical Field Service School, Fort Sam Houston; terminated in 1977.
1972	Army Medical Field Service School renamed Academy of Health Sciences of the U.S. Army.
1973	Baylor University Memorandum of Agreement with the U.S. Army Academy of Health Sciences affiliated over 20 programs of instruction with 150 course offerings for academic credit at Baylor University; terminated in 1977 for all programs except Health Care Administration and Physical Therapy.
1987	University School organized. Responsibilities reassigned to other academic units in 1992.
1993	George W. Truett Theological Seminary organized in Waco.
1994	Seminary classes began.
1995	School of Engineering and Computer Science organized.
2002	Honors College organized.
2005	School of Social Work granted independent status from the College of Arts and Sciences.
2015	Renamed Diana R. Garland School of Social Work in honor of its inaugural dean, Diana R. Garland, Ph.D.
2014	Robbins College of Health and Human Services organized.
2021	Achieved "R1" status by the Carnegie Classification of Institutions of Higher Education as a university with "very high research activity."

## **Board of Regents**

Jay A. Brown Tyler C. Cooper Diane D. Dillard Sarah Gahm Kristina "Krissy" Doerner Guidi Larry P. Heard Michael P. Heiskell Paula R. Hurd **Neal Jeffrey** Mark E. Lovvorn Katie Jo Luningham Rene Maciel Jill Manning William "Bill" E. Mearse Michael McFarland Melissa Purdy Mines Alicia D.H. Monroe B. Todd Patterson Randolph "Randy" L. Pullin Todd A. Reppert Mark Rountree Manny Ruiz David M. Slover Kim Stevens Julie Hermansen Turner

## **Honoris Causa Regents**

Faith Cederholm Beaty Sarah L. Dolan

Dennis R. Wiles Don Willett Sher Isada Ally Perkins Mark V. Petersen Brian Raines

Regents as of May 31, 2022

# **Administration President's Council**

Name	Title
Linda A. Livingstone, B.S., M.B.A., Ph.D.	President
Nancy W. Brickhouse, B.S., M.A., Ph.D.	Vice President and Provost
Jason D. Cook, B.A.	Vice President for Marketing and Communications and Chief Marketing Officer
Brett Dalton, B.B.A., M.B.A.	Chief Business Officer
Robyn L. Driskell, B.A., M.A., Ph.D.	Vice President and Chief Compliance and Risk Officer
Malcolm Foley, B.A., M.Div.	Special Advisor to the President for Equity & Campus Engagement
Cheryl Gochis, B.A., M.A.	Vice President for Human Resources and Chief Human Resources Officer
Tiffany Hogue, B.A., J.D.	Chief of Staff to the President
Christopher W. Holmes, B.A., J.D.	General Counselor and Chief Legal Officer and Corporate Secretary
Kevin P. Jackson, A.A., B.A., M.A., Ph.D.	Vice President for Student Life
Kristy J. Orr, B.A., LLD, J.D.	Board Professional
Mack Rhoades, IV, B.S., M.S.	Vice President and Director of Intercollegiate Athletics
David P. Rosselli, B.A., M.A.	Vice President for University Advancement

## **Academic Deans & Vice Provosts**

#### **Deans**

Dealis	
Name	Title
Jeffry Archer, MLIS	Dean, University Libraries
Sheri L. Dragoo, B.S., M.S., Ph.D.	Interim Dean, Robbins College of Health and Human Sciences
Linda Plank, R.N., NEW-BC, Ph.D.	Dean, Louise Herrington School of Nursing
Douglas V. Henry, B.A., M.A., Ph.D.	Dean, Honors College
J. Larry Lyon, B.A., M.A., Ph.D.	Dean, Graduate School
Sandeep Mazumder, B.A., M.A., M.A., Ph.D.	Dean, Hankamer School of Business
Shanna Hagan-Burke, B.A., M.A., Ph.D.	Dean, School of Education
Gary Mortensen, B.M.E., M.M., D.M.A.	Dean, School of Music
Lee C. Nordt, B.S., M.S., Ph.D.	Dean, College of Arts and Sciences

Dennis L. O'Neal, B.S., M.S., Ph.D.	Dean, School of Engineering and Computer Science
Jon Singletary, B.A., M.Div.,	Dean, Diana R. Garland School of Social
M.S.W., Ph.D.	Work
Todd D. Still, B.A., M.Div.,	Dean, George W. Truett Theological
Ph.D.	Seminary
Bradley J.B. Toben, B.A., J.D. LL.M.	, Dean, School of Law

#### **Vice Provosts**

Name	Title
Lori Baker, B.A., M.A., Ph.D.	Vice Provost for Faculty Development and Diversity
James M. Bennighof, B.M., M.A., Ph.D.	Vice Provost for Faculty Affairs
Gary R. Carini, M.P.A., M.A., Ph.D.	Vice Provost for Institutional Research and Professional Education
Kevin Chambliss, B.S., Ph.D.	Vice Provost for Research
Jeffrey S. Hamilton, B.A., M.A., Ph.D.	Vice Provost for Global Engagement
J. Wesley Null, B.S.Ed., M.S.Ed., Ph.D.	Vice Provost for Undergraduate Education & Institutional Effectiveness
Lisa Rhiney, B.A., M.B.A., C.P.A.	Vice Provost for Administration and Operations

## **Student Life Officers**

Name	Title
Burt Burleson, B.A., M.Div., D.Min.	University Chaplain
Sharra Hynes, B.Med., M.M.E., Ph.D.	Associate Vice President for Student Life and Dean for Student Learning and Engagement
James G. Marsh, Ph.D.	Dean for Student Health and Wellness and Executive Director for Counseling Services
Bethany McCraw, B.S., M.S., B.S.Ed., M.S.Ed.	Associate Dean for Student Conduct Administration
Elizabeth D. Palacios, B.A., M.S.Ed., Ph.D.	Dean for Student Development

## **Campus Safety**

Name	Title
Mark Childers, B.S., M.S.	Associate Vice President - Public Safety and Security
John Kolinek, B.S.	Chief of Police

## **The Graduate School**

Name	Title
J. Larry Lyon, B.A., M.A., Ph.D.	Vice Provost and Dean of Graduate School
Sara L. Dolan, B.S., M.A., Ph.D.	Associate Dean of Professional Development
William Hockaday, B.Sc., Ph.D.	Associate Dean for Research
Christopher Rios, B.M., B.M.E., M.A., Ph.D.	Associate Dean for Enrollment Management

Becca Cassady, B.A., Ph.D.	Director of the Graduate Writing Center
Sheila Dooley, B.A.	Assistant to the Vice Provost and Dean of Graduate School
Anna Henderson, B.A.	Business Manager
Tosha A. Hendrickson, B.A., M.S.Ed.	Admissions & Recruitment Director
Eric Hooley, B.S.	Graduate Admissions Systems Specialist
Alanna D. Martinez, B.S.	Administrative Associate for Admissions & Recruitment
Dana Matthews	Admissions Specialist
Alana Schaeper, B.A.	Assistant Director of Student Records
Laura Sepanski, B.A.	Program Coordinator for Professional Development

For General Information

Graduate School/Admissions: (254) 710-3588

Graduate Admissions@baylor.edu

One Bear Place # 97264 Waco, TX 76798-7264

# Other Schools, Colleges, and Institutes

## **Waco, Texas**

## **College of Arts and Sciences**

Name	Title
Lee C. Nordt, B.S., M.S., Ph.D.	Dean
Brian E. Raines, B.A., M.S., D.Phil.	Associate Dean for Research and Strategic Planning
Kimberly Kellison, B.A., M.A., Ph.D.	Associate Dean for Humanities and Social Sciences
Marcie Moehnke, B.S., M.S., Ph.D.	Associate Dean for Sciences
Frieda H. Blackwell, B.A., M.A., Ph.D.	Associate Dean for Undergraduate Studies, Humanities
Blake W. Burleson, B.A., M.A., Ph.D.	Associate Dean for Undergraduate Studies, Strategic and Enrollment Initiatives
Carrolle Kamperman, B.A., M.A.	Associate Dean for Undergraduate Studies, Student Success Management
Andrew Hogue, B.S., M.S., Ph.D.	Associate Dean for Engaged Learning

### **Robbins College of Health and Human Sciences**

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Name	Title
Sheri Dragoo, B.S., M.S., Ph.D.	Interim Dean
Denny B. Kramer, B.A., M.S., Ph.D.	Associate Dean for Graduate Programs and the Division of Health Professions
Michaela J. Ritter, CCC/SLP, Ph.D.	Associate Dean for Undergraduate and International Studies
M. Renee Umstattd Meyer, B.S., M.S., Ph.D.	Associate Dean for Research
Will Driskell, B.A., M.B.A.	Assistant Dean for Finance and Operations

#### **Hankamer School of Business**

Name	Title
Sandeep Mazumder, B.A., M.A., M.A., Ph.D.	Dean
Timothy Kayworth, B.A., M.B.A., Ph.D.	Associate Dean, Graduate Programs
Mark G. Dunn, B.S., B.A., M.B.A., Ph.D.	Associate Dean, Undergraduate Programs
Mitchell Neubert, B.S., Ph.D.	Associate Dean, Research and Faculty Development
Krista A. Howell, B.S.Ed., M.S.Ed.	Assistant Dean, Undergraduate Programs
Anthony E. Lapes, B.S., M.S.Ed.	Assistant Dean, Operations
Kenneth K. Buckley, B.B.A., M.B.A.	Assistant Dean, Career Management

#### **School of Education**

Name	Title
Shanna Hagan-Burke, B.A., M.S.Ed., Ph.D.	Dean
Terrill Saxon, B.A., M.S.Ed., Ph.D.	Associate Dean for Graduate Studies and Global Engagement
Suzanne M. Nesmith, B.S., M.Ed., Ph.D.	Associate Dean for Undergraduate Education and Graduate Program Director for Master of Arts in Teaching
Grant Morgan, B.S., M.S., Ph.D.	Associate Dean for Research
Joel R. Porter, B.S., M.S.Ed., Psy.D.	Assistant Dean
Rishi Sriram, B.A., M.S.Ed., Ph.D.	Graduate Program Director for Educational Leadership
Lakia Scott, B.A., M.S.Ed., Ph.D.	Graduate Program Director for Curriculum & Instruction
Tonya Davis, B.S., M.S.Ed., Ph.D.	Graduate Program Director for Educational Psychology (Ph.D. in Educational Psychology)
Nicholas Benson, B.A., M.S., Ed.S., Ph.D.	Graduate Program Director for Educational Psychology (Ph.D. in School Psychology)
Jeff Petersen, B.S. M.A., Ph.D	Graduate Program Director for Sports Management
Laila Sanguras, B.S., M.S., Ph.D.	Graduate Program Director for Ed.D. Online Program

### **School of Engineering and Computer Science**

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Name	Title
Dennis L. O'Neal, B.S., M.S., Ph.D.	Dean
Kenneth W. Van Treuren, B.S., M.S.E., D.Phil.	Associate Dean for Research and Faculty Development
Michael W. Thompson, B.S.E.E., M.S.E.E., Ph.D.	Associate Dean for Undergraduate Programs
G. Michael Poor, B.S., M.S., Ph.D.	Graduate Program Director for Computer Science
lan Gravagne, B.S., M.S., Ph.D.	Graduate Program Director for Electrical and Computer Engineering

Stephen T. McClain, B.S.,	Graduate Program Director for Mechanical
M.E., M.S., Ph.D.	Engineering

#### **School of Music**

Name	Title
Gary Mortensen, B.M.E., M.M., D.M.A.	Dean
Michael Alexander, B.M.E., M.M., D.M.A.	Associate Dean for Academic Affairs
Michael N. Jacobson, B.M., M.M., D.M.A.	Associate Dean for Operations
Timothy McKinney, B.S., M.M., Ph.D.	Associate Dean for Graduate Studies

## Diana R. Garland School of Social Work

Name	Title
Jon E. Singletary, B.A., M.Div., M.S.W., Ph.D.	Dean
Melody Zuniga, B.A., M.S.W.	Associate Dean for Academic Affairs
Holly K. Oxhandler, B.S., M.S.W., Ph.D.	Associate Dean for Research and Faculty Development
Robin K. Rogers, B.A., M.R.E., M.S.S.W., Ph.D.	Co-Graduate Program Director for Ph.D. in Social Work
T. Laine Scales, B.A., M.S.W., D.Min., Ph.D.	Co-Graduate Program Director for Ph.D. in Social Work

## **Dallas, Texas**

### **Louise Herrington School of Nursing**

Louise Herrington Concor of Huroling		
Name	Title	
Linda Plank, Ph.D., R.N., N.E.AB.C.	Dean	
Marie Lindley, Ph.D., R.N, C.N.E	Associate Dean for Academic Affairs	
Alona Angosta, Ph.D., APRN, FNP-C, FAAN	Associate Dean for Research & Scholarship	
Kristi Feutz, D.N.P., A.P.R.N., F.N.P-B.C.	Associate Dean for Online Graduate Programs	
Dora Bradley, Ph.D., R.NB.C., F.A.A.N.	Associate Dean for Strategic Initiatives and Innovations	
Karen Cotter, Ph.D., R.N., C.N.E.	Associate Dean for Pre-Licensure Programs	
Elaine Lark, MLA	Interim Director of Student Services	
Jamie Quinn, MSIS	Director of Nursing Learning Resources Center	

## Joint Base San Antonio-Fort Sam Houston, San Antonio, Texas

## **U.S. Army Medical Center of Excellence**

#### **MEDCoE**

Name	Title
Dennis J. LeMaster, Major General, USA	Commanding General, MEDCoE
Brian Burk, Colonel	Deputy Commandant, MEDCoE

Matthew S. Douglas, Lieutenant Colonel, D.Sc.P.A.S.	Dean, Graduate School, MEDCoE
Laytala Hawkins, Lieutenant Colonel, Ph.D., LCSW, BCD	Associate Dean, Graduate School, MEDCoE
Teresa S. Hinnerichs, Lieutenant Colonel, Ph.D.	Director MHA/MBA Program
Carrie Hoppes, Lieutenant Colonel, Ph.D.	Director, Doctoral Program in Physical Therapy
Renee E. Cole, Colonel, Ph.D.	Director, Graduate Program in Nutrition
Kerri Van Arnem, Major, D.Sc.P.A.S.	Director, Graduate Education Manager-PA
Carrie W. Hoppes, Lieutenant Colonel, Ph.D.	Director, Graduate Education Manager-PT
Steven S. Kertes, Colonel, D.N.P.	Director, Doctoral Program in Anesthesia Nursing

Director, Doctoral Program in Occupational

## Brooke Army Medical Center JBSA Fort Sam Houston, San Antonio, Texas

Enrique V. Smith-Forbes,

Colonel, Ph.D.

Name	Title
Bryan B. Pickens, Major,	Director, Doctor of Science in Physical
D.Sc.P.T.	Therapy, Orthopaedics
Brian T. Gregg, Lieutenant Colonel, Ph.D.	Director, Doctor of Science in Occupational Therapy
Brett Gendron, Major,	Director, Doctor of Science in Physician
D.Sc.P.A.S.	Assistant Studies, Emergency Medicine
Jesse Gronsky, Major,	Director, Doctor of Science in Physician
D.Sc.P.A.S.	Assistant Studies, General Surgery
Kristopher Lewis, Major,	Director, Doctor of Science in Physician
D.Sc.P.A.S.	Assistant Studies, Clinical Orthopaedics

#### Fort Bliss, El Paso, Texas William Beaumont Army Medical Center

Name	Title
Preston Lopez, Major, D.Sc.P.A.S.	Director, Doctor of Science in Physician Assistant Studies, Clinical Orthopaedics
Lisa Jin, Major, D.Sc.P.A.S.	Director, Doctor of Science in Physician Assistant Studies, Emergency Medicine

#### Fort Hood, Killeen, Texas Carl R. Darnall Army Medical Center

Name	Title
Mohamad Umar, Lieutenant	Director, Doctor of Science in Physician
Colonel, D.Sc.P.A.S.	Assistant Studies, Emergency Medicine

#### Fort Lewis, Tacoma, Washington Madigan Army Medical Center

Name	Title
John E. King, Major,	Director, Doctor of Science in Physician
D.Sc.P.A.S.	Assistant Studies, Clinical Orthopaedics
Aaron J. Cronin, Lieutenant	Director, Doctor of Science in Physician
Colonel, D.Sc.P.A.S.	Assistant Studies, Emergency Medicine

#### Nellis Air Force Base (AFB), Las Vegas, Nevada Mike O'Callaghan Military Medical Center

Name	Title
Danny Villalobos, Major,	Director, Doctor of Science in Physician
D.Sc.P.A.S.	Assistant Studies, Emergency Medicine

## Travis Air Force Base (AFB), Fairfield, California David Grant Medical Center

Name	Title
Jeremy Barnett, Major,	Director, Doctor of Science in Physician
D.Sc.P.A.S.	Assistant Studies, Clinical Orthopaedics

#### West Point, New York, U.S. Military Academy Keller Army Community Hospital

Name	Title
Mike Crowell, Lieutenant	Director, Doctor of Science in Physical
Colonel, Ph.D.	Therapy, Sports Medicine

## **Accreditations and Memberships**

Baylor University is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award baccalaureate, masters, and doctoral degrees. Questions about the accreditation of Baylor University may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097, by calling (404)679-4500, or by using information available on SACSCOC's website (https://sacscoc.org/).

In addition, the University and its schools and departments are accredited by, and/or hold membership in, the following organizations:

#### General

- · The Association of Texas Colleges and Universities
- · The Association of American Colleges and Universities
- · The American Council on Education
- · The Southern University Conference
- · The American Council of Learned Societies
- · The Texas Council of Church-Related Colleges
- · The Association of Southern Baptist Colleges and Schools
- The Lilly Fellows National Network of Church-Related Colleges and Universities
- · The American Association of University Women
- The American Society of Allied Health Professions

## The Graduate School

- · The Council of Graduate Schools
- · The Association of Texas Graduate Schools
- · The Conference of Southern Graduate Schools
- The Midwestern Association of Graduate Schools

## **Colleges and Schools College of Arts and Sciences**

- · Council of Colleges of Arts and Sciences
- · Phi Beta Kappa

#### **Hankamer School of Business**

- AACSB International The Association to Advance Collegiate Schools of Business
- · Beta Gamma Sigma

#### School of Education

- · The American Association of Colleges for Teacher Education
- · Program Accreditation by the State Board for Educator Certification
- · Kappa Delta Pi
- · Carnegie Project for the Education Doctorate
- · National Association of School Psychologists (NASP)

#### School of Engineering and Computer Science

- Computer Science: The B.S.C.S. degree is accredited by the Computing Accrediting Commission (CAC) of the Accreditation Board for Engineering and Technology (ABET)
- Engineering: Electrical and Computer Engineering, Engineering, and Mechanical Engineering programs accredited by the Engineering Accreditation Commission (EAC) of the Accreditation
- · Board for Engineering and Technology (ABET)

#### **Robbins College of Health and Human Sciences**

- Council on Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association
- · Council on Education for Public Health
- · Commission on Accreditation of AT Education
- · American Kinesiology Association
- · National Academy of Kinesiology
- Physical Therapy: Accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association

#### School of Law

- · The Association of American Law Schools
- · Accredited by the American Bar Association

#### School of Music

- · The National Association of Schools of Music
- · The Texas Association of Music Schools
- · Pi Kappa Lambda

#### **Louise Herrington School of Nursing**

- Accredited by the Commission on Collegiate Nursing Education and the Texas State Board of Nurse Examiners
- The Southern Regional Educational Board, Council on Collegiate Education for Nursing
- · The American Association of Colleges of Nursing
- · Accreditation Commission for Midwifery Education
- The Council on Accreditation of Nurse Anesthesia Educational Programs (COA)
- · Sigma Theta Tau

#### Diana R. Garland School of Social Work

· Council on Social Work Education

#### **George W. Truett Theological Seminary**

· The Association of Theological Schools

## **Departments and Programs**

#### College of Arts and Sciences

- · American Anthropological Association
- · American Mathematical Society
- American Studies: Member, The American Studies Association and The American Studies Association of Texas
- Athletic Training: Commission on Accreditation of Athletic Training Education
- · Aviation Sciences: Member, The University Aviation Association
- · Chemistry: Approved by the American Chemical Society
- Child and Family Studies accredited by the National Association for the Education of Young Children
- Community Health: SABPAC (SOPHE-AAHE Baccalaureate Program Approval Committee)
- Environmental Health Science: Association of Environmental Health Academic Programs (AEHAP)
- Bachelor of Science in Environmental Health Science is accredited by the National Environmental Health Science and Protection Accreditation Council (EHAC)
- Interior Design: Accredited by the Council for Interior Design Accreditation
- Journalism, Public Relations and New Media: Accredited by the Accrediting Council on Education in Journalism and Mass Communications (ACEJMC)
- · Mathematical Association of America
- · Mathematical Sciences Research Institute
- Modern Languages and Cultures: Member, Association of Departments of Foreign Languages; Modern Language Association and South Central Modern Language Association
- Nutrition Sciences: Accredited by the Commission on Accreditation for Dietetics Education of the Academy of Nutrition and Dietetics
- · Political Science: American Political Science Association
- Psychology, Clinical Psychology (Psy.D. Degree): Accredited by American Psychological Association
- Religion: Baptist History and Heritage; Hispanic Theological Initiative Consortium; Southwest Commission on Religious Studies
- · Theater Arts: National Association of Schools of Theater

#### **Graduate School**

 Health Administration: Accredited by the Commission on Accreditation of Healthcare Management Education (CAHME)

## **Academic Calendar**

## **Graduate Academic Calendars**

#### Please visit the links below to view the current Graduate Calendars:

- Graduate Academic Calendar (https://www.baylor.edu/calendar/? id=968802)
- Trimester Academic Calendar (https://www.baylor.edu/calendar/? id=970311)
  - · Includes the following online programs:
    - · Communication Sciences and Disorders (CSD)
    - · Computer Science (CSI)

- · Doctor of Education (EdD)
- Occupational Therapy (OTD)
- · School Leadership (SCL)
- · Social Work (MSW)
- · Nursing (NUR)
- Quarter Academic Calendar (https://www.baylor.edu/calendar/? id=970578)
  - · Online MPH program only
- OMBA (Accelerated 6) Academic Calendar (https://www.baylor.edu/ calendar/?id=970579)
  - · Online MBA program only

### Other Dates and Deadlines

Please visit the links below to view other dates and deadlines for registration, financial aid, and graduation:

- Office of the Registrar (https://www.baylor.edu/registrar/?id=84505)
- · Graduate School (https://www.baylor.edu/graduate/?id=959509)

# **General Information Graduate Student Association**

The Graduate Student Association (GSA) is an organization concerned with the intellectual and social growth of graduate students at Baylor University. The GSA sponsors activities and programs that facilitate an exchange of ideas, promotion of scholarly development, cultivation of social support systems, and dissemination of other information concerning graduate student life. All students currently enrolled for one or more semester hours of graduate course work toward an advanced degree and with a graduate GPA of 3.0 or greater are automatically members of the GSA. Students desiring further information about the GSA should review the website at www.baylor.edu/gsa (http://www.baylor.edu/gsa/) or contact the Associate Dean for Student Development (254) 710-4487.

## **Housing**

The Graduate Student Housing Community consists of two Baylor owned apartment complexes: Browning Square and The Quadrangle. Our single bedroom units at Browning Square and two bedroom units at The Quadrangle can accommodate singles, families, children, and pets. The Graduate Student Housing Community provides a quiet, adult residence with a living area suitable to the professional and family lives that are unique to graduate students. The community also serves as a place for scholars and families to gather for social, spiritual, and academic pursuits. To this end, we encourage residents to attend events that provide occasions for the community to come together and share in fellowship, friendship, and ideas.

## **Health Insurance**

Baylor University requires Health Insurance for degree-seeking domestic graduate students under the purview of the Graduate School enrolled in 3 or more credit hours, including DPT, online graduate students, and/or those enrolled in at least one hour of a full-time equivalency course. To assist students to meet this requirement, Academic HealthPlans has been selected to administer the Student Health Insurance Plan (SHIP) underwritten by Blue Cross/Blue Shield of Texas. Students will

be required to enroll in this plan or waive out of it by demonstrating comparable health insurance coverage through AHP.

International graduate students are required to maintain insurance coverage through Baylor's student health insurance plan. International students will be automatically enrolled in SHIP. If an International graduate student would like to add additional coverage (dental, dependents, etc.) they should contact Betty Fornelius. Otherwise, the health insurance enrollment process will be automatic for our international students.

Information about the Baylor University Health Insurance Plan can be found at: www.baylor.edu/health\_center (http://www.baylor.edu/health\_center/) under the "Insurance" quick link.

## **Campus Safety**

The members of the Baylor Department of Public Safety (BUDPS) take great pride in providing all community members with exemplary law enforcement, emergency management (to include fire safety), global safety and security, parking and transportation and technical and physical security services. All five BUDPS departments work diligently with the campus community to provide a safe and secure environment for students, faculty, staff and guests to work, pursue academic endeavors, and participate in leisure activities.

The largest component of BUDPS is the Baylor University Police Department, which has a staff of 62 persons, including 37 police officers, 10 dispatchers, 13 security officers, an administrative manager, and a records manager.

Available 24 hours a day, seven days a week, officers with the Baylor University Police Department respond to over 10,000 calls a year. The Department operates marked patrol vehicles on campus, a bicycle unit, a Criminal Investigation unit, and a Crime Prevention unit.

The Baylor University Police Department is the primary reporting and investigating law enforcement agency for all crimes occurring on the Baylor University campus and/or Baylor owned property. Baylor University Police Officers have the same authority as any municipal police officer or sheriff's deputy.

The Baylor University Police Department office is open Monday - Friday, 8:00 a.m. to 5:00 p.m. Police dispatchers are on duty at the office (located at the Speight Street Parking garage) to receive calls for service/ assistance 24 hours a day, 7 days a week, including holidays. If you are in need of police assistance, call (254) 710-2211 or for emergency incidents call (254) 710-2222 or 2222 from any campus telephone. Baylor University Department of Public Safety also maintains eighty-one (81) emergency call boxes located across the campus and one-hundred fifty-two (152) emergency telephones, which are located in all building elevators, that offer immediate connection to the BUPD Dispatch Center, Downloading the free BU Campus Guardian cell phone security app is an additional tool available to Baylor University faculty, staff and students to call or text crisis and/or emergency situations occurring on and around the campus to the Baylor Police Department. The security officers also offer services such as escorts and report suspicious or unacceptable behaviors.

We encourage everyone to visit the BUDPS website to learn more about all the services we provide at: www.baylor.edu/dps (http://www.baylor.edu/dps/).

You can also learn about safety initiatives on campus by reading Baylor University's Annual Fire Safety & Security Report, which is published by October 1st of each year. This report is published to comply with the Jeanne Clery Act, a consumer protection law passed in 1990. This mandatory report requires all colleges and universities, who receive federal funding, to share information about crimes occurring on and around campus in efforts to not only improve campus safety, but to also inform the public of crimes occurring on and around campus.

## **Admissions**

Admission to the Graduate School is conducted by formal application, which is available online (https://www.baylor.edu/graduate/?id=967133). Graduate admissions committees will consider all application materials when making admission decisions, so each piece of the application is important. In addition to an application, applicants must submit a non-refundable application fee, standardized test scores, transcripts, and letters of recommendation, which are described below in detail. Please send materials to

Baylor University Graduate Admissions
One Bear Place #97264
Waco, Texas 76798-7264
or via email to GraduateAdmissions@baylor.edu.

Qualified students will be admitted regardless of race, color, national or ethnic origin, gender, age, or disability.

- All applicants must submit an application and pay an application fee (\$50 for all other programs, and \$100 for EMBA programs).
- For U.S. citizens, Baylor Graduate School accepts unofficial transcripts and test scores for application evaluation purposes. Should Baylor choose to extend an offer of admission, you will be notified that official transcripts and test scores must be submitted before you will be admitted and allowed to register. This includes official transcripts for each college or university at which a degree (bachelor's or higher) was earned.

## **Transcripts**

The Graduate School requires that all applicants have either a bachelor's degree from a regionally accredited institution in the United States or proof of equivalent training at a foreign institution of higher learning. Applicants are expected to have a record of undergraduate study and experience that is predictive of success in graduate study. A minimum grade point average or standardized test score is not specified. Records for current and former Baylor University students must be requested by the student through the Office of the Registrar and sent to the Graduate School.

## **Proof of Degree**

The Graduate School must receive proof of an earned degree. If the transcript from the school at which the applicant earned a bachelor's degree, or bachelor's-equivalent, does not clearly state proof of degree completion, including the date on which that degree was conferred, the applicant must request that additional documentation, such as an official diploma certificate showing proof of degree, be mailed to the Graduate School.

Baylor University students applying to a joint bachelor's/master's degree program must provide proof of completion of their junior year (90 semester hours).

International applicants should be particularly mindful of this requirement since transcripts from non-U.S. institutions frequently lack proof of conferred degree information. Transcripts in languages other than English must be translated by an official translating agency and in some cases evaluated by (World Education Services (WES) www.wes.org (http://www.wes.org)), or other service provider. If the applicant is admitted before receiving a degree and final transcript, the applicant is required to have an official, final transcript documenting proof of degree sent to the Graduate School by the first day of class. Without proof of degree, the applicant will not be able to register for classes.

#### **Test Scores**

Standardized testing measures of academic preparedness for graduate study are an important component of the admissions process. GRE, GMAT, and MCAT test scores must be less than five years old to be considered. The GRE General Test is required for admission to some programs, please see your programs admissions page or contact Graduate Admissions@baylor.edu for confirmation.

Applicants should request test agencies to send scores directly to the Graduate School. Baylor University's College Entrance Examination Board (CEEB) code is 6032. No minimum standardized test scores are required for any civilian graduate program, but applicants may contact the graduate program director for the program to which they are applying to find out what scores are considered competitive. Scores are determined to be satisfactory in light of other admission materials submitted and special factors specific to individual disciplines as well as institutional standards monitored by the Graduate School.

### **Letters of Recommendation**

Letters of recommendation should address the applicant's potential for success in the graduate program to which he or she has applied. Recommendations should come from professors, employers, or other individuals qualified to accurately assess academic or professional skills. While letters of recommendation will vary in content from discipline to discipline, letters of recommendation for doctoral applicants should address the applicant's academic accomplishments and preparedness for doctoral study.

The Graduate School does not use recommendation forms. As part of the Graduate School's online application, applicants list their recommender's email address, mailing address, Institution/Employer name, and send them an email with instructions about how to submit their letter of recommendation online. Applicants have the option to send recommenders the email in advance of the online application, which allows the recommenders more time to submit their recommendation. Applicants should let their recommenders know ahead of time that, once the applicants have submitted their name, they will receive an email from GraduateAdmissions@baylor.edu. For more details, log in to the online graduate application.

If a recommender submits his or her letter using the Baylor online recommendation tool, please do not submit a paper copy. If necessary, recommenders may submit their letters directly to the Graduate School or may provide recommendations to the applicant in a sealed envelope signed across the seal, "for submission to the Graduate School." Recommenders may also send their letter via email as a scanned image to GraduateAdmissions@baylor.edu (high quality image >=200dpi; .pdf, .jpg, .gif, .tif, .bmp). Letters should include full name, title, phone number, and mailing address of the recommender. Letters should

also include the full name of the applicant and the degree to which the applicant is applying.

Three letters of recommendation should be submitted and should be written on institutional or business letterhead. One to three letters of recommendation are required for applications to programs in the Hankamer School of Business.

- Applicants must also submit any additional items or materials
   (e.g., writing sample, statement of purpose, or taped performance)
   required by the prospective department or degree program. Additional
   admission items required may be found in the Curriculum section of
   this catalog.
- International applicants are expected to satisfy the following admissions requirements:
- A. TOEFL, IELTS, and DUOLINGO: International applicants must provide a test score from one of the three tests. The test score must be less than two years old to be considered. They must attain a minimum of 550 on the paper-based, 213 on the computer-based, or 80 on the internet-based Test of English as a Foreign Language (TOEFL), attain a minimum overall band score of 6.5 on the International English Language Testing System (IELTS), or attain a minimum overall score of 125 on the Duolingo exam.

Applicants to doctoral programs who submit an internet-based TOEFL score are recommended to score a minimum of 20 on the speaking section of the test. **Note:** All programs in the Hankamer School of Business require a minimum TOEFL score of 600 on the paper-based test, 250 score on the computer-based version, or 100 on the internet-based version, a minimum overall band score of 7.0 on the IELTS, or a minimum overall score of 125 on the Duolingo exam.

The TOEFL, IELTS, and Duolingo are not required, if the applicant has a degree conferred by a U.S.-accredited higher education institution, or if the official language of their country, or region of their country, is English. TOEFL, IELTS, and Duolingo scores are valid for two years. After that time, the applicant must retake the test and submit the new scores to the Graduate School. For information about TOEFL, go to www.ets.org (http://www.ets.org); for IELTS, go to www.ielts.org (http://www.ielts.org); for Duolingo, go to https://englishtest.duolingo.com/applicants (https://englishtest.duolingo.com/applicants/).

B. When all of the preceding requirements have been received and satisfied, and after the applicant has been accepted by a degree program, the international student must complete the Immigration Status Form (www.baylor.edu/globalengagement/index.php? id=925421 (http://www.baylor.edu/globalengagement/?id=925421)) and submit financial documents as instructed by the International Student and Scholar office (ISSS). For more information on how to obtain an I-20, which is required for an F-1 (student) visa, contact the ISSS office (ISSS\_Support@baylor.edu) or see the ISSS website at http://www.baylor.edu/globalengagement/?\_buref=1172-91940. Baylor requires all international graduate students to carry medical insurance prior to enrollment (see Health Insurance section of this catalog).

Unexpired application materials including applications, transcripts, test scores, letters of recommendation, and resumes will be held for two years, after which point they will be destroyed. Applications submitted after stated deadlines may not be considered. Applications on which admission decisions have not been made may be deferred up to one academic year. Declined applicants must reapply. A student

desiring admission to any graduate degree program must complete the application process, even if another graduate degree has been earned at Baylor University.

## **Applications for Transfer of Credit**

Students enrolled in a graduate program at another university who wish to take graduate course work at Baylor University for credit to be transferred to their home institutions may apply as "transfer of credit" applicants. Transfer of credit applicants must submit a Transfer of Credit application, a \$25 non-refundable application fee, and a letter of good standing from the home institution's Registrar. Also, a Baylor Health Form must be completed and submitted to Baylor Health Services.

## **Applications for Re-enrollment**

If a student has completed a Baylor graduate degree and would like to take additional course work within the same department on a non-degree basis, a Re-enrollment paper application is required (available from the Graduate School). If it has been longer than one year since the last term of enrollment, the Baylor Health Form must be resubmitted.

## **Bacterial Meningitis Vaccine Requirement**

All new, entering college students in the state of Texas who are under the age of 22 are required by law to have had a bacterial meningitis vaccine within the last 5 years and at least 10 days prior to the first class day.

A student may be exempted from this requirement in two ways:

- An affidavit or certificate signed by a physician who is duly registered and licensed to practice in the United States, stating that in the physician's opinion, the vaccination would be injurious to the health and well-being of the student; or
- 2. An affidavit signed by the student saying that the student declines the vaccination for reasons of conscience, including religious belief. A conscientious exemption form from the Texas Department of State Health Services must be used. This form may be requested by going to www.dshs.texas.gov/immunize/school/exemptions.aspx (https:// www.dshs.texas.gov/immunize/school/exemptions.aspx).

Bacterial meningitis caused by Neisseria meningitis may be a serious infection, rapidly leading to death or disfigurement. The best way to prevent infection is to be immunized against it. College students are at increased risk because of age and lifestyle issues.

Important: All new, entering students under age 22 must comply with the above requirements at least 10 days prior to the first day of the semester/term. For the latest information about this requirement, visit the Baylor Health Services/Health Center website at www.baylor.edu/health\_center (http://www.baylor.edu/health\_center/). To ask questions, please call Baylor Health Services at (254) 710-1010.

The Graduate School's letter of admission constitutes the University's only official notification of the admission decision. (Admission is specific to individual graduate programs, the specific semester, and the stated terms of admission.) Admitted applicants must submit the Health Form and be cleared by Baylor Health Services before registering for classes. Attempts to enroll after the one year period will require re-application. The University reserves the right to refuse admission to any applicant whose previous academic record is deemed unsatisfactory.

## **Additional Considerations**

#### **Deferments**

An admitted applicant may defer his or her application up to one academic year with written permission from the graduate program. Deferral of an application does not guarantee admission in a future term.

#### **Prerequisites**

Applicants will be expected to complete all undergraduate prerequisites in both the major and minor fields in which graduate study will be pursued. The determination of appropriate prerequisites is made by each program's graduate program director and/or the chairperson of the department in which the graduate program is housed. Students otherwise eligible for unconditional admission and who require no more than six semester hours of prerequisite course work may, with the permission of the graduate program to which the student applies, concurrently pursue both graduate study and prerequisite course work in the first semester. The total course load, however, may not exceed fifteen semester hours.

#### Qualifications

- The Graduate School recognizes the breadth of talents and aptitudes
  that are required to successfully complete a given graduate
  program and to demonstrate exceptional proficiency under gainful
  employment. With this in mind, consideration for alternative valid
  and reliable standardized measures required for admission will be
  made by the Graduate School where appropriate college/school
  administrative endorsement has been received.
- A student may be admitted on probation for a total of nine semester hours of graduate course work, contingent upon both the recommendation of the graduate program director and the approval of the Graduate School. Students on probation cannot receive university funding for either stipend or tuition. If the student is unable to maintain the overall GPA requirement of 3.0 at the conclusion of the nine hours, the student will be dismissed from the Graduate School.
- If evidence of sufficient qualifications for admission is inconclusive, a student may be admitted on probation for a total of nine semester hours of graduate course work, contingent upon both the recommendation of the graduate program director and the approval of the Graduate School. Students on probation cannot receive university funding for either stipend or tuition. If the student is unable to maintain the overall GPA requirement of 3.0 at the conclusion of the nine hours, the student will be dismissed from the Graduate School.

#### **Admission to Candidacy**

Admission to a graduate program does not automatically guarantee a student's candidacy for a graduate degree. See the section in this catalog entitled Admission to Candidacy. Any degree program may require its master's students to pass a qualifying examination before program completion. All doctoral degree candidates must take a preliminary examination before admission to candidacy.

#### **Stay Informed**

It is the student's responsibility to become informed and to observe all regulations and procedures concerning degree completion required by the graduate program to which he/she is admitted. This includes attention to all internal deadlines (degree completion, registration, graduation, etc.), as well as the use of appropriate dissertation/thesis guidelines,

and satisfying registration throughout degree completion and financial settlement procedures.

## Financial Aid

#### **Student Financial Aid**

The costs of tuition, fees, room, and meals at Baylor are among the most economical of any major private university in the nation. Baylor represents an affordable, yet superior, private education guided by Christian influences and ideals.

The Student Financial Aid Office provides a program that includes loans and part-time campus employment designed to help eligible students meet expenses while enrolled at Baylor University.

Please visit www.baylor.edu/sfs (http://www.baylor.edu/sfs/) for pertinent information regarding student employment and loans.

#### **Financial Aid Applications**

If a student requires need-based financial aid, the student should complete the Free Application for Federal Student Aid (FAFSA). This application should be completed after October 1, but preferably before February 1 for priority consideration for the upcoming academic year. The FAFSA should be completed in sufficient time to allow Baylor to receive the results no later than May 1, so that students will be notified of eligibility before invoices for fall charges are mailed. Baylor normally receives results of the FAFSA from the federal processor within three to five business days from the date you file the form electronically. The deadline for completion of the aid application process is April 20 of the spring semester (or November 14 if attending only in the fall.) Applicants who do not have all steps (including verification if selected) completed by these dates will not be awarded aid.

Students interested in pursuing assistance for the summer sessions will be considered automatically once they have filed the FAFSA for the previous academic year and pre-registered for classes. To be eligible for financial aid, students must be making satisfactory academic progress as defined by Baylor University. The Statement of Satisfactory Academic Progress is available on the web at www.baylor.edu/sfs/sap (http://www.baylor.edu/sfs/sap/). In addition, some programs may have specific requirements above these minimum standards.

Students who consider dropping hours should contact the Student Financial Aid Office prior to dropping the hours to determine the effect on scholarship and financial aid eligibility. A reduction in hours may result in an adjustment to the aid package and may also affect satisfactory academic progress. It is the responsibility of the student to notify this office of any reduction in hours.

Some students may receive financial aid from several sources, which may include part-time employment, and/or loans. Because many financial aid programs are funded by the federal and state government, the Student Financial Aid Office must abide by established laws and guidelines when processing a student's application.

Complete information on the various types of assistance is available at www.baylor.edu/sfs (http://www.baylor.edu/sfs/). Information on alternative loans, along with a preferred lender list, can be found at www.baylor.edu/sfs/alternative (http://www.baylor.edu/sfs/alternative/).

## **Financial Costs**

Although the exact cost of attending Baylor University will vary according to personal habits, tastes, and financial resources, there are some fees that all students pay. For an estimate of the 2022-23 graduate expenses for one semester including tuition, fees, room, and meals, please visit www.baylor.edu/sfs/gradcost (http://www.baylor.edu/sfs/gradcost/).

For financial aid purposes, the Cost of Attendance (COA) is an estimate of the total cost to attend Baylor University. It not only includes direct costs as outlined above, but also indirect costs. Direct costs are those billed by Baylor, such as tuition, fees, and on-campus room and meals for students who live on campus. Indirect costs are books, supplies, transportation, personal expenses. To see estimates that include these and other costs, please visit https://www.baylor.edu/sfs/index.php?id=965634 (https://www.baylor.edu/sfs/?id=965634).

#### **Tuition**

Expense/Fee	Amount
Traditional, per semester hour	\$2,154.00
Summer, per semester hour	\$1,432.00
EDP of School Psychology, per credit hour	\$1,200.00
Executive MBA Program	
Austin EMBA and Austin Health Careers	
2021/22 Cohort, per semester	\$17,200.00
2022/23 Cohort, per semester	\$17,200.00
Dallas EMBA and Dallas Health Careers	
2021/22 Cohort, per semester	\$17,600.00
2022/23 Cohort, per semester	\$17,600.00
MA of School Leadership, per credit hour	\$1,000.00
MSW - residential (hourly rate starting in FY 23)	\$825.00
MBA & approved programs, per semester (12 hours or more)	\$25,869.00
Online CSD, per credit hour (increase effective summer 2022)	\$1,840.00
Online Doctor of Education, per credit hour	\$1,785.00
Online Doctor of Nursing Practice, per credit hour	\$1,100.00
Online Doctor of Occupational Therapy (entry- level), per term (increase effective spring 2023)	\$17,820.00
Online Doctor of Occupational Therapy (post- professional), per credit hour (increase effective spring 2023)	\$1,050.00
Online Doctor of Physical Therapy, per term (increase effective spring 2023)	\$18,334.00
Online MA of Journalism, per credit hour	\$1,200.00
Online MBA	
2014/15-2017/18 Cohorts, per credit hour	\$1,027.00
2018/19-2022/23 Cohorts, per credit hour	\$1,068.00
Business Foundations 2014/15-2017/18 Cohorts, per credit hour	\$750.00
Business Foundations 2018/19-2022/23 Cohorts, per credit hour	\$780.00
Online MPH, per credit hour	\$1,785.00
Online MS of Computer Science, per credit hour (foundation and regular)	\$1,000.00
Online MSW, per credit hour	\$1,415.00

All tuition rates are subject to change.

A graduate student studying with one or more faculty members and using the resources of the campus is required to register for at least one semester hour of graduate credit. Students must be registered for at least one semester hour of graduate credit during the semester of intended graduation.

#### **Fees**

Expense/Fee	Amount
Administrative fee, per term (certain programs only)	\$100.00
Application fee for:	
All graduate programs	\$50.00
Executive MBA students	\$100.00
Application fee for transfer of credit	\$25.00
Applications will not be processed without this fee. This fee will not be waived. (Application fees subject to change).	
Applied Music fee, per semester for one 30-minute lesson per week	\$360.00
Audit fee, per course	\$370.00
Commencement charges	
Master's cap/gown/hood, purchase through bookstore, no return	\$129.90
Doctoral cap/gown/hood, rental, return required 1	\$81.00
Doctoral cap/gown/hood, purchase, no return, includes shipping <sup>1</sup>	\$1,045.55
Duplicate diploma to replace lost original (special order through Office of Registrar, Suite 380)	\$25.00
Graduate Student charges/fees <sup>2</sup>	
Copyrighting of dissertation (optional)	\$55.00
Copyrighting of thesis (optional)	\$55.00
Identification card replacement fee	\$20.00
Installment plan fee (standard)	\$60.00
Installment plan fee (deferred)	\$80.00
Summer installment plan fee (unless receiving stipend)	\$24.00
Laboratory/Course fee, per course (\$50.00 minimum, charges vary)	\$50.00
Late Fee	
After due date	\$25.00
Parking Permit fees	\$450.00

Handled in Graduate School Office

#### **Rooms and Housing**

Charges are per person, per semester

Expense/Fee	Amount
Single Room	\$4,870.00
Single Room/Suite with Shared Bathroom	\$4,950.00
Single Room/Suite with Private Bathroom	\$5,660.00

<sup>&</sup>lt;sup>2</sup> Fees subject to change

Double Room	\$3,670.00
Double Room	\$3,670.00
Double Room/Suite with Shared Bathroom	\$4,340.00
Double Room/Suite with Private Bathroom	\$4,440.00
Triple Room	\$3,520.00
Triple Room/Suite with Shared Bathroom	\$3,670.00
Apartment Single Gold	\$5,820.00
Apartment Single Green	\$4,800.00
Apartment Double Gold	\$4,570.00
Apartment UP Single	\$3,920.00
Apartment UP Gold Single	\$5,260.00
Expanded Occupancy	\$3,370.00

For more information on rooms and housing visit www.baylor.edu/cll (https://catalog.baylor.eduHttp://www.baylor.edu/cll/) (Room types and Rates)

#### Meals

Expense/Fee	Amount
All Access 7 days per week plus \$150 Dining Dollars	\$3,123.63 <sup>1</sup>
All Access 5 days per week plus \$100 Dining Dollars	\$2,734.13 <sup>1</sup>
Block 170 plus \$300 Dining Dollars	\$2,003.86
Block 100 plus \$125 Dining Dollars	\$1,158.79
Block 65 plus \$225 Dining Dollars	\$869.09

<sup>&</sup>lt;sup>1</sup> 8.25% tax included

#### **Estimate of Expenses per Semester**

Expense/Fee	Amount
Tuition, normal course load of nine semester hours @ \$2,154.00 per semester hour <sup>1</sup>	\$19,386.00
Laboratory/Course fee, per course varies	\$50.00 to \$250.00
Parking Permit fee, annual	\$450.00

Students in the Communication Sciences and Disorders program and the MBA and MBA/MSIS combined programs will pay a flat tuition rate of \$25,869.00 if enrolled in 12 or more hours. 8.25% tax included.

#### **Method of Billing**

Baylor uses electronic billing (E-Bill System) as its official billing method and students are responsible for viewing and paying their student accounts by the scheduled due date as reflected in emails to the students and in the invoices, statements, and schedules within the My Account tab of the E-Bill System, or in the following link: www.baylor.edu/sfs/duedates (http://www.baylor.edu/sfs/duedates/). Failure to review E-Bill does not constitute a valid reason for not paying on time.

#### **Financial Aid**

Aid described as "estimated" on the student account, E-Bill, or Financial Aid Award does not represent actual or guaranteed payment of that aid to the student but is an estimate of the aid the student may receive if he/she meets all requirements stipulated by that aid program.

A student's Financial Aid Award is contingent upon continued enrollment and attendance in each class upon which the financial aid eligibility was calculated. If the student drops any class before completion, financial

aid eligibility may decrease and some or all of the financial aid awarded to the student may be revoked. If some or all of a student's financial aid is revoked because the student dropped or failed to attend class, the student is required to repay all revoked aid that was disbursed to the account and resulted in a credit balance that was refunded to the student.

#### **Monthly Statements**

Monthly Statements will be billed on the first business day of every month for any outstanding balance. The due date will be the last day of the same month. Failure to pay the balance will result in \$25 Late Fee.

Students are required to confirm financial responsibility before registering for each term they attend. The full text of the Financial Responsibility Agreement can be found at https://www.baylor.edu/sfs/doc.php/391249.pdf.

#### **Payment Plan**

Students have the option to either pay their charges in full or enroll in a payment plan each semester. A setup fee will be assessed each semester in which a student chooses to enroll. Students may pay their account in full any time during a semester; however, the setup fee is non-refundable. For more information on payment plans, please visit www.baylor.edu/sfs/paymentplans (http://www.baylor.edu/sfs/paymentplans/).

#### **Payment of Accounts**

By registering for classes, students agree to pay all tuition and required fees associated with their registration, as well as any other optional charges and fees, whether paying in full or utilizing the payment plan option. Students must meet all financial obligations to the University by their due dates to avoid late penalties. Failure to pay amounts owed may result in cancellation of the student's registration and/or holds being placed to prevent future registration and the issuance of an official transcript. The complete Payment of Accounts policy can be found at www.baylor.edu/sfs/paybill (http://www.baylor.edu/sfs/paybill/).

#### **Payment Methods**

Baylor University utilizes online statements and electronic payments in its efforts to provide timely financial information to students and to control costs. Student account payment options include electronic check (using a personal checking or savings account), credit card (a 2.85% convenience fee will be charged by a third-party processor), Flywire, Western Union wire transfer via E-Bill system, or physical check. Payments cannot be accepted by phone. For more information on payment methods, please visit www.baylor.edu/sfs/paybill (http://www.baylor.edu/sfs/paybill/).

#### **Returned Payments**

Any payment that is rejected for payment by the paying financial institution is subject to a returned item charge of \$25. Rejected payments may also result in cancellation of the student's registration and additional fees if the student is required to re-register on or after the first day of classes.

#### **Financial Obligation**

Students are individually responsible for their financial obligation to Baylor University and charges to their student account are payable when due. Upon graduation or university withdrawal, unpaid student account balances are subject to referral to a collection agency and disclosure to credit bureaus.

#### Right to Withhold Transcript and/or Block Registration

Baylor University may withhold the issuance of a transcript record and/ or inhibit the registration of any prior or current student if he or she has certain outstanding obligations to the University. Please see the complete Transcript and Registration Hold policy at https://www.baylor.edu/risk/ doc.php/342480.pdf.

#### **Student Communication**

The students' Baylor University email address is used as the official form of communication. Students are responsible for reading the emails they receive from Baylor in a timely manner. Students are responsible for keeping Baylor records up to date with their current physical addresses, email addresses, and phone numbers via BearWeb.

#### **Authorized Users**

It is the student's responsibility to notify their parent(s)/legal guardian(s) of their account balance, or set up the parent(s)/legal guardian(s) as an Authorized User to access the student's statement, account activity, and 1098-T forms through the authorized user link located at www.baylor.edu/ebill (http://www.baylor.edu/ebill/).

#### **Financial Aid Priority Dates**

Students must complete the Free Application for Federal Student Aid (FAFSA-www.studentaid.gov (http://www.studentaid.gov)) by the following dates to receive priority and ensure the availability of funding by the time payment is due:

Semester	Date		
To receive priority for funding (some programs are limited):			
Fall and Spring semesters	February 1		
Spring semester only	October 1		
To ensure availability of funding (and receive credit toward bill):			
Fall and Spring semesters	May 1		
Spring semester only	November 1		

Respond promptly to requests for additional documentation/clarification received by mail or email (all emails are directed to student's Baylor email accounts). Students who file the FAFSA after the deadline should be prepared to pay their semester bill from their own resources by the due date. If eligible for aid, the student may be reimbursed after aid has been credited to the student account. For more information, visit the Student Financial Services website at www.baylor.edu/sfs (http://www.baylor.edu/sfs/).

## Cancellations, Drops, and University Withdrawals

#### **Fall and Spring Semesters**

The information in this section is described using fall and spring semester term calendars.

#### **Trimesters and Summer Terms**

The information in this section is described using fall and spring semester term calendars but is also relevant to other Quarters, Trimesters, OMBA and Summer calendars using equivalent dates. For

dates, deadlines, and other pertinent details to those terms, please see the "Academic Calendar" section for their respective dates.

#### **Definitions of Cancellations, Drops, and University Withdrawals**

- Cancellation Cancelling (removing) all classes prior to the 1<sup>st</sup> day of classes.
- Drop Dropping one or more, but not all, classes from a student's schedule from the 1<sup>st</sup> day classes through the 50th class day in a semester (or equivalent).
  - Drops from the 1<sup>st</sup> class day through the 12<sup>th</sup> class day in a semester (or equivalent) are removed from the student's transcript.
  - Drops after the 12<sup>th</sup> class through the 50<sup>th</sup> class in a semester (or equivalent) will result in a "W" (Withdrawal) notation for the class(es) on the student's transcript.
  - A drop after the 50th class day in a semester (or equivalent) is not allowed except by appeal to the student's academic dean.
- University Withdrawal Officially discontinuing all classes for which
  a student is registered on or after the 1<sup>st</sup> day of classes through the
  50th class day in a semester (or equivalent). A university withdrawal
  after the 50th class day in a semester (or equivalent) is not allowed
  except by appeal to latewithdraw@baylor.edu.

#### **Cancellations**

Cancellation describes when a student has decided not to attend a semester (or equivalent) and drops all their classes for that semester (or equivalent) prior to the 1st class day. Cancelling classes is not allowed on the 1st day of classes and thereafter. See the "Academic Calendar" section for deadlines. All classes must be cancelled in BearWeb prior to 1<sup>st</sup> class day. For a quicker reversal of other fees (Parking Permits, Meal Plans, Health Insurance, etc.) and other information about refunds, contact Student Accounts to ensure account activity is correct.

#### Academic Effects of Cancellations

· Cancelled classes do not appear on the official academic transcript.

#### **Financial Effects of Cancellations**

- Requests for the cancellation of related fees and refunds must be made in writing by the student via email inquiry at www.baylor.edu/ sfs/contactus (http://www.baylor.edu/sfs/contactus/).
- Cancellation requests must be received prior to the 1st class day of the term. For cancellations, all tuition, fees, and meal plans will be refunded at 100 percent.
- Late cancellation requests received on the 1<sup>st</sup> class day or after are subject to a late cancellation fee if non-attendance has been verified. (\$150 during first week and \$300 thereafter).

#### **Dropping Classes**

Dropping one or more, but not all, classes from a student's schedule through the 50th class day of the semester. (To discontinue all classes from the term, see University Withdrawal.) See "Academic Calendar" for deadlines for all terms.

A student has the option to drop a class prior to or during a semester (or equivalent). Prior to dropping a class, a student should review, "Before you Drop a Course." https://www.baylor.edu/university\_advisement (https://www.baylor.edu/university\_advisement/)

#### **Academic Effects of Drops**

- Through the 50th class day, drops can be processed in BearWeb.
   Beginning on the 13<sup>th</sup> class day of the semester (or equivalent), the student must obtain Advisor approval notation to drop in BearWeb.
- A drop through the 12th class day of the semester (or equivalent) results in the course being removed from the official academic transcript.
- After the 12th and through the 50th class day (or equivalent), a drop in one or more classes requires a professional advisor approval and results in a "W" notation on the official academic transcript. There are no drops after the 50th class day during the semesters (or equivalent) except by appeal to the student's academic dean.
- Failure to drop a class will result in the instructor posting the grade the student has earned at the end of the term (i.e., an "F").
- Prior to dropping a class, a student is expected to attend class regularly.
- A student dropping a nursing class for any reason will be dropped from all corequisite classes that are linked to the class.

#### **Financial Effects of Drops**

- Beginning with the 13th class day for fall and spring terms (3rd class day for summer), a Change of Course fee will be assessed for all schedule changes.
- Refunds for dropped classes (tuition and lab/course fees) during the fall and spring terms include the following policies:
  - Because of the flat-rate tuition, there is no refund adjustment for a student who drops classes unless the billable hours are reduced below 12 as the result of a dropped class.
  - Refunds for dropped classes (tuition and lab/course fees) during the semester (or equivalent) will be processed according to the following refund schedule:

Term	Semester	Trimester	Full Summer	Summer 1 & 2	Minimester
Prior to the end of	5th class day - 100%	Week 1 - 100%	3rd class day - 100%	2nd class day - 100%	1st class day - 100%
Prior to the end of	10th class day - 75%	Week 2 - 75%	7th class day -75%	4th class day - 75%	2nd class day - 75%
Prior to the end of	15th class day - 50%	Week 3 - 0%	11th class day - 50%	6th class day - 50%	3rd class day - 50%
Prior to the end of	20th class day - 25%		14th class day - 25%	7th class day - 25%	4th class day - 25%
Prior to the end of	21st class day - 0%		15th class day - 0%	8th class day - 0%	5th class day - 0%

An extensive refund schedule for all terms can be found at www.baylor.edu/sfs/droprefunds (http://www.baylor.edu/sfs/droprefunds/).

To determine how a refund is calculated, multiply the number of hours the student will drop by the applicable percentage rate above based on the day of the drop. This calculation will determine the number of hours to subtract from the number of enrolled hours. The student is financially liable for the remaining enrolled hours plus the determined percentage of dropped hours.

For example, if a student enrolled in 9 hours drops a 3-hour class prior to the 15th class day, multiply the 3 dropped hours by 50% (1.5 hours), subtract the 1.5 hours from the original 9 hours, and the student is left

with 7.5 billable hours. If the student is enrolled in a graduate program that offers the flat-rate tuition plan, there will be no tuition adjustment unless the billable hours are reduced below 12 as a result of a dropped class.

Changes in the number of enrolled hours can affect financial aid eligibility. A student should contact the Baylor One Stop for information about how dropping a class might affect his or her financial aid award package.

#### **University Withdrawal**

University Withdrawal describes officially discontinuing participation in all classes for which a student is registered on or after the 1st class day of the term. A student cannot withdraw from the university after the 50th class day of a semester (or equivalent). Beginning the 1st class day of each term, a student will not be able to drop all courses from their class schedule on BearWeb, but they will be able to submit a University Withdrawal Form (https://www.baylor.edu/successcenter/?id=871527).

Students who want to understand fully the implications of this action may schedule a withdrawal conversation with the Center for Academic Success & Engagement.

To withdraw officially from the University, a student must submit the online Withdrawal Form. Students who are unable to use the electronic form, by exception, can declare their intent to withdraw verbally by calling their designated official per the list below.

Program	Exit Conversation
Main Campus (Waco)	Center for Academic Success & Engagement
Post-Bacc Accelerated BSN (Dallas)	Associate Dean

A student who withdraws prior to the 12th class day in their first semester (or equivalent) at the University will be subject to readmission to the University for future semesters. Please contact your admissions office.

While Baylor University is not an attendance-taking institution, upon confirmation by a student's instructors of non-attendance, the University reserves the right to cancel or withdraw the student for that term with an effective date matching the last known date of academic attendance or engagement.

#### Withdrawal Conversation

For a nursing student on the Dallas campus, an exit conversation with their Associate Dean is required immediately after submitting a University Withdrawal.

Program	Exit Conversation
Nursing (Dallas)	Required
Main Campus (Waco)	Not required

#### **Academic Effects of a University Withdrawal**

- The University Withdrawal effective date is established by the date on which a student submits the mandatory University Withdrawal Form (https://www.baylor.edu/successcenter/?id=871527) (or in exceptional cases declares their official intent to withdraw to their designated official verbally).
- Contact with the Center for Academic Success and Engagement can be initiated in person (west basement of Sid Richardson during

regular business hours), by telephone (254-710-8696), or by emailing case@baylor.edu .

- When a student withdraws from the University, the assigned "W" is based upon the effective date of the University Withdrawal. Please see the "Academic Calendar" section for the respective dates.
- The required University Withdrawal Form (https://www.baylor.edu/successcenter/?id=871527) and additional information is available online at www.baylor.edu/case (http://www.baylor.edu/case/).
- Any other procedure will lead to failure in all classes for which the student is registered. Under no circumstances does notification to instructors or dropping classes constitute an official University Withdrawal.

#### **Financial Effects of a University Withdrawal**

- If the student fails to contact the Center for Academic Success and Engagement and simply stops attending, then the following policies apply:
- Tuition, fees, meal plans and other applicable charges will not be adjusted on the student's account.
- Financial aid credits, however, may be reversed as required by federal regulations.
- Refunds of tuition, fees, or other charges are applied to any outstanding balance owed to the University.
- Any credit balance remaining after all processing is complete will be sent by direct deposit (if bank account is designated in BearWeb) or mailed to the student at his/her home address listed in BearWeb.
- Refunds of tuition and required fees (Chapel Fee, Laboratory/Course Fees, Administrative Fee and Applied Music Fee) are based on the effective University Withdrawal date and are prorated on a per diem scale based on the total number of calendar days in that payment period.
- There are no refunds for University Withdrawals that occur after 60 percent of the payment period has passed. A payment period is defined as the total number of calendar days in the semester (from the published 1st class day through the published last day of finals) excluding the five-calendar day Thanksgiving break and the nine-calendar day spring break.
- To obtain a calendar schedule of refund percentages, please visit the Student Financial Services website www.baylor.edu/sfs/contactus (http://www.baylor.edu/sfs/contactus/) or call 254-710-2311.
- · Unless specifically noted, other fees are considered non-refundable.
- · Unused Dining Dollars are refunded upon University Withdrawal.
- Meal plan refunds are calculated pro rata based on the University Withdrawal effective date.

An administrative charge equal to one week of the meal charge for the student's respective meal plan will be assessed.

• Block meal plans are not prorated and will not be credited upon withdrawal.

- A student receiving scholarships or other financial aid should contact the Baylor One Stop office to discuss the financial implications of a University Withdrawal.
- Financial aid recipients are not eligible for a refund until all of the financial aid programs are reimbursed in accordance with federal, state, and University requirements. To obtain information about the return of financial aid funds, contact the Baylor One Stop at www.baylor.edu/sfs/contactus (http://www.baylor.edu/sfs/contactus/) or at 254-710-2611.
- A student residing in campus housing must contact the Campus Living & Learning office to obtain information about any applicable housing adjustments and penalties. Campus Living & Learning can be reached at Living@baylor.edu or by calling 254-710-3642. Additional information is available online at https://www.baylor.edu/cll/. A student must follow the proper check-out procedure outlined in the Guide to Community Living and must vacate campus housing within 48 hours of the University Withdrawal effective date.

## Appeals for Exception to University Withdrawal and Return Policy

Students are not permitted to withdraw after the 50th class day of the semester or the last day for a University Withdrawal in any other term. It is critical that students follow these deadlines. Exceptions to this policy may be granted when extraordinary circumstances (e.g., medical or health emergencies) have impacted academic performance, have limited the ability to submit a timely withdrawal request, or make recording a grade of "Incomplete" inappropriate. Consideration of a subsequent appeal for exception to this policy, regardless of the outcome of the first, would be extraordinarily unlikely. Further information about requesting this exception may be found at: www.baylor.edu/case (http://www.baylor.edu/case/). The deadline for submitting a withdrawal exception must be made no later than the day before the next term begins.

A student receiving an approved appeal for an exception to the University Withdrawal deadline may not re-enroll during the subsequent full semester. For example, if the student seeks the withdrawal exception at the end of the spring semester, he or she will not be eligible to return until the following spring semester. The student must apply for reactivation when he or she is prepared to re-enroll. Procedures for reactivation may be found at: https://www.baylor.edu/registrar/studentreactivation/, and further detail about returning after a withdrawal exception may be found at: www.baylor.edu/case (http://www.baylor.edu/successcenter/).

#### **Dropping an Audited Class**

A student who drops an audited class by the fifth (5th) class day (fall/spring) is eligible for a full refund. No refund for an audited class is given after the fifth (5th) class day. Full refunds also apply to a student who drops an audited class by the third (3rd) class day for the full summer session, by the second (2nd) class day for the summer I and II, and the first (1st) class day for the Minimester. No refunds are given after the designated class drop date.

### **Right to Withhold Transcripts and/or Block Registration**

Baylor University may withhold the issuance of a transcript record and/ or block the registration of any current or prior student if the student has certain outstanding obligations to the University. Please see https:// www.baylor.edu/risk/doc.php/342480.pdf for the complete transcript and registration hold policy.

#### **Assistantships**

The University provides many students with stipend support, which is available with varying compensation levels depending upon the nature of the service and the amount of time required of the students. Specific information and opportunities may be obtained from the chairperson or the graduate program director in the degree program of your choice. In addition to University-funded stipends, there are foundation grants that provide funds for various kinds of assistantships. Students receiving assistantships must maintain an overall grade point of 3.0 to avoid being placed on probation. Probationary status makes the student ineligible for University funding. Graduate stipends are usually awarded by the graduate programs and fall into the following classifications:

#### **Graduate Assistant**

A Graduate Assistant (GA) is a student-employee paid by the University to engage in activities related to their academic degree programs under the following conditions. GAs are identified based on two criteria: the nature of their work and the nature of their relationship to the university.

- The nature of their work: GAs are full-time students whose primary responsibilities are their academic and professional development.
   Thus, their roles and responsibilities are directly related to and often part of their academic requirements. Examples of GA works include the following:
  - Serving as a "teacher of record" or teaching assistant to another instructor
  - Serving as a research assistant on a range of research or scholarly projects as defined by their discipline, such as working in a lab, assisting with a journal, or editing a book
  - Serving as a TA or RA or in other roles related to their professional development outside their home academic department
- The nature of their relationship to the university: GAs are identified by their Graduate Program Directors and approved by the Graduate School. They are full-time students who are awarded, normally as part of their admission into their program, full tuition and stipend funding for all or most of the time required to complete their degree and are eligible for subsidized student health insurance per the Graduate School's insurance subsidy policy.
- GAs are employed on an on-going basis, either 10-months or 12months per year, throughout their enrollment in a graduate degree program, subject to continuing academic eligibility and other factors.
- GAs must retain full-time enrollment and are expected to devote an average of 20 hours per week to their assistantship responsibilities. Graduate Assistants may be assigned and compensated for more than 20 hours with approval of the Graduate Dean, but may not be assigned more than 28 hours of work that is not directly related to their academic program.

#### **Graduate Student Employees**

Graduate students who are employed by the University but whose employment or relationship to the university does not meet the definition of a Graduate Assistant as defined in the Graduate Assistant Policy are classified as either a Graduate Student Employee (GSE) – Monthly or Graduate Student Employee (GSE) – Bi-Weekly. The exempt (monthly) or non-exempt (bi-weekly) distinction is based solely on the primary work duties assigned to the graduate student, as further explained below. GSEs may be assigned up to 20 hours of work per week. Additional hours must be approved by the Graduate Dean.

#### Graduate Student Employee (GSE) - Monthly

A non-GA graduate student performing professional services utilizing knowledge or experience beyond the experience of an undergraduate and whose primary duties are teaching or research, as defined by the US Department of Labor. Based on the duties performed, GSE – Monthly employees are classified as exempt employees in the performance of work duties for wage and hour purposes. Examples of exempt GSE assignments include the following.

- A graduate student who is employed as teacher of record for a single course
- A graduate student who is employed to conduct research under the direction of a faculty member

In many cases, the work performed by GSE monthly employees (exempt professional work) may be very similar or even identical in nature to work being performed by GA's. However, a Graduate Assistantship is not awarded to every graduate student performing professional exempt services at the university.

#### Graduate Student Employee (GSE) - Bi-Weekly

A graduate student performing non-exempt work as defined by the US Department of Labor. Examples of non-exempt GSE assignments include assisting with the professional or administrative functions of the university.

Baylor University is a member of the Council of Graduate Schools (CGS). Baylor abides by a CGS Resolution, "Resolution Regarding Graduate Scholars, Fellow, Trainees and Assistants," that concerns the conditions surrounding the acceptance of offers of certain kinds of graduate student financial assistance, namely, scholarships, fellowships, traineeships, and assistantships. The general spirit of the Resolution is that students should have an opportunity to consider more than one offer and should have until April 15 to do so, that institutions and students should be able to view acceptances in force after April 15 as binding, that everyone should know what the rules are, and that an offer by the institution and its acceptance by the student constitute an agreement which both expect to honor. The Resolution acknowledges that students, after having accepted an offer, may change their minds and withdraw that acceptance. The intent of the Resolution is to provide a uniform and widely acceptable framework for so doing, one that provides protection for both student and institution. Full text of the Resolution can be viewed at www.cgsnet.org/pdf/resolution.pdf (http://www.cgsnet.org/pdf/ resolution.pdf). The April 15 date applies to fall applications submitted by the Graduate School's posted deadline.

#### **Fellowships and Scholarships**

In addition to assistantships noted above, there may be other sources of funding to support your graduate studies. The Graduate School website (www.baylor.edu/graduate (http://www.baylor.edu/graduate/)) posts funding opportunities and assistantship opportunities under the "Current Students" heading.

- Graduate School Fellowship (Enhancement) GSF: Fellowship
  granted by the Graduate School Dean to graduate students to assist
  with living costs while engaged in studies at the University. Award
  of fellowship is based on excellent academic qualifications. No past,
  present, or future services are performed as a condition to receiving
  this fellowship.
- Departmental Graduate Tuition Scholarship DGTS: Scholarship awarded by an academic program to graduate students to cover tuition costs. Award of scholarship is based on excellent academic

qualifications. No past, present, or future services are performed as a condition to receiving this scholarship.

The Vice Provost for Research maintains an extensive listing of graduate fellowships at www.baylor.edu/research/index.php?id=937053 (http://www.baylor.edu/research/?id=937053). Websites for many departments at Baylor also provide information about funding available to students majoring in those graduate programs.

#### **Financial Aid**

Financial aid programs available to graduate students include Federal Work-Study, Direct Unsubsidized Loans, Direct Grad PLUS Loans, and alternative loans through various private lenders. Apply for aid by completing the Free Application for Federal Student Aid (FAFSA) at www.studentaid.gov (http://www.studentaid.gov). Visit the website at www.baylor.edu/sfs (http://www.baylor.edu/sfs/) for additional information regarding the financial aid application process.

# **General University Regulations General Expectation of Baylor Students**

Baylor University is governed by a predominantly Baptist Board of Regents and is operated within the Christian-oriented aims and ideals of Baptists. The University is affiliated with the Baptist General Convention of Texas, a cooperative association of autonomous Texas Baptist churches. We expect that each Baylor student will conduct himself or herself in accordance with Christian principles as commonly perceived by Texas Baptists. Personal misconduct either on or off the campus by anyone connected with Baylor detracts from the Christian witness Baylor strives to present to the world and hinders full accomplishment of the mission of the University.

Under the Student Conduct Code, all Baylor students are expected to obey the laws of the United States, the State of Texas, and municipalities, or, if studying abroad, the laws of other countries. Students are also expected to obey the rules, regulations, and policies established by Baylor University including those found in the Honor Code. These expectations apply to all persons taking courses at or through the University, either full-time or part-time, pursuing undergraduate, graduate, or professional studies. Persons who are not officially enrolled for a particular term at the University but who have a continuing relationship with the University or who have been notified of their acceptance for admission will also be held to these standards.

Each student is responsible for learning about and adhering to the Baylor University Student Conduct Code and Honor Code. The Division of Student Life attempts to ensure that the Student Conduct Code and Honor Code are communicated to all students through various means. However, the student is responsible to the University for his or her conduct that violates University policies. The Student Conduct Code and Honor Code apply from the time that a person is notified of his or her acceptance for admission to the University through his or her receipt of a diploma or other credential. Moreover, should a student witness a violation of University policies on the part of other students, the student is responsible for reporting that violation to an appropriate University official (e.g., Judicial Affairs administrators, Office of Academic Integrity administrator, Campus Living and Learning staff, Baylor University Police Department, etc.).

## **Professional Conduct**

In keeping with Baylor University's commitment to mutual respect and personal integrity, the Graduate School expects that all students will

conduct themselves in a manner fitting their professional identity. This includes personal conduct towards faculty, staff, peers, and colleagues both on and off campus. Failure to display professional conduct may result in disciplinary action, including dismissal from the graduate program.

### **Email Communication to Students**

Baylor University may send official University correspondence to a student via email, using the email address assigned by Baylor. Each Baylor student is personally responsible for checking his or her email on a regular and recurring basis for receipt of official University correspondence.

## Change Of Address and Telephone Number

It is frequently a matter of great importance to students for University officials to be able to locate them quickly. For this reason, students are asked to file a notice of change of student local or student home address and telephone number with the University promptly, and not later than ten days thereafter in any case. Address changes may be made through BearWeb. For assistance, contact the Office of the Registrar at registrar@baylor.edu or (254) 710-1181. Failure to receive University notices because of an incorrect address provided by the student will not relieve the student of responsibility for responding to the notice. Nursing students enrolled on the Dallas campus are requested to report a change of address in the Office for Student Services on the first floor of the Harry W. Bass Memorial Educational Center.

## **Students Called for Active Military Duty**

An enrolled student who withdraws as a result of being called into active military duty (reserves or National Guard) may choose to:

- 1. receive a refund of tuition and fees paid toward the current term, or
- 2. be given full credit of tuition and fees paid toward the current term to apply toward future term's charges for enrollment, or
- if late enough in the term, request an "incomplete" so that the remainder of the work could be completed at a later date and receive no refund or credit of tuition and fees.

If the student has met the academic requirements for the term, a grade will be assigned and no tuition refund or credit will be granted.

Board charges are refunded on a pro rata basis on the date of the student's withdrawal. Room charges are refunded on a pro rata basis based on the date a student officially vacates on-campus housing.

Students having federal/state financial aid will be withdrawn according to the published withdrawal policy. Any refund or credit for a student being called into active military duty who has such financial aid will be considered on a case-by-case basis.

## **Degrees Offered**

Baylor University offers graduate degrees in five cities in Texas; Fairfield, California; Las Vegas, Nevada; Tacoma, Washington; and West Point, New York. The Waco campus offers thirty-three Doctor of Philosophy degrees, five doctoral-level professional degrees, twenty master's-level professional degrees, twenty-two Master of Arts degrees, thirteen Master of Science degrees, and twenty-eight joint degrees. Dallas, Texas is the site for the Doctor of Nursing Practice. The United States Army Medical Center of Excellence, located at Joint Base San Antonio – Fort Sam

Houston, in San Antonio, Texas, offers two individual masters degrees (Nutrition, MHA), one joint degree (MBA/MHA), and two doctoral degrees (DNP, DPT). We also offer five doctorate degrees at Brooke Army Medical Center in San Antonio, two doctorate degrees at Madigan Army Medical Center in Tacoma, Washington as well as William Beaumont Army Medical Center in El Paso, Texas. Darnall Army Medical Center in Killeen, Texas; David Grant Medical Center, Travis Air Force Base in Fairfield, California; Mike O'Callaghan Military Medical Center, Nellis Air Force Base in Las Vegas, Nevada; and the United States Military Academy in West Point, New York, each offer one doctoral degree.

The Graduate School encourages faculty to invest in the lives of gifted graduate students, equipping them to pass on a vision of inquiry, scholarship, teaching, and service. Students participate in classroom tutorial, collegial modes of learning, and in systematic independent inquiry, in a setting that allows them to see scholars at work as an important means of learning the scholar's art.

In order to ensure the appropriate quality of graduate courses, the Graduate Curriculum Committee, before it approves a proposal for a new course, must determine whether the course requires a level of independent learning and academic content above what is expected at the undergraduate level and is appropriate for graduate study.

Students may not pursue two or more graduate degrees concurrently unless the degrees are part of a University approved "Joint Degree" program, also called "dual degree" program. In "Joint Degree" programs, since both degrees are awarded simultaneously, all requirements in both programs must be completed in order to receive either degree. Additionally, the University offers accelerated programs which are listed on page 50.

Students will normally graduate under the degree requirements published in the Graduate Catalog that is in effect when the student matriculates for graduate study at Baylor University. Realizing that degree requirements might change from year to year, a student might opt to graduate under requirements in effect in a subsequent year while the student is enrolled in graduate study. To make such a change, the student must initiate a petition in which the student requests to graduate under a specified later set of degree requirements. This petition would need to be approved by the student's mentor and the director of that graduate program, then submitted to the Graduate School for final approval.

## Waco, Texas

### **Doctor of Philosophy Degree Programs**

- · Anthropology
- Biology
- Chemistry
- · Church Music
- · Communication Sciences and Disorders
- · Computer Science
- · Curriculum and Teaching
- · Ecological, Earth and Environmental Sciences
- Educational Psychology
- · Electrical and Computer Engineering
- English
- Entrepreneurship
- · Environmental Science
- · Exercise and Nutrition Sciences

- · Geology
- · Health Services Research
- · Higher Education Studies and Leadership
- History
- · Information Systems
- · Mathematics
- · Mechanical Engineering
- Philosophy
- · Physics
- · Political Science
- Preaching
- Psychology
- · Public Health
- · Religion
- School Psychology
- · Social Work
- Sociology
- Statistics

#### **Professional Doctoral Degrees**

- Doctor of Education (Curriculum and Instruction, Educational Administration (K-12 Educational Leadership), Higher Education Studies and Leadership, and Learning and Organizational Change)
- · Doctor of Musical Arts
- · Doctor of Occupational Therapy
- · Doctor of Physical Therapy
- · Doctor of Psychology

#### **Professional Degrees**

- · Master of Accountancy
- · Master of Arts in Teaching
- · Master of Athletic Training
- · Master of Business Administration
- · Master of Engineering
- · Master of Environmental Studies
- · Master of Fine Arts
- · Master of International Journalism
- Master of Music
- · Master of Public Health
- · Master of Public Policy and Administration
- · Master of Science in Biomedical Engineering
- Master of Science in Clinical Psychology
- · Master of Science in Economics
- Master of Science in Education<sup>2</sup>
- · Master of Science in Electrical and Computer Engineering
- · Master of Science in Information Systems
- · Master of Science in Mechanical Engineering
- Master of Taxation
- · Education Specialist

See special conditions in Psychology section.

See School of Education for majors.

#### **Master of Arts Degree Programs**

- · American Studies
- Biology
- Classics
- Communication
- · Curriculum & Instruction
- Farth Science
- · Education Psychology
- · English
- · Film & Digital Media
- History
- · International Relations
- Journalism
- · Museum Studies
- Philosophy
- Physics
- · Political Science
- Psychology<sup>1</sup>
- · Religion
- · School Leadership
- Sociology
- Spanish
- · Theatre Arts

Note: A student may complete minors in the Department of Art and the program of Latin American Studies.

#### **Master of Science Degree Programs**

- Biology
- Chemistry
- · Communication Sciences and Disorders
- · Computer Science
- · Environmental Science
- · Exercise Physiology
- Geology
- Mathematics
- · Nutrition Sciences
- · Physics
- · School Psychology
- Sport Pedagogy
- Statistics

#### Joint Degrees

- · Master of Arts (Curriculum and Instruction)/Master of Divinity
- · Master of Business Administration/Juris Doctor
- · Master of Business Administration/Master of Divinity
- · Master of Business Administration/Master of Engineering
- Master of Business Administration/Master of Science in Information Systems
- · Master of Business Administration/Master of Social Work
- · Master of Music (Church Music)/Master of Divinity

- · Master of Public Policy and Administration/Juris Doctor
- Master of Science in Education (Curriculum and Instruction)/Master of Divinity
- · Master of Taxation/Juris Doctor
- Bachelor of Arts for Select Majors<sup>1</sup>/Master of Arts in Museum Studies
- · Bachelor of Business Administration/Master of Accountancy
- · Bachelor of Business Administration/Master of Science in Economics
- · Bachelor of Business Administration/Master of Taxation
- · Bachelor of Science in Education/Master of Arts in Teaching
- · Bachelor of Science/Master of Athletic Training
- Bachelor of Science in Education/Master of Science (Sport Pedagogy)
- Bachelor of Science in Electrical and Computer Engineering/Master of Science in Biomedical Engineering
- Bachelor of Science in Electrical and Computer Engineering/Master of Science in Electrical and Computer Engineering
- Bachelor of Science in Electrical and Computer Engineering/Master of Engineering
- Bachelor of Science in Engineering/Master of Science in Biomedical Engineering
- · Bachelor of Science in Engineering/Master of Engineering
- Bachelor of Science in Environmental Health Science/Master of Public Health
- Bachelor of Science in Mechanical Engineering/Master of Science in Biomedical Engineering
- Bachelor of Science in Mechanical Engineering/Master of Science in Mechanical Engineering
- Bachelor of Science in Mechanical Engineering/Master of Engineering
- · Bachelor of Science in Public Health/Master of Public Health
- · Bachelor of Science in Statistics/Master of Science in Statistics

#### 4+1 Accelerated Programs

- · Bachelor of Arts/Master of Arts (Classics)
- · Bachelor of Arts/Master of Arts (Communication)
- · BA Art History/Master of Arts in Teaching
- · BA Biochemistry/Master of Arts in Teaching
- · BA Chemistry/Master of Arts in Teaching
- · BA English/Master of Arts in Teaching
- BA Environmental Studies/Master of Arts in Teaching
- · BA History/Master of Arts in Teaching
- · BA Mathematics/Master of Arts in Teaching
- · BA Political Science/Master of Arts in Teaching
- · BA Religion/Master of Arts in Teaching
- · BA Studio Art/Master of Arts in Teaching
- · BA University Scholars/Master of Arts in Teaching
- · BFA Art/Master of Arts in Teaching
- BS Applied Mathematics/Master of Arts in Teaching

See special conditions in Psychology section.

For undergraduate majors in American Studies, Anthropology, Art and Art History, Journalism, or History who decide that they wish to apply their undergraduate knowledge to work in museums, the department offers a joint bachelor and master degree.

- · BS Biochemistry/Master of Arts in Teaching
- · BS Biology/Master of Arts in Teaching
- · BS Biology/Master of Science in the Biology of Global Health
- · BS Chemistry/Master of Arts in Teaching
- BS Communication Sciences and Disorders Deaf Education/Master of Arts in Teaching
- · BS Environmental Science/Master of Arts in Teaching
- · BS Mathematics/Master of Arts in Teaching
- · BSEd All Level Special Education/Master of Arts in Teaching
- · BSEd Elementary Education/Master of Arts in Teaching
- BSEd Elementary Education with Supplemental Gifted and Talented/ Master of Arts in Teaching
- · BSEd Middle School Education/Master of Arts in Teaching
- · BSEd Recreation and Leisure Services/Master of Arts in Teaching
- · BSEd Secondary Education/Master of Arts in Teaching

## **Dallas, Texas**

#### **Baylor University Louise Herrington School of Nursing**

· Doctor of Nursing Practice

#### U.S. Army Medical Center of Excellence 1

#### San Antonio, Texas - Joint Base San Antonio-Fort Sam Houston, Brooke Army Medical Center

- · Master of Health Administration
- Master of Health Administration/Master of Business Administration (joint degree)
- · Master of Science (Nutrition)
- · Doctor of Nursing Practice (Anesthesia Nursing)
- · Doctor of Physical Therapy
- · Doctor of Science in Occupational Therapy
- · Doctor of Science in Physical Therapy
- Doctor of Science in Physician Assistant Studies (Emergency Medicine, Orthopaedics, General Surgery)

#### El Paso, Texas - Fort Bliss, William Beaumont Army Medical Center

 Doctor of Science in Physician Assistant Studies (Emergency Medicine, Orthopaedics)

#### Killeen, Texas - Fort Hood, Darnall Army Medical Center

 Doctor of Science in Physician Assistant Studies (Emergency Medicine)

#### Tacoma, Washington - Fort Lewis, Madigan Army Medical Center

 Doctor of Science in Physician Assistant Studies (Emergency Medicine, Orthopaedics)

## Fairfield, California - Travis Air Force Base, David Grant Medical Center

· Doctor of Science in Physician Assistant Studies (Orthopaedics)

#### Las Vegas, Nevada - Nellis Air Force Base, Mike O'Callaghan Medical Center

 Doctor of Science in Physician Assistant Studies (Emergency Medicine)

## West Point, New York - United States Military Academy, Keller Army Community Hospital

Doctor of Science in Physical Therapy

<sup>1</sup> These programs are for specifically targeted Federal personnel.

# **Registration Classifications**

- · Regular. Student is fully admitted to a graduate degree program.
- Post Baccalaureate: Any student wishing to register for graduate classes before being formally admitted to the Graduate School will need to register as a post baccalaureate student through the undergraduate Admissions Office. Only six hours of graduate level work may be taken by a post baccalaureate student. After the student has been admitted to the Graduate School, he/she may then petition to transfer the six hours of graduate level work taken as a post baccalaureate student into their graduate program. This applies to 4000-level courses carrying graduate credit as well as 5000-level or 6000-level courses. A 4000-level course requires a statement from the instructor stating the student completed the extra requirements to receive graduate credit for the course.
- Transfer of Credit: Any student in Good Standing in a graduate
  program at another university wishing to take a graduate-level course
  at Baylor and transfer the credits to their home university. Students
  must present a Letter of Good Standing from their home institution
  prior to each semester of registration at Baylor.

#### **Procedures**

- Registration information is located at www.baylor.edu/registrar (http://www.baylor.edu/registrar/).
- 2. Students who do not pre-register should check with their department for registration information prior to the first day of classes.
- 3. All students are expected to register for a minimum of one semester hour of graduate-level coursework in each semester. This practice is institutionally referred to as "continuous registration."
- 4. All students should refer to the official University and Graduate School Calendars for dates set for the semester of graduation. Dissertation and thesis students should be especially mindful of final deadlines for submission and completion of degree requirements. Dissertation and thesis services are available from the first day of classes through the last day of classes during each semester.

It is the graduate student's responsibility to honor all conditions and procedures associated with timely registration. Advisement should be limited to the appropriate graduate program director and authorized faculty. Advisement is expected to be consistent with policies and procedures as stated in the Graduate Catalog.

## **Enrollment**

## **Classifications**

- Graduate: Any person holding a bachelor's degree who has been admitted to the Graduate School, who has enrolled in a graduate program, and who is taking course work to be credited toward a graduate degree. All graduate students are expected to maintain continuous enrollment. Ph.D. students are required to maintain continuous enrollment, including the semester in which the degree is conferred. (See Items 3 and 4 in the preceding section.)
- Graduate Non-Degree: Any person holding a bachelor's degree who
  has been admitted to the Graduate School, but not wishing to pursue
  a degree. The University will produce a graduate transcript reflecting

the graduate-level course work taken. Graduate non-degree students must satisfy the same admission standards as fully admitted students.

- Transfer of Credit: Any student in Good Standing in a graduate program at another university wishing to take a graduate-level course at Baylor and transfer the credits to their home university.
- Post baccalaureate: Any person holding a bachelor's degree that has
  not been admitted to Graduate School who is taking course work
  through the undergraduate Admissions Office. An undergraduate
  transcript will be generated for the student to reflect the postbaccalaureate coursework. After the student has been admitted to
  the Graduate School, he/she may then petition to transfer the 6 hours
  of graduate level work taken as a post-baccalaureate student into
  their graduate program.
- Undergraduate Senior: An undergraduate senior may enroll in graduate course work (including 5000-level courses and 4000-level courses approved for graduate credit for which the student intends to apply either toward graduate credit or toward undergraduate degree requirements), subject to the following conditions:
  - a. The student must have grade point averages, both overall and in the major field, of at least 3.0.
  - b. The student may enroll in no more than one graduate course in one semester.
  - c. The course load (combined undergraduate and graduate course work) may not exceed fifteen semester hours in one semester.
  - d. The student must have taken and successfully completed all prerequisites for the graduate course(s).
  - e. The student may include no more than six semester hours of graduate credit within the total semester hours for the undergraduate degree.
  - f. The student will assume the responsibilities of a graduate student in a graduate course.

Exceptions to rules 2 and 5 above may be granted for students in joint-degree programs which integrate undergraduate and graduate degree requirements, resulting in simultaneous award of both bachelor's and master's degrees. In such cases, the student may enroll in no more than two graduate courses in one semester, and the student may include no more than twelve semester hours of graduate credit within the total semester hours for the undergraduate degree. In this context, the full summer is considered as one semester such that an undergraduate senior may take a maximum of two graduate courses during the combined summer sessions.

Permission to take graduate course work requires the student to file a petition to be approved by the professor(s) of the course(s) and the dean of the college of the student's undergraduate major. Accompanying the petition must be a copy of the student's transcript so that the undergraduate Dean's office can calculate grade point averages. On the petition, the student indicates whether the graduate course work is to apply toward undergraduate degree requirements. Should the student later be admitted into a graduate program for which the course work is relevant, the student, if they did not count the work toward the undergraduate degree, may petition the Graduate School to transfer up to six hours into their graduate program. The course work may not be counted both ways unless it is part of a joint degree program and has already been approved as part of the curriculum. Final approval of the petition must be obtained before the student can register for any graduate course work.

### **Full-Time Status**

A graduate student is considered full time taking nine credit hours.

Exceptions to the minimum credit hours for a graduate student may be made when:

- A student is registered for internship, practicum, or cooperative education activities that require full-time work and will count toward completion of the student's degree program (upon the request of the Dean of the Graduate School).
- A student is completing a thesis or dissertation and is enrolled in a class specifically identified as being for this purpose.
- A student is conducting prospectus research prior to admission to candidacy and is enrolled in a class specifically identified as being for this purpose.

The above exceptions may not apply to a student's eligibility for financial aid (e.g. scholarships, grants, loans, etc.) A student who has questions concerning the enrollment requirements for his or her financial aid should contact the financial aid office and confer with a financial aid counselor.

#### **Continuous Enrollment**

Beginning in Fall 2020, Ph.D. students must maintain continuous enrollment until degree completion. Continuous enrollment is defined by the Graduate School as students enrolled in at least one credit hour in consecutive Fall and Spring semesters. Summer enrollment is not required if the student is enrolled in the preceding Spring and the following Fall semesters. A formal leave of absence will not extend the overall time-to-degree cap. Ph.D. students at Baylor have a maximum of eight years after matriculation to complete their degree (although individual programs may set earlier caps). Students who fail to remain continuously enrolled and have not sought a formal leave of absence must reapply to the program.

## **Information on Change of Degree**

Students who wish to change their degree from a doctoral degree to a master's level degree must ask their department to submit a Change of Degree Form available on the Graduate School website (https://www.baylor.edu/graduate/doc.php/360154.pdf). Students who wish to change their degree from a master's level degree to a doctoral degree must reapply. Please contact the Admissions Director, Tosha Hendrickson, at Tosha\_Hendrickson@baylor.edu to help with the process. Additional questions regarding a change of degree should be directed to Alana Schaeper, at Alana\_Schaeper@baylor.edu.

## **Course Numbering System**

The numbers applied to each course indicate level, semester hours of credit, and sequence. Selected courses numbered 4000-4V99 are open to both advanced undergraduates and graduate students. Graduate credit will not be conferred for courses numbered below 4000, or for 4000-level courses which do not appear in the Graduate Catalog. Courses numbered 5000 and above are limited to graduate students. The first digit in the number indicates the level. The second digit in the number indicates the value in graduate credit hours. Thus, "3" as a second digit indicates three credit hours. Some courses may be taken for a varying number of credits, typically from one to three semester hours. In such cases, instead of a digit for the second place in the course number, the letter "V" is used, and the varying amount of credit is indicated at the right of the course title.

The last two digits are reserved for departmental indication of preferred sequence of courses.

#### **Course Load**

The maximum number of credit-hours per semester for traditional, on-campus programs is 16 for master's students and 12 for doctoral students. No more than 8 credit-hours may be taken in each of the summer sessions. The credit limits for some online, accelerated, and professional programs vary.

## **Grading System**

Grades for graduate students are:

Grade	Grade Points
A	4.00
A-	3.67
B+	3.33
В	3.00
B-	2.67
C+	2.33
С	2.00
C-	1.67
D+	1.33
D	1.00
D-	.067
F	0.0

If a grade of C-, D+, D, D-, or F is made in a required course, the student must repeat the same course at Baylor and make a grade of C or better to meet the degree requirements for graduation. In addition, a C-, D+, D, D-, or F will not apply toward the total number of hours for program completion, but will calculate in the student's grade point average. Graduate courses may be repeated according to the following conditions:

- 1. A course may only be repeated one time
- A course in which a student previously received a B-, C+, or C may be repeated when a petition is approved by the Graduate Program Director and Graduate School.
- A course in which a student previously received a C-, D+, D, D-, or F may be repeated without requiring a petition.
- 4. No more than three courses may be repeated within a degree program.

**Note:** For purposes of this policy, an attempt includes registration for any course that results in either a grade or a W notation on a student's record. Graduate Courses may not be repeated if a grade of B or higher was previously received.

The grade point average (GPA) is calculated by totaling the number of grade points earned and dividing by the number of credits applied toward the GPA. The resulting grade point average is truncated following the second decimal (e.g., 1.99672=1.99). The university does not round the GPA. This method of calculation is used for all academic purposes such as academic standing, graduation, and scholarship eligibility.

The grade of "I," incomplete, may be given only when the completed portion of the course work is of passing quality. It is the student's responsibility to complete the course requirements and to see that the incomplete grade is removed from the record. A student may not

graduate with an "I" incomplete on their transcript. The incomplete grade will change to an "F" when the student reaches their time limit, is certified to graduate, or withdraws from the program.

Students may not register in a course other than 5V99, 6V99, or scientific research for which they may already carry a grade of incomplete. Students who receive one or more incomplete grades during a semester may have their schedule for the following semester reduced by the number of hours of "incomplete" received. In certain practicum-oriented and internship-based courses in the major or minor field, a grade of "Pass," "Fail," "Credit," or "Non-credit" may be given, provided the grading system for the courses has been approved by the Graduate School, and has been coordinated with the Registration and Academic Records Office prior to course offering. Students registering for dissertation (6V99) or thesis (5V99) will receive a grade "Credit" or "Non-credit" rather than a letter grade. A student may be given an "I" in dissertation (6V99) or thesis (5V99) until the work is completed and successfully defended.

## **Change of Grade Policy**

Changes to grades may be initiated by the instructor of the class and must be approved by the department chair and the dean of the Graduate School (with notification to the dean of the school in which the class was offered). Changes to grades may be initiated by an instructor when the original grade resulted from an error, the original grade was an Incomplete, or in cases where the student's performance was affected by extenuating circumstances. Changes resulting from an error or extenuating circumstances may only be made within one calendar year of the original grade assignment and may not occur once a degree has been conferred or the student's time limit has expired. Further, changes to Incomplete grades may be made only in compliance with Graduate School policies on Incompletes (see policies below).

Beyond changes to grades for reasons stated above, changes may occur when initiated by the Provost based on the finding of a violation of academic integrity or when a grade is successfully appealed through the appropriate process. The one-year time limit does not apply to these changes.

Policy for changing incompletes:

- Baylor Policy requires that incompletes be removed from the student's transcript when the student graduates, withdraws from the program, or their time limit has expired, with the exception of dissertation (6V99) or thesis (5V99) hours. The Graduate School will administratively initiate the change of grade form to change the incomplete to an "F" if the instructor has not already submitted the change.
- 2. The instructor of record for the course may require the student to complete the course and remove the incomplete at any time prior to the Graduate School deadline as stated above. The instructor may not exceed the Graduate School deadline unless a formal extension to the student's time limit has been petitioned and approved by both the Graduate Program Director in the student's department and the Graduate School.
- 3. A student may be given an "I" in dissertation (6V99) and thesis (5V99) until the work is completed and successfully defended. Once completed and defended, the instructor of record will submit a change of grade changing the "I" to "CR" for semesters in which the student registered for dissertation (6V99) or thesis (5V99).

### **Audit**

A student may audit a course with permission from the Graduate School. A student's department must complete an Add/Drop Form along with a petition in order to register a student for an audited course. The type of petition needed is included in the Add/Drop form located in OnBase. Students do not have access to OnBase. Faculty/staff must use a VPN to log into OnBase off campus. For additional questions, please contact Alana Schaeper, at Alana\_Schaeper@baylor.edu.

The fee for auditing a course is \$370. Tuition funds may not be used to cover classes that are being audited. Only lecture courses may be audited. Audit enrollment is subject to the instructor's willingness to have nonparticipating students. Students who drop an audited course by the fifth class for the fall or spring semester are eligible for a full refund. Full refunds also apply to students who drop an audited course by the third class day for the full summer session, by the second class day for Summer I and II, and by the first class day for the Minimester. No refunds are given after the designated drop date.

Audited courses may not exclude a student seeking credit, may not be repeated at a later date for credit, may not be changed in status after the registration period, and are not considered part of the course load. The course will not count toward degree requirements.

#### **Probation**

A student who is admitted to Graduate School on probation must maintain a "B" (3.0) overall grade point average for the first nine semester hours of graduate course work. Failure to do so will result in notification of dismissal by the Graduate School. The Graduate School is not required to hear student appeals of this decision. Students will have an option to appeal the dismissal one time. The form to be completed for the appeal will be included in the dismissal letter received. Students are automatically removed from probation upon completion of the first nine semester hours of graduate-level course work if an overall 3.0 grade point average is attained.

Any fully admitted student whose overall GPA falls below a "B" (3.0) average during any semester will be placed on probation for the next nine semester hours of graduate course work. If, after completion of the ninth semester-hour credit, the student's overall grade point average is still below 3.0, the student will receive notification of dismissal from the Graduate School. Students receiving assistantships must maintain an overall grade point average of 3.0 to avoid being placed on probation. Probationary status prevents the student from academic assistantship/fellowship or enhancement award eligibility.

### **Dismissal**

Individuals who do not attain the required minimum grade point average of 3.0 during the probationary period will be notified in writing by the Graduate School of their dismissal.

The student will be precluded from all registration and enrollment privileges at that time. Should the student's circumstances be so unusual as to warrant special consideration, the dismissal letter will include directions and provisions for engaging in an appeals process. A student can appeal a dismissal one time. Should a student be dismissed a second time, they will be unable to appeal the decision.

## **Commencement Participation**

For a student to walk at a commencement ceremony, the student must be eligible for either certified or non-certified commencement. Certified Commencement requires a student to complete all degree requirements and be certified for the degree in order to participate in a commencement ceremony. Non-Certified Commencement provides the opportunity for a student close to completing all degree requirements to participate in a commencement ceremony.

Doctoral candidates must be certified as having completed their degree in order to participate in commencement ceremonies at the end of a term.

A student seeking a bachelor's, master's, or Education Specialist degree, who was enrolled in or has completed sufficient coursework to complete degree requirements in a term, may participate as a degree candidate in commencement ceremonies at the end of a term. (For the purposes of determining sufficient coursework under this policy, a student must have received a final grade, an incomplete notation (I), or a withdrawal notation (W) for relevant coursework.)

Students who withdraw from the University in the term and have not been certified for completion of a degree may not participate.

## **Posthumously Awarded Degrees**

A student in his/her final year who has successfully completed 75% of the degree requirement, who is enrolled in good standing, making satisfactory academic progress, meeting all minimum grade point average requirements for his/her degree program, and dies before completing his/her degree may be awarded the degree posthumously upon the recommendation of the Graduate School Dean and with the approval of the Provost.

# **Curriculum Organization Curriculum Changes**

Any faculty member can propose a new degree, major, minor, concentration, or new course (or changes to existing courses). The first step is a discussion between the faculty member and the appropriate department chair. The most successful proposals have strong support at the department and dean's office levels. Establishing support across disciplinary and school/college boundaries is beneficial. Departments should follow the curriculum guidelines, as indicated on the Provost's website (www.baylor.edu/provost (http://www.baylor.edu/provost/)), for submitting requested curriculum changes.

Any new degree or major requires approval by the Graduate Curriculum Committee, Graduate Dean, Graduate Council, Council of Deans (PhD), Vice Provost for Academic Affairs and Policy (Vice Provost for Institutional Research & Professional Education for GPE programs), President, and Board of Regents (to be included on the agenda, requests for new degrees must be submitted at least 6-8 weeks in advance of Board meetings).

Any new minor, specialization, or concentration requires approval by the Graduate Curriculum Committee, Graduate Dean, and Vice Provost for Academic Affairs and Policy (Vice Provost for Institutional Research & Professional Education for GPE programs).

Changes to degree requirements for an existing program must be approved by one of the Graduate Curriculum Committees. Contact the chair of the appropriate committee for information about the process and requirements.

To make determinations on how much academic credit should be offered for new courses (or changes to existing courses), the individual faculty members and curriculum committees consider the following factors:

- the subject matter covered in the course,
- 2. the number (and nature) of required assignments,
- 3. the number of contact hours each week,
- 4. the amount and level of work required, and
- 5. the structure/content of similar courses currently being offered within the department and throughout the university.

Once approved, changes are entered into the university's academic records system and can be offered during the next most appropriate term. New courses (or changes to existing courses) are submitted through BearQuest and reviewed under similar guidelines.

## **Catalog Updates**

The Graduate School Catalog is updated annually by the Graduate School - Office of the Dean. Any updates to the General, Curriculum, or Affiliated Programs sections of the catalog must be submitted in writing to graduate\_catalog@baylor.edu following appropriate approvals. The Courses of Instruction section is updated annually via BearQuest.

# **Doctoral Degrees, General Degree Requirements**

The following general requirements apply to all doctoral programs administered by the Graduate School.

## **Transfer Credit**

The majority of all course work toward completion of any degree must be taken at Baylor. For doctoral degrees, the accepted number of transfer credits will be determined by the individual academic departments within the following general guidelines:

- course work must be from an accredited university and appear on a graduate transcript, and
- course work must have been taken within five years immediately prior to matriculation, and
- course work must carry a grade of "B" or better (cannot accept P/F, CR/NC or certificates of completion), and
- none of the transfer course work consists of extension, workshop courses, or master's thesis or doctoral dissertation credits, and
- may not use courses to satisfy requirements toward more than one degree at Baylor unless the two degrees are part of a joint degree program.

## **Time Limitation**

The maximum time limit for the doctoral degree is eight years from the time the student first matriculates into the doctoral program. After this time the student may request a one-year extension. Once a student's time limit expires, any incompletes with the exception of dissertation or thesis hours will change to an "F". Any student wishing to return to complete their degree after a one year absence, must reapply for admission to Graduate School. If admitted the student would enter under the current catalog and the appropriate course work for degree completion may be revalidated or not, according to the policy of the individual program in

consultation with the Graduate School. Coursework where incompletes have been changed to an "F" may not count in the new program.

## **Graduation Eligibility**

To qualify for a doctoral degree, students must have a minimum overall grade point average of 3.0 and must have satisfied all course work, practica, dissertation, or other academic/professional efforts associated with the degree sought. No member of the Baylor University faculty above the rank of Lecturer may be admitted to candidacy for a graduate degree at the University. Candidates are not allowed to continue in the doctoral program after ten years has elapsed from the semester of enrollment. Students may not use a course to meet more than one degree requirement or count toward two master's degrees unless the two degrees are part of a joint degree program.

## **Filing for Graduation**

Students file for graduation within BearWeb. The application portal will be available during the dates listed below.

Spring Graduation: October 1 - February 1

Summer Graduation: February 1 - June 1

• Fall Graduation: February 1 - October 1

If you use student loans or other forms of financial aid to pay your bill you should file for graduation as early as possible so that the Student Financial Aid (SFA) office can ensure your award offer for the upcoming year is accurate.

Students pursuing a joint degree program must file for graduation in both programs or schools. If a Ph.D. student seeks to receive a Master's degree on the way (non-terminal Master's degree), the student must contact the Assistant Director of Student Records, Alana Schaeper, at Alana\_Schaeper@baylor.edu before attempting to apply for graduation in order to have a file opened.

Processing of diplomas takes four to eight weeks. The degree is conferred at the first commencement ceremony following program completion. Ceremonies are held in August, December, and May (see Academic Calendar in this catalog).

# **Dissertation Examining Committee Composition**

The dissertation examining committee will include a minimum of four members. At least two members, including the chairperson, will be Baylor Graduate Faculty from the degree-granting program. At least one member must be a member of Baylor's Graduate Faculty whose primary appointment is from a program other than the one conferring the degree. This non-program member helps to ensure a consistent level of quality, rigor, and fairness across all graduate programs at Baylor University. The committee may also include one member from outside of Baylor with approval of the candidate's Graduate Program Director. Non-Baylor committee members are not eligible to serve as the dissertation chairperson. The Graduate Program Director is responsible for ensuring the relevant expertise of the non-Baylor committee member and notifying the Graduate School through the Announcement of Doctoral Oral Examination form. The candidate's dissertation director will serve as the chairperson of the committee and ensure that formal announcement of the examination is made, that the exam is conducted fairly, and that it is open to the faculty. The committee may include additional members beyond the required minimum of four. Preferably, the student and the examiners will be present in person, but in certain cases (e.g., online degree programs, extenuating circumstances, etc.) this may not be logistically possible. A Graduate Program Director may approve alternative formats for examination, including virtual, video-conferenced participation of one or more examiner(s). Such approval needs to be accompanied with justification to the Graduate School.

# **Doctoral Degrees, Specific Degree Requirements**

## **Doctor of Philosophy**

The degree of Doctor of Philosophy is awarded to those who attain a high level of scholarship in a selected field, as well as the ability to conduct research.

#### Admission

Students not only must meet the general requirements for admission to graduate study, but also must have demonstrated in their undergraduate courses, and in all work beyond the baccalaureate level, scholarly potential and notable intellectual ability. Admission will require the concurrence of the graduate program director and the Graduate School. A standardized appropriate measure is required and specified by all departments. Some departments specify additional skill, performance, or aptitude requirements.

## Program Requirements Period of Study

The equivalent of three academic years of full-time study beyond the bachelor's degree and the completion typically of twelve semester hours of dissertation research constitute the minimum requirements for degree completion. The majority of all course work toward completion of the Ph.D. degree must be taken at Baylor. The doctorate is not based on a number of courses or time units, but rather on the demonstrated ability to be a contributing scholar. Consequently, an individual may spend more than the minimum time earning the degree. Students may not use a course to meet more than one degree requirement.

#### **Foreign Language Requirement**

The prerogative of requiring a foreign language for the Ph.D. degree rests with the degree program. For those programs requiring foreign language, the requirement will consist of one or more languages approved by the degree program in consultation with the Graduate School. English may not be used as a foreign language. Intermediate proficiency in a foreign language may be demonstrated via any one of the options below:

- Presenting an official undergraduate transcript from Baylor University
  or another regionally accredited institution of higher learning showing
  that while enrolled the student received a grade of "B" or better in the
  Baylor University 2320 course or its equivalent course in the foreign
  language taken at another institution. Note: This option is valid if the
  above course was taken not more than five years before the student
  matriculates into the Baylor graduate program.
- After matriculation into the graduate program at Baylor University, and after having satisfied the necessary prerequisites, enrolling in 2320 and receiving a grade of "B" or better.
- 3. Enrolling in French, German, or Spanish 5370/5371, or Latin or Greek 5321/5322 and receiving a grade of "B" or better in French, German, or Spanish 5371 or Latin or Greek 5322. These are reading courses designed specially for graduate students; no previous experience with the language is necessary. The Graduate School must receive

- a petition requesting the foreign language course be accepted as completion of the language requirement. These courses may not be audited, or taken Pass/Fail or Credit/Non-Credit.
- 4. Taking the reading examination offered by the Department of Modern Languages and Cultures (Arabic, Chinese, French, German, Italian, Japanese, Spanish, Portuguese, Russian, or another modern language approved by the candidate's department), Department of Classics (Greek and Latin), or the Institute of Biblical and Related Languages (Hebrew and related Semitic Languages).
- Presenting a degree from a foreign university. This procedure is valid if the student's native language is not that of the country in which the degree has been obtained.

The language requirement must be met before the form for application for admission to candidacy for the doctoral degree is filed. The student is responsible for securing proof of having satisfied the language requirement. Deadlines for meeting the language requirement may be found on the Graduate School website (www.baylor.edu/graduate (http://www.baylor.edu/graduate/)) and additional information regarding foreign language test preparation can be found on the Modern Languages and Cultures website (www.baylor.edu/MLC (http://www.baylor.edu/MLC/)).

#### **Major and Minor**

A student's major field of study is determined by the program to which a student is admitted. At the option of the department, students may be required to select one or two minor fields in a department(s) other than the major. Should the department not require a minor, the student may declare a minor with the consent of the departments involved.

#### **Departmental Supervision**

Graduate Program Directors are entrusted with the responsibility for the initial supervision for the student's program of study. A research professor or committee, with the approval of the Graduate Program Director, assumes responsibility for supervising the student's academic performance until the time of the preliminary examination.

#### **Preliminary Examination**

This examination is designed to test the student's knowledge in the discipline or field(s) of study. It is either a written examination, or a combination of written and oral parts, and is given under the direction of both the graduate program director and a committee designated by the director. Incomplete grades must be removed prior to the preliminary examination. If the student does not pass the preliminary examination, a second one may be given no sooner than four months after the first examination. After two failures, no further examination is permitted.

#### **Admission to Candidacy**

Students are recognized as candidates for a doctoral degree only after they have met the foreign language requirement (if required), passed the preliminary examination(s), completed all departmental requirements including all coursework (except the dissertation), and received approval by the Graduate School of their formal application for admission to candidacy. An application for admission to candidacy form must be filed with the Graduate School upon successful completion of the above requirements, and prior to a student registering for dissertation hours.

#### **Dissertation Supervision**

This committee is appointed by the major department typically no later than the student's third semester of graduate study. The committee is entrusted with the responsibility of general supervision of the student's program of study, research, and dissertation. The committee will consist

of three Graduate Faculty members: the chairperson who mentors the research and dissertation, and at least two others.

#### Dissertation

Candidates for the Doctor of Philosophy degree must present an acceptable dissertation on a problem in the field of their major subject. The dissertation must give evidence that the candidate has pursued a program of research, the results of which reveal scholarly competence and a significant contribution to knowledge.

Candidates should acquire the *Guidelines for Preparing the Dissertation and Thesis* and other necessary materials at the beginning of the semester in which graduation is expected. The most recent edition of Guidelines is available on the Baylor homepage www.baylor.edu/graduate/degree (http://www.baylor.edu/graduate/degree/). Additional degree completion instructions are provided to students when they file for graduation. The Guidelines contain the directions for the procedure to complete the dissertation, an explanation of forms necessary, the semester calendar, and an explanation of fees associated with the process.

#### Final Examination

This oral examination is conducted by an examining body appointed by the Graduate School upon the recommendation of the graduate program director only after all courses, research, and dissertation requirements have been fulfilled. The dissertation research committee is an integral part of the examining committee.

The dissertation examining committee will include a minimum of four members. At least two members, including the chairperson, will be Baylor Graduate Faculty from the degree-granting program. At least one member must be a member of Baylor's Graduate Faculty whose primary appointment is from a program other than the one conferring the degree. This non-program member helps to ensure a consistent level of quality, rigor, and fairness across all graduate programs at Baylor University. The committee may also include one member from outside of Baylor with approval of the candidate's Graduate Program Director. Non-Baylor committee members are not eligible to serve as the dissertation chairperson. The Graduate Program Director is responsible for ensuring the relevant expertise of the non-Baylor committee member and notifying the Graduate School through the Announcement of Doctoral Oral Examination form. The candidate's dissertation director will serve as the chairperson of the committee and ensure that formal announcement of the examination is made, that the exam is conducted fairly, and that it is open to the faculty. The committee may include additional members beyond the required minimum of four. Preferably, the student and the examiners will be present in person, but in certain cases (e.g., online degree programs, extenuating circumstances, etc.) this may not be logistically possible. A Graduate Program Director may approve alternative formats for examination, including virtual, video-conferenced participation of one or more examiner(s). Such approval needs to be accompanied with justification to the Graduate School.

Candidates who fail this examination may take a second one only upon the recommendation of the graduate program director and the approval of the Graduate School. In no case will this examination be given until an interval of at least four months has elapsed. After two failures, no further examination is permitted.

No longer than ten days after the oral examination, but no later than the "last day" deadline posted in the Graduate School *Academic Calendar* for the semester of graduation, an electronic pdf copy of the dissertation in its final departmentally approved form should be submitted to the Graduate School. With the dissertation copy, the student should also

submit the appropriate forms required, as stated in the Guidelines. A student is certified for graduation once the pdf copy of the dissertation is submitted electronically and approved, and all remaining steps, as stated in the *Guidelines*, have been completed.

#### **Doctor of Education**

Through the School of Education, Baylor University offers two Doctor of Education degrees. In the department of Curriculum and Instruction, the Ed.D. in Learning and Organizational Change prepares students to apply essential principles of teaching and learning to manage the dynamics of organizational change. In the department of Educational Leadership, the degree program's emphasis prepares graduates for competent professional performance in executive leadership roles.

#### **Curriculum and Instruction**

#### Admission

Applicants to the online Ed.D. in Learning and Organizational Change program must hold a master's degree with a GPA that demonstrates strong academic success, which is 3.0 or higher, and at least two years of professional experience. The online Ed.D. program starts three times per year — in January, May, and August. The admissions team accepts and reviews applications year-round on a rolling basis. Successful applicants possess backgrounds that demonstrate an ability to excel in a doctoral program and a strong desire to have a positive impact in their field. GRE test scores are not required to apply to the online Ed.D. in Learning and Organizational Change program. All applicants must submit the online application, a resume/curriculum vitae, official transcripts of baccalaureate and master's degrees from accredited institutions, three letters of recommendation, a personal statement, and a video introduction.

#### **Program Requirements**

Transfer Credit: No transfer credit is allowed in this program.

**Foreign Language:** The Doctor of Education program has no foreign language requirement.

Time Limitation: The maximum time limit for the doctoral degree is eight years from the time the student first matriculates into the doctoral program. After this time the student may request a one-year extension. Once a student's time limit expires, any student wishing to return to complete their degree after a one year absence, must reapply for admission to graduate school. The student would enter under the current catalog and the appropriate course work for degree completion may be revalidated or not, according to the policy of the individual program in consultation with the Graduate School.

**Admission to Candidacy:** Admission to doctoral courses is not equivalent to admission to candidacy. Students are admitted to candidacy for the Doctor of Education degree only after they have passed EDC 6392 Problem of Practice Phase Two during their fifth term in the program.

**Major and Minor**. In this program, there is a specific sequence of courses that provides students with a foundation in Learning and Organizational Change, so this is the major. No minor is available for this program.

Faculty Advisors: Faculty Advisors are assigned to each student at the time they enroll in EDC 6391 Problem of Practice Phase One and EDC 6392 Problem of Practice Phase Two. These faculty are the designated instructors for the Problem of Practice courses and mentor students in the development of their Problem of Practice during these courses.

Problem of Practice/Dissertation: The Problem of Practice is a comprehensive and ongoing written product that is completed throughout the program. Traditionally crafted as a "dissertation," the Problem of Practice for this Ed.D. program will be organized and completed in three distinct phases, with designated benchmarks in the Problem of Practice courses. Students will work with faculty members to design and complete their Problem of Practice, formally presenting their ongoing progress throughout the program. The final written product will be submitted and presented to faculty during the final Problem of Practice course.

**On-Campus Immersions:** Ed.D. students come to campus for two days twice during the program to experience Baylor campus, interact with faculty and other campus leaders, and engage in collegial discussions to further develop their academic experience and the Problem of Practice.

#### **Educational Leadership**

#### Admission

The Doctor of Education degree requires a minimum of sixty-five semester hours beyond the master's degree, and an adequate background in teaching pedagogy, school administration, elementary education, secondary education, educational psychology, the history and philosophy of education, educational statistics, and educational measurement.

Students must meet not only the general requirements for admission to graduate study, but must have demonstrated in their undergraduate courses and in all work above the baccalaureate level a scholarly interest and ability considerably beyond the average. Students desiring to work at the doctoral level must apply, even though another graduate degree may have been earned at Baylor University.

Admission to the Ed.D. Degree program is based upon student vocational aspirations as well as a variety of background, skill set/aptitudes and dispositions that project potential for successful completion of the program and subsequent success as a transformational K-12 leader. Applicants are sought who are already addressing educational/professional issues or who have a strong passion to gain skills and knowledge to address any number of pressing issues and problems faced in K-12 education systems. Specific factors considered in admission decisions include:

- Professional aspirations consistent with purpose of Baylor leadership preparation program
- Promising academic/professional aptitude for advanced study
- Successful teaching/administrative experience in a appropriate educational setting
- Personal/professional qualities and dispositions consistent with advanced study and an ethically-principled leadership
- · Strong interpersonal and foundational communication skills
- · Past academic performance
- Reasonable fit with available Baylor faculty and site-based mentor resources

In considering an individual's program application, the following sources of information are required to complete the admission review process:

- 1. Letter of Application,
- 2. Three Professional Reference Letters,
- 3. Current Professional Resume,
- 4. Certified University Transcript/s and professional certifications,

- 5. Professional Writing Sample,
- 6. Structured Interview,
- Other Evidentiary Documents, such as portfolio of products that show leadership expertise, testimonials, performance evaluations, or sample innovations from teaching, leadership or writing experience.

Each of the above admission factors has associated with it one or more criteria intended to guide students in preparing applications and to aid the program in selecting students who demonstrate the high promise for a successful completion of the program and achieving the professional purpose for which the program is designed. In particular, the Baylor program seeks individuals as students who have a strong passion to gain skills and knowledge to provide ethical leadership and address any number of pressing issues and problems faced in K-12 education systems.

These criteria should not be viewed as individual requirements to be demonstrated, but rather as indicators that represent program planners' judgment about how each factor might best be demonstrated by individuals approaching this program from a traditional K-12 educational background. Applicants may, and are encouraged to, consider addressing other criteria/indicators that address the identified admission factors to persuade the admissions committee of the relevance of their aspirations, experience, and aptitude for this program.

#### **Program Requirements**

**Transfer credit.** The policy concerning transfer, extension, and workshop courses is the same as that listed under the General Degree Requirements for Doctoral Degrees. The work must have been completed within five years prior to matriculation into the doctoral program.

Time limitation. The maximum time limit for the doctoral degree is eight years from the time the student first matriculates into the doctoral program. After this time the student may request a one-year extension. Once a student's time limit expires, any student wishing to return to complete their degree after a one-year absence, must reapply for admission to graduate school. The student would enter under the current catalog and the appropriate course work for degree completion may be revalidated or not, according to the policy of the individual program in consultation with the Graduate School.

Admission to candidacy. Admission to doctoral courses is not equivalent to admission to candidacy. Students are admitted to candidacy for the Doctor of Education degree only after they have passed the preliminary examination. Students pursuing the program for the Doctor of Education degree will be permitted to take the preliminary examination for admission to candidacy after they have completed thirty semester hours of program-approved graduate study beyond a master's degree. This preliminary written examination should be a test of competence in the basic areas of study in education and should include general subject matter over the basic areas of educational leadership and support areas. The preliminary oral examination should be taken after students have passed the preliminary written examination. Admission to candidacy occurs after the student passes these two examinations. The preliminary examinations will be given each semester. They must be completed at least two semesters prior to the date the degree is conferred. In this case, the summer session may count as one semester. If any part of the written examination is failed, the examining committee may recommend reexamination. This may be permitted provided at least one-semester lapses between examinations. No more than two failures are permitted. An application for admission to candidacy form must be filed with the Graduate School upon successful completion of the above requirements, and prior to a student registering for dissertation hours. Students must

be registered for at least one semester hour of graduate credit during the semester of intended graduation.

Supervisory committee. The major department appoints this committee typically no later than the student's third semester of graduate study. The committee is entrusted with the responsibility of general supervision of the student's program of study and dissertation. The committee will consist of three Graduate Faculty members: the chairperson who mentors the research and dissertation, and at least two others.

**Dissertation.** Candidates will be required to take courses in the methods and techniques of statistics, methods and techniques of research, framing and describing problems of practice as outlined in the degree plan. The dissertation must give evidence of student's ability to treat and conduct research, analysis, and writing about an educational problem of significance. The Graduate School provides a range of helpful resources including *Guidelines for Preparing the Dissertation and Thesis*, a UMI document on copyrighting, and degree certification deadlines.

**Foreign Language.** The Doctor of Education program has no foreign language requirement.

**Graduate Record Examination (GRE) General Test.** The Doctor of Education program has no GRE requirement.

**Final Examination.** This oral examination is conducted by an examining body appointed by the Graduate School upon the recommendation of the graduate program director only after all courses, research, and dissertation requirements have been fulfilled. The dissertation research committee is an integral part of the examining committee.

Student will present results from dissertation to the superintendent of schools or agency head, and executive leadership team including original design team, and the governance board for the participating institution. Student may also be required to present findings and recommendations to other groups as requested by the superintendent or agency head, such as committees of teachers or principals, and/or the elementary, middle or secondary principals.

The dissertation examining committee will include a minimum of four members. At least two members, including the chairperson, will be Baylor Graduate Faculty from the degree-granting program. At least one member must be a member of Baylor's Graduate Faculty whose primary appointment is from a program other than the one conferring the degree. This non-program member helps to ensure a consistent level of quality, rigor, and fairness across all graduate programs at Baylor University. The committee may also include one member from outside of Baylor with approval of the candidate's Graduate Program Director. Non-Baylor committee members are not eligible to serve as the dissertation chairperson. The Graduate Program Director is responsible for ensuring the relevant expertise of the non-Baylor committee member and notifying the Graduate School through the Announcement of Doctoral Oral Examination form. The candidate's dissertation director will serve as the chairperson of the committee and ensure that formal announcement of the examination is made, that the exam is conducted fairly, and that it is open to the faculty. The committee may include additional members beyond the required minimum of four. Preferably, the student and the examiners will be present in person, but in certain cases (e.g., online degree programs, extenuating circumstances, etc.) this may not be logistically possible. A Graduate Program Director may approve alternative formats for examination, including virtual, video-conferenced participation of one or more examiner(s). Such approval needs to be accompanied with justification to the Graduate School.

Candidates who fail this examination may take a second one only upon the recommendation of the graduate program director and the approval of the Graduate School. In no case will this examination be given until an interval of at least four months has elapsed. After two failures, no further examination is permitted.

No longer than ten days after the oral examination, but no later than the "last day" deadline posted in the Graduate School *Academic Calendar* for the semester of graduation, an electronic pdf copy of the dissertation in its final departmentally approved form should be submitted to the Graduate School. With the dissertation copy, the student should also submit the appropriate forms required, as stated in the Guidelines. A student is certified for graduation once the pdf copy of the dissertation is submitted electronically and approved, and all remaining steps, as stated in the *Guidelines*, have been completed.

## **Doctor of Nursing Practice**

The Doctor of Nursing Practice (DNP) is offered by Baylor University through the Louise Herrington School of Nursing. The emphasis of this clinical doctorate is to prepare nurses in an advanced practice role such as nurse practitioner, nurse midwife, nurse executive leader and nurse anesthesia to become scholar#practitioners to function in service# related areas. The Post Master's NP/NM DNP Program is designed for nurses who already hold a master's degree as a nurse practitioner or nurse midwife. The Post Master's DNP-ENL program is designed for those nurses who already hold a master's degree in a non-nursing health related field and certification in executive nursing practice. The Baccalaureate to DNP (BSN to DNP) Program is designed to educate nurses in the advanced practice roles of adult gerontology acute care, family, neonatal, pediatric nurse practitioner or nurse midwife in order to provide evidence based, comprehensive healthcare to individuals and populations. The focus of the program is centered on the mission and values of service to under-served and global communities.

The U.S. Army Graduate Program in Anesthesia Nursing (USAGPAN) is a BSN to DNP US Army affiliated program. The USAGPAN information and admission requirements are located in the "Affiliated Programs, Nursing Anesthesia (p. 185)" section.

#### Admission

For admission to the Nursing Graduate Program, applicants must meet the general requirements set forth by the Graduate School and the Louise Herrington School of Nursing. Admission and degree requirements are located in the "Curriculum, Nursing" section of this catalog.

#### **Program of Study**

The baccalaureate to NP/NM DNP program consists of 75-89 credits and may be completed over 8 years. Length of time varies between specific roles, however the average time for a full-time student is 10 semesters. An example of program plans can be found under the LHSON section of the catalog.

Advanced practice nurses seeking a post-master's DNP without a role change will have a 33-48 credit program of study. The average length of time for this post-master's is 5 semesters. The program is built upon AACN's Master's Essentials. This program does not accept any transfer credit. Students will need to complete clinical hours to achieve a total of 1000 hours from BSN-DNP.

Post-Master's students seeking a new Advanced Practice Role will be considered transfer students and be in the BSN-DNP program. This program consists of 75-89 credits and is built on AACN's Baccalaureate

Essentials. It may be completed over 8 years. The number of credits will vary depending on specific role as well as type of master's degree. Transfer of credit for graduate courses is possible but must be equivalent to the courses offered at Baylor University and the student must have achieved a grade B or higher in the course. At a minimum student will need to complete 38 credits at Baylor University in addition to the master's credit hours (up to 37 hours transferred from master's work). However, the school of nursing reserves the right to add courses as needed to meet the licensure requirements of the LACE Consensus Model (advanced pathophysiology, advanced pharmacology, and advanced health assessment).

Advanced residency hours are performed under the supervision of qualified graduate nursing faculty and are arranged in conjunction with the student. The advanced residency is designed to meet the DNP competencies while focusing on the student specialty interest of practice.

The DNP Project is a three course, 6 credit hour evidence-based practice project developed, implemented, evaluated, and disseminated under the supervision of a DNP Project Advisor. The final completed project is formally presented to the faculty of the LHSON prior to graduation.

The baccalaureate to DNP graduate is prepared to sit for the national board examination required in each specialty. The post-master's APRN DNP graduate is expected to maintain national certification in the specialty throughout the program.

## **Doctor of Occupational Therapy**

The Doctor of Occupational Therapy (OTD) degree is offered by Baylor University in three distinct programs through the Robbins College of Health and Human Sciences.

Baylor University offers an Entry-Level OTD degree program using an accelerated, hybrid-learning curriculum. This program is 24 months in length and includes a blend of online coursework (synchronous and asynchronous), face-to-face lab immersion instruction, and clinical education. This program develops future Doctors of Occupational Therapy who are skilled, compassionate, and evidence-based clinicians; passionate in their pursuit of knowledge and professional development; and servant leaders to their community and profession.

The Post-Professional Doctor of Occupational Therapy (PP-OTD) degree is offered by Baylor University through the Robbins College of Health and Human Sciences. The program is 16 months in length and is delivered fully online. The PP-OTD program prepares currently licensed occupational therapists who hold a master's degree for continued professional development, interprofessional collaboration, and leadership roles by integrating evidence-based practice.

The OTD degree is also offered through an affiliation with the Army Medical Center of Excellence (MEDCoE), located at Joint Base San Antonio-Fort Sam Houston, Texas. The program is 30 months in length and includes 18 months of didactic coursework, and 12 months of two level II fieldwork clinical affiliations and a doctoral capstone experience and project. Students are commissioned in the U.S. Army. Due to the students' active duty obligation and association with the uniformed services, certain policies and procedures governing students are unique to this program and may be found in the most current Program Manual or the individual student assessment plan (ISAP) published by this graduate program. For a description of the admission requirements, prerequisite

course information, curriculum, and graduation requirements, see the "Affiliated Programs" section of this catalog.

## **Doctor of Psychology**

This professional degree is offered by Baylor University through the Department of Psychology and Neuroscience. The emphasis in this degree program is on the training of clinical psychologists as scholar-practitioners to function in applied-service situations.

#### **Admission**

Students not only must meet the general admission requirements for graduate study, but must have demonstrated in their undergraduate and any postgraduate courses a scholarly and professional interest considerably above the average. Twelve hours of undergraduate psychology courses and a GRE general exam score that is predictive of success in this program are required. In addition, an autobiography, a record of relevant experience, a statement of research interests, and three letters of recommendation are required as a part of the completed application. Direct clinical or practicum-oriented experience in a closely related field is one of several major criteria used to evaluate applicants for the program. In addition, experience with and interest in clinically applied research is desired in successful applicants. Admission to this program is made only at the beginning of the second six weeks of the summer session each year, and all application materials must be received on or before December 1 of the year prior to beginning the program. Admission will require the concurrence of the chairperson of the Department of Psychology and Neuroscience and the Graduate School. Students must apply to this doctoral program even though another graduate degree may have been earned at Baylor University.

#### **Program Requirements**

**Period of study.** The Doctor of Psychology degree is a five-year program. Four years, including summers, consist of campus residency, including didactic and clinical practica and research totaling 115 semester hours beyond the baccalaureate degree. These courses follow a sequence established by the program faculty; a student may not alter this sequence or omit courses from the specified program without written approval by the program director. The fifth year is an internship program.

Time limitation. The maximum time limit for the doctoral degree is eight years from the time the student first matriculates into the doctoral program. After this time the student may request a one-year extension. Once a student's time limit expires, any student wishing to return to complete their degree after a one year absence, must reapply for admission to graduate school. The student would enter under the current catalog and the appropriate course work for degree completion may be revalidated or not, according to the policy of the individual program in consultation with the Graduate School.

**Foreign language requirement.** There is no requirement for competency in a foreign language for the Psy.D. program.

**Residency.** At least twelve consecutive semesters of residency are required. Summer school may count for no more than four of the semesters. Students must be registered for at least one semester hour of graduate credit during the semester of intended graduation.

**Supervisory committee.** The full-time clinical faculty of the Psy.D. Program, approved by the Graduate School, is entrusted with the responsibility of general supervision of the student's program of study,

clinical practica, and internship. The Graduate Program Director chairs this committee.

Qualifying and comprehensive examinations. There are two qualifying written examinations, one in January of the second year and the other at the end of the third year. Students must pass the qualifying examinations prior to approval for internship. If any part of the qualifying examination is failed, the examining committee may recommend reexamination. No more than one failure per examination is permitted, and at least four months must elapse between examinations. A new comprehensive examination structure will be in place for students who begin the program in the 2022-2023 academic year.

Admission to candidacy. Admission to the doctoral program is not equivalent to admission to candidacy. Students are admitted to candidacy after successful completion of at least seventy-one semester hours of residency, and after satisfactory performance of the written qualifying examination. Formal application for admission to candidacy is made through procedures established by the Graduate School.

**Clinical practicum.** At least thirty semester hours of practicum training are required of all students. Practicum hours must be completed prior to the internship year.

**Dissertation and research practicum.** In the fourth year of study, each student will complete a clinical research practicum. This practicum requires six semester hours of Dissertation research and must result in a completed Dissertation in Clinical Psychology.

**Dissertation supervision.** A committee is designated by the graduate program director. This committee may be the same committee that assumes responsibility for the initial supervision, or it may be newly appointed. The committee that provides initial supervision is five readers, including the chairperson, all members of Graduate Faculty. The student's mentor is the chairperson of the committee.

**Dissertation.** Candidates for the Doctor of Psychology degree must present an acceptable dissertation on a problem in the field of their major subject. The dissertation must give evidence that the candidate has pursued a program of research, the results of which reveal scholarly competence and a significant contribution to knowledge.

Candidates should acquire the *Guidelines for Preparing the Dissertation and Thesis* and other necessary materials at the beginning of the semester in which graduation is expected. The most recent edition of Guidelines is available on the Baylor Graduate School website. Additional degree completion materials not available on the homepage are provided to students when they file for graduation. The Guidelines contain the directions for the procedure to complete the dissertation, an explanation of forms necessary, the semester calendar, and an explanation of fees associated with the process.

**Dissertation Examination.** This oral examination is conducted by an examining body appointed by the Graduate School upon the recommendation of the graduate program director only after all research and dissertation requirements have been fulfilled. The dissertation research committee is an integral part of the examining committee.

The dissertation examining committee will include a minimum of five members, including the chairperson. At least two members, including the chairperson, will be Baylor Graduate Faculty from the degree-granting program. At least one member must be a member of Baylor's Graduate Faculty whose primary appointment is from a program other than the one conferring the degree. This non-program member helps to ensure

a consistent level of quality, rigor, and fairness across all graduate programs at Baylor University. The committee may also include one member from outside of Baylor with approval of the candidate's Graduate Program Director. Non-Baylor committee members are not eligible to serve as the dissertation chairperson. The Graduate Program Director is responsible for ensuring the relevant expertise of the non-Baylor committee member and notifying the Graduate School through the Announcement of Doctoral Oral Examination form. The candidate's dissertation director will serve as the chairperson of the committee and ensure that formal announcement of the examination is made, that the exam is conducted fairly, and that it is open to the faculty. The committee may include additional members beyond the required minimum of five. Preferably, the student and the examiners will be present in person, but in certain cases (e.g., online degree programs, extenuating circumstances, etc.) this may not be logistically possible. A Graduate Program Director may approve alternative formats for examination, including virtual, videoconferenced participation of one or more examiner(s). Such approval needs to be accompanied with justification to the Graduate School.

Candidates who fail this examination may take a second one only upon the recommendation of the graduate program director and the approval of the Graduate School. In no case will this examination be given until an interval of at least four months has elapsed. After two failures, no further examination is permitted.

No longer than ten days after the oral examination, but no later than the "last day" deadline posted in the Graduate School *Academic Calendar* for the semester of graduation, an electronic pdf copy of the dissertation in its final departmentally approved form should be submitted to the Graduate School. With the dissertation copy, the student should also submit the appropriate forms required, as stated in the Guidelines. A student is certified for graduation once the pdf copy of the dissertation is submitted electronically and approved, and all remaining steps, as stated in the *Guidelines*, have been completed.

**Predoctoral internship.** Each student is required to complete a predoctoral internship in the fifth year of the program at a site accredited by the American Psychological Association. Students on internship must enroll in PSY 6V01 Clinical Internship each term while on internship.

**Other requirements.** Each student is required to comply in full with all additional policies and rules specified in the Psy.D. Program manual. This manual is distributed to all students enrolled in the program.

 $\label{prop:constraint} \mbox{Additional information. See "Psychology and Neuroscience" in the courses section of the catalog.$ 

### **Doctor of Physical Therapy**

The Doctor of Physical Therapy (DPT) degree is offered by Baylor University in two distinct programs through the Robbins College of Health and Human Sciences.

Baylor University offers a DPT degree program using a hybrid learning curriculum. This program is 24 months in length and includes a blend of online coursework (synchronous and asynchronous), onsite lab immersion instruction, and clinical education. This program graduates Doctors of Physical Therapy who are skilled, compassionate, and evidence-based clinicians; passionate in their pursuit of knowledge and professional development; and servant leaders to their community and profession.

The DPT degree is also offered through an affiliation with the Army Medical Department Center and School, Health Readiness Center of Excellence located at Joint Base San Antonio-Fort Sam Houston, Texas. The program is 30 months in length and includes 18 months of didactic coursework, a clinical affiliation during Semester II, and 12 months of clinical internship. Students are commissioned in one of three of the uniformed services: Army, Navy, or Air Force. Due to the students' active duty obligation and association with the uniformed services, certain policies and procedures governing students are unique to this program and may be found in the most current Program Manual or the individual student assessment plan (ISAP) published by this graduate program. For a description of the admission requirements, prerequisite course information, curriculum, and graduation requirements, see the "Affiliated Programs" section of this catalog.

## Doctor of Science in Occupational Therapy

Baylor University offers the Doctor of Science degree in Occupational Therapy (D.Sc.O.T.), in affiliation with the U.S. Army Medical Center of Excellence (MEDCoE). This degree is an advanced-practice post-professional clinical doctorate designed to meet Army occupational therapists' professional development and specialty needs. The program's didactic, clinical, and research components are presented at Brooke Army Medical Center and additional facilities at Joint Base San Antonio, Ft. Sam Houston in San Antonio, Texas. The program is designed for active duty Army and Navy occupational therapy personnel possessing a master's degree in occupational therapy. For a description of the prerequisites and degree requirements, refer to the "Affiliated Programs" section of this catalog.

### **Doctor of Science in Physical Therapy**

Baylor University offers the Doctor of Science degree in Physical Therapy (D.Sc.P.T.), major in Orthopaedics, in affiliation with the U.S. Army, at two locations. The concentration for the program offered at Brook Army Medical Center, Fort Sam Houston in San Antonio, Texas, is Orthopaedic Manual Physical Therapy. For the program offered at Keller Army Community Hospital at the United States Military Academy, West Point, New York, the concentration is Sports Medicine and Primary Care.

The program mission is to produce active duty, post-graduate-level specialty trained physical therapists who provide state-of-the-art advanced care and clinically relevant research to benefit the Military Health System. Further information is presented in the "Affiliated Programs" section of this catalog.

## **Doctor of Science in Physician Assistant Studies**

Baylor University offers the Doctor of Science degree in Physician Assistant Studies (D.Sc.P.A.S.), major in Emergency Medicine, General Surgery, and Orthopaedics, in affiliation with the U.S. Army Medical Department Center and School. The program is designed for active-duty personnel who already hold the master's degree in physician assistant studies. The curriculum provides advanced education and training to further enhance the abilities of clinicians to save soldiers' lives on the battlefield and to serve Military Health System beneficiaries. For a description of prerequisites and degree requirements, refer to the "Affiliated Programs" section of this catalog.

## Master's Degrees, General Degree Requirements

The following general requirements apply to all master's programs administered by the Graduate School.

### **Content of Graduate Program**

A minimum of thirty semester hours will be required. A minimum of one-half of the semester hours required for the master's program, exclusive of thesis credits, must be in courses numbered at the 5000 level. Specific graduate programs may require more than the minimum number of hours. Students may not use a course to meet more than one degree requirement.

#### **Transfer Credit**

For master's degrees, the accepted number of transfer credits will be determined by the individual academic departments within the following general guidelines:

- 25 percent of the required Baylor course work (excluding internships, practica, and theses) may be petitioned for transfer,
- the total number of transferred credits may not exceed fifteen semester hours,
- course work must be from an accredited university and appear on a graduate transcript,
- course work must have been taken within the five years immediately prior to matriculation,
- course work must carry a grade of "B" or better (cannot accept P/F, CR/NC, or certificate of completion, and
- none of the transfer course work consists of extension or transfer courses.

#### **Time Limitation**

The maximum time limit for the master's degree is five years from the time the student first matriculates into the master's program. After this time, the student may request a one-year extension. Once a student's time limit expires, any incompletes with the exception of dissertation or thesis hours will change to an "F". Any student wishing to return to complete their degree after a one year absence, must reapply for admission to graduate school. The student would enter under the current catalog and the appropriate course work for degree completion may be revalidated or not, according to the policy of the individual program in consultation with the Graduate School. Coursework where incompletes have been changed to an "F" may not count in the new program.

### **Graduation Eligibility**

To qualify for a master's degree, students must have a minimum overall grade point average of 3.0 and must have satisfied all course work, practica, project, thesis, or other academic/professional efforts associated with the degree sought. No member of the Baylor University faculty above the rank of Lecturer may be admitted to candidacy for a graduate degree at the University.

### **Filing for Graduation**

Students file for graduation within BearWeb. The application portal will be available during the dates listed below.

Spring Graduation: October 1 - February 1
 Summer Graduation: February 1 - June 1

• Fall Graduation: February 1 - October 1

If you use student loans or other forms of financial aid to pay your bill you should file for graduation as early as possible so that the Student Financial Aid (SFA) office can ensure your award offer for the upcoming year is accurate.

Students pursuing a joint degree program must file for graduation in both programs or schools. If a Ph.D. student seeks to receive a Master's degree on the way (non-terminal Master's degree), the student must contact the Assistant Director of Student Records, Alana Schaeper, at Alana\_Schaeper@baylor.edu before attempting to apply for graduation in order to have a file opened.

Processing of diplomas takes four to eight weeks. The degree is conferred at the first commencement ceremony following program completion. Ceremonies are held in August, December, and May (see Academic Calendar in this catalog).

### **Committee Composition**

The thesis examining committee will include three members of the Baylor Graduate Faculty: the committee chairperson, one other Graduate Faculty member from the student's home department, and a third member, or "outside" member. The outside member must be a Graduate Faculty member whose primary faculty appointment is from a department other than the one conferring the student's degree. The student's mentor will serve as the chairperson of the committee and ensure that formal announcement of the examination is made, that the exam is conducted fairly, and that it is open to the faculty. The "official outside" member helps to ensure a consistent level of quality, rigor, and fairness across all graduate programs at Baylor University and may or may not be actively involved in the thesis. The committee may include additional members (who are not necessarily members of the Graduate Faculty) beyond the minimum required number.

If a candidate fails the comprehensive or oral examination, a second examination may be taken contingent upon the approval of both the department(s) concerned and the Graduate School. No reexamination may be conducted until at least four months has elapsed. (Students in the U.S. Army-Baylor Health Care Administration program are required to take the reexamination within four months from the date of the initial board.) After two failures, no further examination is permitted.

## Master's Degrees, Specific Degree Requirements

#### **Master of Arts**

The Master of Arts degree is available to persons who have a bachelor's degree from an accredited college and who meet the minimal requirements described below.

#### Foreign Language

The prerogative of requiring a foreign language for the M.A. degree rests with the degree program. M.A. students enrolled in degree programs which require a foreign language may fulfill this requirement by demonstrating intermediate proficiency via any one of the options below:

 Presenting an official undergraduate transcript from Baylor University or another regionally accredited institution of higher learning showing

- that while enrolled the student received a grade of "B" or better in the Baylor University 2320 course or its equivalent course in the foreign language taken at another institution. Note: This option is valid if the above course was taken not more than five years before the student was accepted into the Baylor graduate program.
- After matriculation into the graduate program at Baylor University, and after having satisfied the necessary prerequisites, enrolling in 2320 and receiving a grade of "B" or better.
- 3. Enrolling in French, German, or Spanish 5370/5371, or Latin or Greek 5321/5322 and receiving a grade of "B" or better in French, German, Spanish 5371, or Latin or Greek 5322. These are reading courses designed specially for graduate students; no previous experience with the language is necessary. The Graduate School must receive a petition requesting the foreign language course be accepted as completion of the language requirement. These courses may not be audited, or taken as Pass/Fail or Credit/Non-Credit.
- 4. Taking the reading examination offered by the Department of Modern Languages and Cultures (Arabic, Chinese, French, German, Italian, Japanese, Spanish, Portuguese, Russian, or another modern language approved by the candidate's department), Department of Classics (Greek and Latin), or the Institute of Biblical and Related Languages (Hebrew and related Semitic Languages). Note: Students in International M.A. degree programs (Master of International Journalism) must pass an oral examination in addition to the reading examination (Option #4). Bona fide foreign international M.A. students may use English as their foreign language, provided their TOEFL (Test of English as a Foreign Language) score is 550 or higher.
- Presenting a degree from a foreign university. This procedure is valid if the student's native language is not that of the country in which the degree has been obtained.

The student is responsible for securing proof of having satisfied the language requirement. Deadlines for meeting the language requirement may be found on the Graduate School website (www.baylor.edu/graduate/degree (http://www.baylor.edu/graduate/degree/)) and additional information regarding foreign language test preparation can be found on the Modern Languages and Cultures website (www.baylor.edu/MLC (http://www.baylor.edu/MLC/)).

#### **Graduate Hours**

Minimally, thirty semester hours of graduate course work are required for a thesis program, and thirty-three semester hours are minimally required for a non-thesis degree. Individual degree programs have the option of increasing the required number of semester hours. The programs also set the required minimum thesis credits which typically consist of six semester hours. The minimum number will apply for all students in the program. A student may not use a course to meet more than one degree requirement.

#### **Approved Major and Minor**

Students may have no more than two fields of graduate study. They may earn no fewer than eighteen semester hours in the major field, and no fewer than six semester hours in the minor field. The minor field must be approved by the chairpersons of both the major and minor departments. With the approval of the major professor and the Graduate School, a student may include a limited number of courses from allied fields as part of the major program, or in lieu of a minor. If the degree program offers a sufficient number of graduate courses to satisfy degree completion, the course work can be completed within one department.

#### **Thesis**

The prerogative of requiring a thesis for the Master of Arts degree rests with the degree program. Should a thesis be required, the following requirements apply:

- The chairperson of the department and/or the graduate program director approve both the thesis topic and the chairperson of the thesis committee. The thesis committee chairperson must be a member of the Baylor Graduate Faculty.
- 2. The chairperson of the department or the graduate program director, in consultation with both the candidate and the committee chairperson, will identify the members of the thesis committee. The thesis examining committee will include three members of the Baylor Graduate Faculty: the committee chairperson, one other Graduate Faculty member from the student's home department, and a third member or "outside" member. The outside member must be a Graduate Faculty member whose primary faculty appointment is from a department other than the one conferring the student's degree. The student's mentor will serve as the chairperson of the committee and ensure that formal announcement is made, that the exam is conducted fairly, and that it is open to the faculty. The "official outside" member helps to ensure a consistent level of quality, rigor, and fairness across all graduate programs at Baylor University and may or may not be actively involved in the thesis. The committee may include additional members (who are not necessarily members of the Graduate Faculty) beyond the minimum required number.
- 3. The thesis committee will approve the general plan of the research project and the topic of the thesis.
- 4. Candidates are expected to consult with the members of their committee and to acquire the approval of the committee as well as the major department chairperson of the completed draft of the thesis. Candidates should acquire Guidelines for Preparing the Dissertation and Thesis and other necessary materials at the beginning of the semester in which graduation is expected. The most recent edition of the Guidelines is available on the Baylor homepage www.baylor.edu/graduate/degree (http://www.baylor.edu/graduate/degree/).
- 5. No longer than ten days after the oral examination, but no later than the "last day" deadline posted in the Graduate School Academic Calendar for the semester of graduation, an electronic pdf copy of the thesis in its final departmentally approved form should be submitted to the Graduate School. With the thesis copy, the student should also submit the appropriate forms required, as stated in the Guidelines. A student is certified for graduation once the pdf copy of the thesis is submitted electronically and approved, and all remaining steps, as stated in the Guidelines, have been completed.

#### **Examinations**

Candidates in thesis programs who complete the required program of study and a satisfactory thesis will take an oral examination. The format of the examination will be determined by the student's major department.

Candidates in non-thesis programs who complete the required program of study and any other special degree requirements will take a comprehensive oral examination as determined by the major and, if applicable, minor departments. (A written examination may be required in lieu of the oral examination as a matter of policy only with the prior written approval of the Graduate School.) At the option of a school/department, both an oral and a written examination may be required.

The following policies should be noted regarding the comprehensive or oral examination:

- All incomplete grades (except in a thesis or scientific research course) must be removed prior to the final oral or written examination.
- 2. The examination will be conducted by a minimum of two Graduate Faculty Members in the student's major degree program and one pre-approved "outside" member. The "official outside" member must be a Graduate Faculty member whose primary faculty appointment is from a department other than the one conferring the student's degree. The committee must be approved 10 working days prior to the examination by the Graduate School.
- The examination should give the candidate the opportunity to defend the intellectual substance of the thesis, including the structure of the argument advanced, the methodology used, and the interpretation offered.
- 4. The examination should be taken by the published deadline for meeting graduation requirements for any given semester. The candidate should arrange the date of the examination with the chairperson of the examination committee and acquire approval of this date from the Graduate School.

#### **Master of Science**

The Master of Science degree, which is offered through facilities in either Waco or Dallas, is offered to students who have earned a bachelor's degree from an accredited university or college. The requirements for this degree are the same as for the Master of Arts degree, except that there is no foreign language requirement.

### **Professional Degrees**

#### Master of Accountancy

The Master of Accountancy degree is offered to students who have earned a bachelor's degree from an accredited university or college. For further information and requirements, see the "School of Business" section.

#### Master of Business Administration

The Master of Business Administration degree is offered to students who have earned a bachelor's degree from an accredited university or college. Degree plans are tailored to accommodate undergraduate majors in both business and non-business fields. For further information and requirements, see the "School of Business" section.

#### **Master of Engineering**

The Master of Engineering degree is offered to students who have earned an appropriate bachelor's degree from an accredited university or college. For further information and degree requirements, see the "School of Engineering and Computer Science" section.

#### **Master of Environmental Studies**

The Master of Environmental Studies degree is offered to students who have earned a bachelor's degree from an accredited university or college. For a description of the prerequisites and degree requirements, see the "Environmental Science" section.

#### **Master of Fine Arts**

The Master of Fine Arts degree in directing is offered to students who have earned a bachelor's degree from an accredited university or college and whose career goal is a profession in which this degree would -

ordinarily be considered a terminal degree. For a description of the prerequisites and degree requirements, see the "Theater Arts" section.

#### Master of Health Administration

The Master of Health Administration degree is offered through an affiliation with the U.S. Army, Academy of Health Sciences, Fort Sam Houston, Texas. This program is for specifically targeted federal personnel. For a description of the prerequisites and degree requirements, see the "Affiliated Programs" section.

#### Master of Health Administration/Master of Business Administration

The MHA/MBA joint degree is offered through an affiliation with the U.S. Army, Academy of Health Sciences, Fort Sam Houston, Texas. This program is only open to qualified students attending the Army-Baylor MHA or MHA/MBA program. For a description of the prerequisites and degree requirements, see the "Affiliated Programs" section.

#### Master of International Journalism

The Master of International Journalism degree is offered to students who have earned a bachelor's degree from an accredited university or college. For a description of the prerequisites and degree requirements, see the "Journalism" section.

#### Master of Music

The Master of Music degree is offered to students who have earned a bachelor's degree in music from an accredited university or college. For a description of the prerequisites and requirements for this degree, see the "Music" section.

#### **Master of Public Health**

The Master of Public Health degree is offered to students who have earned a bachelor's degree from an accredited university or college. For a description of the prerequisites and requirements for this degree, see the "Public Health" section.

#### **Master of Public Policy and Administration**

The Master of Public Policy and Administration degree is offered to students who have earned a bachelor's degree from an accredited university or college. For a description of the prerequisites and requirements for this degree, see the "Political Science" section.

#### Master of Science in Biomedical Engineering

The Master of Science in Biomedical Engineering degree is offered to students who have earned an appropriate bachelor's degree from an accredited university or college. For further information and degree requirements, see the "School of Engineering and Computer Science" section.

#### **Master of Science in Economics**

The Master of Science in Economics degree is offered to students who have earned a bachelor's degree from an accredited university or college and who intend to seek full time employment or enter a Ph.D. program in economics after graduation. For a description of the prerequisites and degree requirements, see the "Economics" section.

#### **Master of Science in Education**

The Master of Science in Education degree is offered to students who have earned a bachelor's degree from an accredited university or college, and whose career goal is a profession in which this degree would ordinarily be considered desirable for an individual's professional growth

and development. For a description of the prerequisites and degree requirements, see the "Education" section.

#### Master of Science in Electrical and Computer Engineering

The Master of Science in Electrical and Computer Engineering degree is offered to students who have earned an appropriate bachelor's degree from an accredited university or college. For further information and degree requirements, see the "School of Engineering and Computer Science" section.

#### **Master of Science in Information Systems**

The Master of Science in Information Systems degree is offered to students who have earned a bachelor's degree from an accredited university or college. For further information and requirements, see the "School of Business" section.

#### Master of Science in Mechanical Engineering

The Master of Science in Mechanical Engineering degree is offered to students who have earned an appropriate bachelor's degree from an accredited university or college. For further information and degree requirements, see the "School of Engineering and Computer Science" section.

#### **Master of Science in Nutrition**

The Master of Science in Nutrition degree is offered through an affiliation with the U.S. Army, Academy of Health Sciences, Fort Sam Houston, Texas. This program is for specifically targeted federal personnel. For a description of the prerequisites and degree requirements, see the "Affiliated Programs" section.

#### **Master of Taxation**

The Master of Taxation degree is offered to students who have earned a bachelor's degree from an accredited university or college. For a description of the prerequisites and degree requirements, see the "School of Business" section.

#### **Education Specialist**

The Education Specialist degree is offered to students who have earned an appropriate bachelor's degree from an accredited university or college and whose career goal is a profession in which this degree would ordinarily be considered a terminal degree. For additional information see the "Education" section.

## **Curriculum of Departments and Institutes of Instruction**

All departments listed in the following pages offer graduate work in the major field and some offer a minor except those that offer a minor only. Several departments list the requirements needed to complete only a minor in their area. Where prerequisite courses are listed, these courses or their equivalent must be included in the undergraduate preparation for graduate study. Such prerequisite courses do not count for graduate credit.

- · American Studies (p. 42)
- Anthropology (p. 42)
- · Asian Studies (p. 45)
- · Biology (p. 45)
- · Hankamer School of Business (p. 47)

- · Chemistry and Biochemistry (p. 75)
- · Classics (p. 77)
- · Communication Sciences and Disorders (p. 78)
- · Communication (p. 82)
- · Institute for Ecological, Earth, and Environmental Sciences (p. 83)
- · School of Education (p. 86)
- · School of Engineering and Computer Science (p. 108)
- English (p. 117)
- · Environmental Science (p. 118)
- Film and Digital Media (p. 119)
- Geosciences (p. 120)
- · Health, Human Performance and Recreation (p. 123)
- · History (p. 128)
- · Human Sciences and Design (p. 129)
- · Journalism, Public Relations and New Media (p. 130)
- · Latin American Studies (p. 132)
- · Mathematics (p. 132)
- · Museum Studies (p. 133)
- School of Music (p. 135)
- · Louise Herrington School of Nursing (p. 143)
- Philosophy (p. 151)
- · Doctor of Physical Therapy (DPT) (p. 153)
- Physics (p. 154)
- · Political Science (p. 155)
- George W. Truett Theological Seminary (p. 159)
- · Psychology and Neuroscience (p. 160)
- · Public Health (p. 162)
- Religion (p. 167)
- Robbins College of Health and Human Sciences (p. 169)
- · School of Social Work (p. 174)
- · Sociology (p. 176)
- · Spanish, Modern Languages and Cultures (p. 178)
- · Statistical Science (p. 178)
- Theatre Arts (p. 181)

#### **American Studies**

Director: Marlene S. Neill

The graduate program in American Studies is an interdisciplinary program offering comprehensive study in American institutions and culture. The basic program consists of courses in American history, political science, religion, American literature, and journalism.

Prerequisites for graduate work in American studies must include twentyone semester hours in any one or in any combination of the following
areas: American history, government, literature, and philosophy; history
of American education; history of religion in America; and American
sociological problems. There is no foreign language requirement.
Applicants must submit a Graduate Record Examination (GRE) General
Test score; a GRE score and a GPA predictive of success in this program
are recommended.

· American Studies, M.A. (p. 42)

### American Studies, M.A.

Graduate work in American Studies for the Master of Arts degree consists of thirty semester hours, at least fifteen of which must be in courses numbered above 5000. Distribution requirements are as follows:

Code	Title	Hours	
Core			
AMS 5V99	Thesis	6	
AMS 4385	Seminar in American Studies	3	
Additional Requirements			
Three courses cro	ss-listed with English, history, or journalism	9	
One research methods class from English, history, or journalism		3	
Electives			
To be chosen from American Studies courses approved for graduate credit (see listings).		9	
Total Hours		30	

All courses taken for graduate credit must be approved by the Director of American Studies.

## Anthropology Department of Anthropology

Chairperson: Michael P. Muehlenbein

Graduate Program Director: Michael P. Muehlenbein

· Anthropology, Ph.D. (p. 42)

## Anthropology, Ph.D.

The Department of Anthropology offers study for the Doctor of Philosophy with a concentration in Health. The program trains students in quantitative and qualitative methods, including electives in statistics, communication, management, and health. Understanding human health and well-being, utilizing different perspectives and tools offered through multidisciplinary training in Anthropology, is of immediate importance for our species. The Department aims to provide extensive field- and labbased research opportunities to qualify students for a broad job market. Required components, in addition to the dissertation, include pedagogical training, participation in an internship with a local organization, and multiple publications and presentations prior to graduation.

### **Admission**

Applicants must have earned a Bachelor's degree (in any relevant field) from an accredited institution; a graduate degree is not required to matriculate into the Ph.D. program. Applicants are expected to have an academic background that is predictive of success in the program. There are no minimum GPA and standardized test score requirements, although scores should also be predictive of success in the program. All applications will be evaluated considering multiple factors, including program fit, recommendation letters, faculty support, the quality of the applicant pool, and GPA/test scores.

Applicants must submit the following materials for consideration for admission into the program:

 An application letter describing the applicant's qualifications, desire for further study, career goals, and research interests. It is preferred

- that applicants contact potential faculty mentors to develop a possible research plan, and to articulate this in their application letter.
- 2. A writing sample: This might include an undergraduate course paper at least ten pages in length.
- Three letters of recommendation from people qualified to evaluate the applicant's experiences, professional skills, and potential for future study and research.
- A GRE General Test score. The score must not be older than five years.
- Official transcripts from all institutions where undergraduate courses were attempted/completed. At least one transcript must clearly document degree completion. Transcripts in languages other than English must be translated by an official translating agency.
- 6. For applicants whose first language is not English, they must submit scores from the Test of English as a Foreign Language (TOEFL), International English Language Testing System (IELTS), or Duolingo. The score must not be older than five years.

### **Advisory Committee**

Each student's advisory committee will be composed of a minimum of four faculty members: two primary co-advisors from among the Anthropology graduate faculty, one additional Baylor faculty member outside of the Department, and one member outside of Baylor. Committee composition can be changed at the request of the student or a committee member, and such changes will be granted pending decision of the student's committee, the Graduate Program Director, and the Graduate School Dean. Students are required to meet with their committees prior to registering for classes at the beginning of each semester. Students are required to meet with their committee annually to review and evaluate all aspects of the student's coursework, teaching, and research.

### **Master's Degree**

Students admitted into the PhD program in Anthropology will also earn a Master of Science in Anthropology. The MS degree in Anthropology is only available to students admitted into the PhD program in Anthropology. After completion of 42 credit hours from the required/elective courses, the student will receive an MS in Anthropology. A thesis is not required for the MS degree, nor is passing the preliminary examination or successfully defending a dissertation proposal. A maximum of 12 credit hours from previous graduate coursework can be applied toward the MS degree; all other credit hours must be earned at Baylor.

## **Preliminary Examination and Admission to Candidacy**

Each student will complete a written and oral comprehensive examination, prepared by the student's advisory committee, in the summer after their second year. The date of examination will be determined by the advisory committee. Incomplete grades must be removed prior to the preliminary examination. This exam will be based on the student's coursework and their proposed research topic. Students must demonstrate readiness to conduct dissertation research. Based on the results of the written portion of the exam, the advisory committee could permit a student to pass without required revision, pass on probation ('provisional pass') with further work required (which must be completed to be admitted to candidacy), fail with an opportunity to take a second written exam ('provisional fail'), or fail with dismissal from the program. If a student fails but is given an opportunity to take a second written exam, that exam cannot take place less than four months (nor

greater than eight months) from the first exam. A second failure will result in release from the program.

The two-day written exam will be followed by a private (committee-only) oral defense of the dissertation proposal. This proposal is to be formatted as an NSF Doctoral Dissertation Research Improvement Grant application, submitted to the student's advisory committee prior to the written preliminary examination. The student is expected to provide a lecture to the entire department following any needed revisions to their research proposal.

Admission to candidacy for the doctoral degree can be granted only after completing all course requirements (except the research and dissertation credits), passing the written preliminary examination, and submitting and defending the research proposal.

#### Dissertation

Candidates for the PhD in Anthropology must provide evidence they have pursued a program of research that has resulted in scholarly competence. The format of the dissertation must be approved by the candidate's advisory committee and will normally consist of a minimum of three publishable papers in national or international journals pertinent to the field of study. These papers will normally be accompanied by an introduction and conclusion/summary to describe the overall research trajectory, connections among the manuscripts, and general findings.

#### **Final Examination**

Following completion of all degree requirements, and submission of the dissertation to the Graduate School and the candidate's advisory committee, the candidate will provide a public lecture of their dissertation research. Following the public lecture, the candidate will privately defend their dissertation research to a dissertation advisory committee, which will include five members of the Baylor Graduate Faculty: the committee chairperson, two other Graduate Faculty members from the student's home department, and one additional Graduate Faculty member, either from the home department or outside, and a fifth member or "outside" member. The outside member must be a Graduate Faculty member whose primary faculty appointment is from a department other than the one conferring the degree. The Dissertation director will serve as the chairperson of the committee and ensure that formal announcement of the examination is made (publicized by public posting in the Department, as well as by e-mail, at least one week before the scheduled defense), that the exam is conducted fairly, and that it is open to the faculty. The "official outside" member helps to ensure a consistent level of quality, rigor, and fairness across all graduate programs at Baylor University and may or may not be actively involved in the dissertation. The committee may include additional members (who are not necessarily members of the Graduate Faculty) beyond the minimum required number. The date of the lecture and defense will be determined by the examination committee.

The examination committee will make recommendations regarding any necessary revisions of the dissertation that may be required before the conferment of degree. Candidates who fail this examination may take a second one only upon the recommendation of the graduate program director and the approval of the Graduate School. In no case will this examination be given until an interval of at least four months has elapsed. After two failures, no further examination is permitted.

No longer than ten days after the oral examination, but no later than the "last day" deadline posted in the Graduate School Academic Calendar for the semester of graduation, an electronic pdf copy of the dissertation in its final departmentally approved form should be submitted to the

Graduate School. With the dissertation copy, the student should also submit the appropriate forms required, as stated in the Guidelines. A student is certified for graduation once the pdf copy of the dissertation is submitted electronically and approved, and all remaining steps, as stated in the Guidelines, have been completed.

### **General Course Requirements**

General requirements of the Ph.D. are given in the general requirements section of this catalog.

- There is no foreign language requirement for this Ph.D. program. A student's committee may recommend that the student satisfy a language requirement or demonstrate some other special research
- · Students may transfer graduate level credits from another institution, although most courses for completion of the Ph.D. must be taken at Baylor. The number of credit hours (and waiver of course requirements) to be transferred is at the discretion of the student's committee, the Graduate Program Director, and the Graduate School. Transfer credits must be approved by the Graduate Program Director as equivalent to courses offered at Baylor before being forwarded to the Graduate School. The courses must have been taken within five years of matriculation to Baylor and must carry a grade of B or higher (cannot accept P/F, CR/NC or certificates of completion). Furthermore, none of the transfer course work can consist of extension, workshop courses, or master's thesis or doctoral dissertation credits. Course work must be from an accredited university and appear on a graduate transcript.
- Specific requirements for the degree can be waived or substituted for several reasons, including previous work, professional experience, etc. This is all at the discretion of the student's committee, the Graduate Program Director, and the Graduate School.
- · Because the program does not require a general theory course in Anthropology, any deficiencies (in anthropological and evolutionary theory) identified in a student by his/her committee will be corrected by additional readings and independent study.
- · Completion of the Ph.D. requires sixty (60) credit hours, all postbaccalaureate.

## **Specific Course Requirements**

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Code	Title	Hours
Required Core Course	es within Anthropology	
ANT 5311	Descriptive and Exploratory Methods in Anthropology	3
ANT 5312	Laboratory Methods in Anthropological Reserach	3
ANT 5313	Professional Skills and Grant Writing	3
Nine additional credit or above	hours within Anthropology at the 4000 level	9
Elective Category: Sta	atistics and Methods	
STA 5300	Statistical Methods (Required Course)	3
Restricted Category		
Select nine credit hou	rs from the following:	9
BINF 5309	Introduction to Bioinformatics and Systems Biology	
BINF 5330	Advanced Computational Biology	
BIO 5350	Biocomputing	
BIO 5351	Advanced Biocomputing	

BIO 5413	Advanced Ecological Data Analysis	
EDC 6336	Qualitative Research and Data Analysis	
EDC 6339	Ethnographic Research Methods in Education	
EDC 6359	Mixed Methods Research Design and	
	Analysis	
EDC 6370	Case Study Research Methods and Analysis in Education	
EDP 6360	Experimental Design I	
EDP 6362	Applied Multiple Regression/Correlation Analysis in Education	
ENV 4487	Advanced GIS Analysis	
GEO 4386	Remote Sensing	
GEO 4485	Introduction to Geographic Information Systems	
MIS 5340	Database Management Systems	
MIS 5343	Seminar in Data Visualization	
PSY 5301	Introduction to Experimental Design	
PSY 5307	Advanced Statistics II	
PSY 5388	Advanced Statistical Methods	
PSY 5391	Multilevel Modeling	
SOC 5312	Social Science Data Analysis	
SOC 6317	Community Spatial Analysis	
STA 4370	Sampling Techniques	
STA 5301	Introduction to Experimental Design	
STA 5361	Methods in Time Series Analysis	
STA 5371	Methods in Data Mining and Management	
STA 5373	Computational Statistical Methods	
STA 5376	Methods in Biostatistics	
STA 5384	Multivariate Statistical Methods	
SWO 6381	Statistical Analysis for Social Work	
<b>Elective Category:</b>	Communication and Management	
Select six credit ho	ours from the following:	6
BUS 5390	Management Communication	
CSS 4301	Organizational Communication	
CSS 4303	Leadership and Communication	
CSS 4315	Health Communication	
CSS 4317	Narrating Health Across Culture	
CSS 5316	Seminar in Organizational Communication	
ENV 4307	Environmental Law	
ENV 4323	The Environment and Economic Analysis	
MGT 5310	Management of Organizational Behavior	
MGT 5331	Project Management	
PSC 4300	Political Behavior	
PSC 4305	International Law	
PSC 4375	International Organization	
PSC 5322	Seminar in Public Administration	
PSC 5325	Seminar in International Relations	
SWO 6342	Academic Leadership and Administration in Social Work Education	
SWO 6343	Program Evaluation	
Elective Category:		
Select six credit ho	ours from the following:	6

BIO 4301	Immunology	
BIO 4306	Molecular Genetics and Genomics	
BIO 4354	Neglected Tropical Diseases	
BIO 5315	Genomics & Infectious Diseases	
BIO 5330	Conservation Biology	
BIO 5335	Climate Change and Biodiversity	
BIO 5340	Ecosystem Process Modeling	
BIO 5360	Biological Invasions: Ecology and Management	
BIO 5401	Microbial Ecology	
ENV 4325	Human Health Risk Assessment	
ENV 4344	Fundamentals of Toxicology	
ENV 5300	Integrative Seminar in Environmental Studies	
ENV 5302	Foundations of Environmental Health Science	
ENV 5325	Advanced Methods for Human Health Risk Assessment and Analysis	
ENV 5342	Ecological Risk Assessment	
GEO 5389	Earth System Science	
PSY 5323	Biological Foundations of Behavior	
PUBH 5315	Theoretical Foundations of Public Health	
PUBH 5334	Foundations of Public Health	
SOC 6351	Seminar in Population Health	
SOC 6357	Health Inequalities in America	
Internship		
6V98		6
Dissertation		
6V99		12
Total Hours		60

### **Teaching Requirements**

Students are required to serve as a teaching assistant or instructor-of-record prior to graduating. It is anticipated that this teaching will take place in the fourth and fifth years of study. Prior to teaching, students will attend a workshop organized by the Baylor University Academy for Teaching and Learning (ATL). This three-part workshop will introduce participants to the literature on student learning and discuss effective teaching practices. Topics will include course design, learning activities, and effective assessment. The workshop will also provide participants space to share their ideas, get feedback from peers, and relate pedagogy to their discipline.

### **Internship Requirement**

Students must complete an internship with an organization outside of Baylor University, preferably in their third summer in residence. This internship should aim to produce a professional product like a publication or presentation.

### **Other Requirements**

- Students are required to provide a podium presentation at a professional conference prior to graduating.
- At a minimum, students must have one paper accepted by a professional publishing house (preferably a journal article), and one

- other paper submitted prior to graduation. The student must be first author on both.
- Students must participate in the department colloquium series. In
  consultation with a faculty coordinator, students will select speakers
  annually to visit the department. Students must read a paper by the
  visiting speaker, attend the lecture, and meet with the speaker, and
  then discuss the paper and presentation with the faculty coordinator.
  Students are expected to participate in at least two of these events,
  every year while enrolled in the program.
- All students must apply for an NSF pre-doctoral fellowship, an NSF Doctoral Dissertation Improvement Grant, and a Wenner-Gren Dissertation Fieldwork Grant.

#### **Asian Studies**

The Asian Studies program provides opportunities for study and research of the diverse societies that inhabit the Asian continent, from the Ural Mountains to Southeast Asia. The program takes as its geographical focus the regions of Eurasia and the Asia-Pacific. Interdisciplinary in approach, the program spans the fields of economics, foreign languages, history, political science, sociology, and religion, and is dedicated to providing opportunities for foreign study and field experiences.

While no graduate degree is offered in Asian Studies, the following courses are approved for graduate credit in other programs.

Code	Title	Hours
AST/HIS 4305	Modern China	3
AST/ANT 4310	Societies and Cultures of East Asia	3
AST/PSC 4325	Asian International Relations	3
AST/PHI 4340	East Asian Philosophy	3
AST 4350	Seminar in Asian Studies	3
AST/MUS 4362	Traditional Music and Culture in Asia	3
AST/PSC 4364	The Governments and Politics of the Asia- Pacific Region	3
AST/PSC 4374	Governments and Politics of East Asia	3
AST 4376	Asian Literature in Translation	3
AST 4V80	Contemporary Issues in Asian Studies	1-3

## **Biology**

## **Department of Biology**

Chairperson: Dwayne D. Simmons

Graduate Program Director: Joseph H. Taube

The Department of Biology offers advanced study leading to doctoral (Ph.D.) and master's (M.S., M.A.) degrees with emphases in ecology, evolution, and organismal biology (EEO) and in cellular, molecular, health, and disease (CMHD) biology.

- · Biology, M.A. and M.S. (p. 45)
- · Biology, Ph.D. (p. 47)

## Biology, M.A. and M.S.

Applicants who have completed a major in a biological science or appropriate related discipline and who present grade point averages and GRE General Test scores (taken within the last five years) that are predictive of success in this program may be admitted to the master's degree program. The M.S. degree is offered in Biology. The M.A. degree is

offered in Biology with a health profession concentration. The minimum requirement for M.S. degrees is thirty semester hours, including six semester hours of research (BIO 5V99 Thesis) leading to an acceptable thesis. The minimum requirement for the M.A. degrees, which are nonthesis, are thirty semester hours of graduate course work.

Master's students present a public exit seminar based on the thesis (M.S. degrees) or other approved topic (M.A. degree). During the final semester, master's students will have an oral examination comprising (1) demonstration of master's level knowledge in the concept areas associated with their area of emphasis, according to the particular degree program, and, for M.S. degrees, (2) defense of the thesis and (3) demonstration of proficiency in scientific investigation. There is no foreign language requirement or teaching requirement for master's degrees in Biology.

For master's students, the major professor and the graduate program director in consultation with the student will select a thesis committee before the research is begun. The complete committee should be assembled by the end of the student's second semester. The major professor will be a member of the Biology graduate faculty or approved graduate faculty in affiliated life-science departments or programs at Baylor University. The committee consists minimally of three graduate faculty members, professors, including the major professor, a member of the Biology Department faculty and a graduate faculty member from a department other than Biology. Additional faculty may be included on the committee. The committee is involved in the development of the thesis proposal and must approve the proposal before thesis research begins.

The purpose of the *M.A. degree in Biology* with a health profession concentration is to provide advanced education in biological topics specific for students pursuing a professional career in health care. This degree program is expected to be completed in a single year to serve students applying for health-related graduate programs. The student will select an intensive research topic that will be guided by a research mentor that will culminate with a required research seminar and defense. This research topic will be developed through taking 5 to 6 hours of Independent Studies (BIO 5V90 Special Problems) with a selected mentor.

The *M.S. degree in Biology* is for those interested in developing an area of biological expertise through course work and an in-depth research experience that culminates in a thesis. Students may follow either of two emphases: ecology, evolution, and organismal biology (EEO), or cellular, molecular, health, and disease (CMHD) biology. Students in both emphases must demonstrate familiarity with the scientific literature, and expertise in experimental design, in collection and analysis data, and in interpretation of results in subject areas pertinent to the student's thesis research. The majority of course work is in Biology, although graduate courses in allied areas (e.g., Biomedical Studies, Health Sciences, Environmental Studies) may be taken with approval of the student's committee and graduate program director.

#### M.S. Coursework

Code	Title	Hours
BIO 5201	Research Methods in Biology	2
BIO 5202	Res Meth In Bio II	2
STA 5300	Statistical Methods <sup>1</sup>	3
BIO 5101	Graduate Scientific Communications <sup>2</sup>	2
BIO 5V99	Thesis	6

Additional Biology Coursework	15
Total Hours	30

- Or substitute course such as BIO 5412 Biometrics
- <sup>2</sup> 1 credit per semester, taken each of first 2 semesters

Up to four hours of Seminars in Biology (BIO 5100), or other appropriate seminars approved by the student's committee and graduate program director may be applied toward a master's program; repeat credit requires a change in topic from previous registrations. Not more than six hours of Special Problems in Biology (BIO 5V90) may be applied toward master's degree requirements. At least 12 hours of this coursework (excluding the 6 hours of 5V99) must be at the 5000 level. No more than 12 hours may be taken at the 4000 level, and 4000 level courses MUST carry graduate credit (i.e., not all 4000 level courses are eliqible for graduate credit).

#### M.A. Coursework

Code	Title	Hours
BIO 5201	Research Methods in Biology	2
BIO 5202	Res Meth In Bio II	2
BIO 5213	Research Methods in Biology III	2
STA 5300	Statistical Methods <sup>1</sup>	3
BIO 5V90	Special Problems	6
Additional Biology Coursework		15
Total Hours		30

Or substitute course such as BIO 5412 Biometrics

Up to four hours of Seminars in Biology (BIO 5100), or other appropriate seminars approved by the student's committee and graduate program director may be applied toward a master's program; repeat credit requires a change in topic from previous registrations. Not more than six hours of Special Problems in Biology (BIO 5V90) may be applied toward master's degree requirements.

In addition to the core curriculum, students will select approved courses from "essential" areas that are consistent with a general biology degree and pre-health training that is important to the future of medical education. These areas include: Cellular Foundation, Genetics, and Disease Etiology and Human Response. Students will take at least one course from each of these areas as they complete the course work requirement for the degree. No more than 12 hours may be taken at the 4000 level. The following are current courses that apply to these essential areas:

Code	Title	Hours
<b>Cellular Foundation</b>		
BIO 4108	Genes and Development Laboratory	1
BIO 4307	Biochemistry and Physiology of the Cell	3
BIO 4308	Genes and Development	3
BIO 4426	Vertebrate Histology	4
Genetics		
BIO 4106	Molecular Genetics and Genomics Laboratory	1
BIO 4306	Molecular Genetics and Genomics	3
BIO 5306	Molecular Evolution	3
BIO 5311	Advanced Genetic Analysis	3

BIO 5400	Population Genetics	4
BIO 5425	Molecular Ecology	4
Disease Etiology and	Human Response	
BIO 4104	Medical Entomology Laboratory	1
BIO 4123	Laboratory for Parasitology	1
BIO 4304	Medical Entomology	3
BIO 4323	Parasitology	3
BIO 5302	Virology	3
BIO 5303	Behavioral Ecology	3
BIO 5310	Advanced Microbiology	3
BIO 5401	Microbial Ecology	4

Other graduate courses in biology may be taken as electives in addition to courses in these areas.

## Biology, Ph.D.

Advanced study leading to the Ph.D. in biology is offered in ecology, evolution, and organismal biology and in molecular, cellular, and developmental biology. A B.S. or B.A. degree in biology or appropriate related discipline is required for admission to graduate study in this program. Applicants must also submit official scores from the Graduate Record Examination (GRE) General Test, taken within the last five years, that are predictive of success in this program. Students entering the program with graduate-level course work may petition to apply up to twenty-four semester hours of approved courses toward the Ph.D. Additional hours beyond twenty-four may be considered on a courseby-course basis by the Graduate Committee. Thesis hours are not transferable toward doctoral requirements. All graduate students in Biology are expected to maintain a minimum GPA of 3.0 throughout their program. In accordance with Graduate School policy, any student whose Baylor graduate GPA falls below 3.0 will be placed on probation. The student must restore his/her GPA to 3.0 by the end of the next 9 credit hours of coursework in order to remain in the graduate program.

#### Coursework

Code	Title	Hours
BIO 5201	Research Methods in Biology	2
BIO 5202	Res Meth In Bio II	2
STA 5300	Statistical Methods <sup>1</sup>	3
BIO 5101	Graduate Scientific Communications <sup>2</sup>	4
BIO 5100	Seminars in Biology <sup>2</sup>	4
BIO 6101	Research Rotation <sup>3</sup>	3
BIO 6V99	Dissertation	12
Additional Biology Coursework		22
Additional Cour	ses (can be coursework or research)	26
Total Hours		78

- <sup>1</sup> Or substitute course such as BIO 5412 Biometrics
- <sup>2</sup> 1 credit per semester, taken each of first 4 semesters
- 3 CMHD students only

A maximum of eight combined hours of BIO 5100 Seminars in Biology (or other approved seminars) may count toward degree requirements; repeat credit requires change in topic from previous registrations. If the student has successfully completed the equivalents of these courses in

a master's program, then the student's advisory committee may petition the Graduate Committee to waive these courses.

The remaining twenty-four semester hours of required course work (including laboratory research) must include a minimum of fourteen semester hours at the 5000/6000 level. A maximum of nine hours of BIO 5V90 Special Problems can be applied toward doctoral degree requirements. Judicious selection of courses, assisted by the faculty mentor, facilitates specialization in ecology and evolutionary biology or in molecular, cellular, health and disease biology. The committee will consist of at least five graduate faculty, including the student's major professor, three graduate faculty members from the Department of Biology, and a graduate faculty member from outside the Department of Biology. Additional members from appropriate disciplines may also serve on dissertation committees. The committee will be chosen by the major professor and student in consultation with the Graduate Program Director in Biology.

A written Ph.D. comprehensive examination will be prepared by the student's preliminary examination committee. This will be administered during the 4th semester following the student's entry into the program. The oral portion of the examination will encompass a defense of the student's dissertation proposal presented and evaluated by the student's committee. The Biology written exam will cover basic concepts in areas appropriate to the student's background as determined by the preliminary examination committee and will determine the student's readiness to begin dissertation research. Doctoral students must demonstrate familiarity with the scientific literature, and expertise in experimental design, in collection and analysis of data, and in interpretation of results in subject areas pertinent to the student's dissertation research. After completion of a doctoral dissertation, that includes a mandatory publication in a rigorous peer-reviewed academic journal, the candidate has a final oral examination involving defense of the dissertation. Doctoral students present a public exit seminar based on the dissertation.

Doctoral degree program students must fulfill a one-year teaching requirement under the mentorship of a faculty member. This usually involves assisting in undergraduate laboratory course instruction as a graduate teaching assistant or serving as instructor-of-record in a lecture course.

There is no foreign language requirement for the Ph.D. degree in Biology. However, individual advisors and committees may require students to satisfy a language requirement or demonstrate special research skills through formal course work at the graduate level.

### **Hankamer School of Business**

Associate Dean for Graduate Programs: Patsy Norman

#### **Admission**

- 1. See general requirements.
- Applicants for admission to graduate study in business make application to the Graduate School. Applications are forwarded to the Hankamer School of Business where they are evaluated by the Associate Dean for Graduate Programs. Applications are returned to the Dean of the Graduate School for final evaluation.
- 3. Applicants must have a record of undergraduate study and experience that is predictive of success in graduate study.

- Applicants who do not have a bachelor's degree in Business Administration may be required to take BL 5104 Business Foundations - Business Law.
- Students enrolled in the integrated BBA/MAcc and BBA/MTax degree
  programs must meet all requirements for admission to graduate
  school except the requirement for the bachelor's degree. Students
  should apply to graduate school during their senior year. (See
  Undergraduate Catalog for Accounting Major.)
- 6. Either the GRE or GMAT exam is required for admission to the MBA program. Full Time MBA students without a minimum of two years of full-time work experience are required to complete an internship course. All Full Time MBA students in the healthcare administration specialization are required to complete a two-credit hour healthcare residency.
- 7. The primary criterion for evaluating students applying to the Executive Master of Business Administration (Executive MBA) is successful managerial or professional work experience. The GMAT or GRE examination is not required. In special circumstances, however, the GMAT or GRE examination may be required at the discretion of the admission committee. Applicants should contact the Director of the Executive MBA program for requirements specific to their situation.
- 8. The Online MBA requires a complete work history with start and end dates, accomplishments, and skills acquired including any managerial experience. For students with four years of supervisory leadership, or project management experience, the GRE/GMAT may be waived as an admission requirement.
- Applicants to the Online MBA whose undergraduate degree is not in business or not a business degree from an AACSB-accredited institution must take additional business foundation courses, increasing the total hours required for completion from forty-eight to sixty.
- 10. International students who are required to take the Test of English must attain one of the following scores:
  - Test of English as a Foreign Language (TOEFL) a minimum score of 600 (paper-based), 250 (computer-based), or 100 (internetbased) is required.
  - International English Language Testing System (IELTS) a minimum score of 7.0 is required.
  - c. Duolingo: a minimum score of 125 on the Duolingo exam is required.
  - Master of Business Administration (MBA) (p. 48)
    - · General Business Concentration (MBA) (p. 49)
    - · Business Analytics Concentration (MBA) (p. 49)
    - Cyber Security Concentration (MBA) (p. 50)
    - Entrepreneurship and Corporate Innovation Concentration (MBA) (p. 51)
  - Healthcare Administration Specialization (MBA) (p. 51)
  - Healthcare Administration Specialization, Pre-Clinical Track (PCT) (MBA) (p. 52)
  - · Business Administration Minor (p. 53)
  - Business Analytics Graduate Concentration (p. 53)
  - Cyber Security Graduate Concentration (p. 53)
  - Entrepreneurship and Corporate Innovation Graduate Concentration (p. 53)
  - Executive Master of Business Administration (EMBA) (p. 54)

- · Healthcare Administration Concentration (EMBA) (p. 54)
- Cybersecurity Technology & Strategy Concentration (EMBA) (p. 55)
- Executive Presence & Communication Concentration (EMBA) (p. 55)
- International Trade and Supply Chain Management Concentration (EMBA) (p. 55)
- · Strategic Marketing Concentration (EMBA) (p. 56)
- · Online Master of Business Administration (OMBA) (p. 56)
  - Cyber Security Concentration (OMBA) (p. 57)
  - Executive Communication Concentration (OMBA) (p. 57)
  - Global Trade and Supply Chain Management Concentration (OMBA) (p. 57)
  - · Marketing Concentration (OMBA) (p. 58)
  - · Online Master of Business Administration Certificates (p. 58)
- · Joint Master of Business Administration/Master of Divinity (p. 58)
- Joint Master of Business Administration/Master of Engineering (p. 59)
- Joint Master of Business Administration/Master of Science in Information Systems (p. 59)
  - Business Analytics Concentration (MBA/MSIS) (p. 60)
  - · Cyber Security Concentration (MBA/MSIS) (p. 61)
  - Entrepreneurship and Corporate Innovation Concentration (MBA/ MSIS) (p. 62)
- · Joint Juris Doctor/Master of Business Administration (p. 62)
- Joint Master of Business Administration/Master of Social Work (p. 63)
- · Master of Accountancy (MAcc) (p. 64)
- Joint Bachelor of Business Administration/Master of Accountancy (n. 64)
- · Master of Taxation (MTax) (p. 65)
- Joint Bachelor of Business Administration/Master of Taxation (p. 65)
- · Accounting Data and Analytics Certificate (p. 66)
- · Joint Juris Doctor/Master of Taxation (p. 66)
- · Economics (p. 67)
  - Economics, M.S. (p. 67)
  - Joint Bachelor of Business Administration/Master of Science in Economics (p. 68)
  - · Economics Minor (p. 68)
  - · Health Research and Policy, Ph.D. (p. 68)
- Entrepreneurship (p. 69)
  - Entrepreneurship, Ph.D. (p. 69)
- Information Systems (p. 71)
  - Information Systems, M.S. (p. 71)
  - · Business Analytics, M.S. (p. 73)
  - Information Systems, Ph.D. (p. 73)

## Master of Business Administration (MBA)

The Master of Business Administration degree is delivered in different formats tailored to meet the student's career aspirations and schedule.

The full-time MBA is a broad-based curriculum that integrates across functional areas and provides multiple opportunities for students to apply

classroom material in real-world situations. The program consists of fifty-three or fifty-four hours of course work over seventeen months that includes four hours of Business Frameworks, thirty-six core hours and twelve elective hours with a required international component. The full-time MBA is delivered on campus in Waco. Students in the full-time MBA can choose to pursue concentrations in Entrepreneurship & Corporate Innovation, Business Analytics, and Cyber Security. A specialization in Healthcare Administration is also available.

The Executive MBA is designed for the mid-career professional seeking to expand career opportunities. The collaborative learning environment produces business leaders with recognized integrity, superior theoretical knowledge, and practical skills of modern global business. The EMBA consists of forty-eight hours of course work over 21 months that includes active learning experiences in Washington, D.C. and one international trip. The EMBA is delivered in Dallas. In addition to the Executive MBA, five concentrations are available for Executive MBA students. Students electing an Executive MBA with a concentration will complete between 48-50 credit hours depending on the selected concentration.

The Online MBA is an accelerated program that can be completed in 12-16 months. The same acclaimed faculty as on campus teach the online courses that are delivered in seven-week modules with an asynchronous format. The OMBA helps students leverage their graduate education and professional experience to further their career while continuing to work full-time. The OMBA consists of forty-eight hours of coursework that is delivered online. An additional 12 hours of coursework is required for non-BBA degree holders.

#### **Admission**

See Hankamer School of Business (p. 47) for admissions requirements.

- General Business Concentration (MBA) (p. 49)
- · Business Analytics Concentration (MBA) (p. 49)
- · Cyber Security Concentration (MBA) (p. 50)
- Entrepreneurship and Corporate Innovation Concentration (MBA) (p. 51)

## **General Business Concentration** (MBA)

The general Master of Business Administration degree is awarded after the successful completion of the requirements listed below.

A thesis option to the MBA degree is available. Students interested in this option should see the Associate Dean for Graduate Programs in the Business School.

All course work must be in graduate level courses.

Resident study of at least nine months at Baylor University is required. Not more than six hours of work may be transferred from another college or university. No credit will be given for work done by extension or correspondence, or for courses counted already toward a bachelor's or another master's degree.

All MBA candidates must earn an average grade of "B" (3.0) or higher in all courses. If course substitutions are made for any of these core courses, the substituted course grade is included in the average. Students not having an overall average of 3.0 or higher in the core courses are required to repeat one or more of the courses in which a

grade below "B" was earned in order to increase their average to 3.0. When a core course is repeated, the new grade substitutes for the old grade in the core calculated GPA. In some cases, more advanced work may be prescribed in place of the course on which a grade below "B" was earned. Both the original grade and the new grade for a repeated course will be included in the overall GPA for graduation purposes.

Early in the semester in which the degree is to be awarded, candidates must complete an application for graduation found in BearWeb.

Instructions for this form can be found on the Graduate School website.

Code	Title	Hours
Required Framework	Course	
BUS 5401	Business Frameworks	4
Required Core Course	es	
ACC 5300	Accounting Tools for Management Decision Making	3
BUS 5101	Focus Firm I	1
BUS 5111	Professional Career Development for First Semester Graduate Students	1
BUS 5112	Professional Career Development for Second Semester Graduate Students	1
BUS 5390	Management Communication	3
ECO 5340	Economic Tools for Management Decision Making	3
FIN 5360	Seminar in Corporate Finance	3
MGT 5310	Management of Organizational Behavior	3
MGT 5320	Manufacturing and Service Operations	3
MGT 5325	International Management	3
MGT 5385	Strategic Management and Business Policy	3
MKT 5310	Seminar in Marketing Strategy	3
QBA 5330	Business Analytics for Decision Making	3
Select one course fro	m the following:	3
MIS 5342	Business Intelligence	
MIS 5345	Decision Making Using Excel	
MIS 5346	Data Warehousing	
MIS 5355	Management of Information Systems	
ISEC 5305	Seminar in Information Security Foundations	

#### Other Requirements

## **Business Analytics Concentration** (MBA)

The MBA Concentration in Business Analytics provides graduate students within the Hankamer School of Business exposure to concepts and techniques critical to success in the area of business analytics. The purpose of the Graduate Concentration in Business Analytics will

enable graduate students to gain the skills necessary to understand and interpret big data and business analytics.

Admission to the Business Analytics Concentration is contingent on admission into the Master of Business Administration (see requirements under Business School Admissions).

The Degree requirements are as follows:

Code Title					
Required Framework Courses					
BUS 5401	Business Frameworks	4			
Required Core Course	es				
ACC 5300	Accounting Tools for Management Decision Making	3			
BUS 5101	Focus Firm I	1			
BUS 5111	Professional Career Development for First Semester Graduate Students	1			
BUS 5112	Professional Career Development for Second Semester Graduate Students	1			
BUS 5390	Management Communication	3			
ECO 5340	Economic Tools for Management Decision Making	3			
FIN 5360	Seminar in Corporate Finance	3			
MGT 5310	Management of Organizational Behavior	3			
MGT 5320	Manufacturing and Service Operations	3			
MGT 5325	International Management	3			
MGT 5385	Strategic Management and Business Policy	3			
MKT 5310	Seminar in Marketing Strategy	3			
QBA 5330	Business Analytics for Decision Making	3			
<b>Business Analytics C</b>	ourses				
MIS 5342	Business Intelligence	3			
MIS 5340	Database Management Systems	3			
MIS 5343	Seminar in Data Visualization	3			
Select two courses fr	om the following:	6			
ECO 5347	Econometric Theory and Methods				
ECO 5349	Causal Inference and Research Design				
ECO 5351	Data Science I				
ECO 5352	Data Science II				
MIS 5322	Advanced Python for Analytics				
MIS 5346	Data Warehousing				
MKT 5398	Directed Studies in Marketing				
Other MBA Requirem	ents				
1-hour internship requirements time work experience	uired for students without 2 years of full-	1			
Students with more than 2 years can choose to take an elective.					
Students who do not have an undergraduate degree in Business					
Administration will be	Administration will be required to take the following:				
BL 5104	Business Foundations - Business Law	(1)			
Total Hours		53			

## **Cyber Security Concentration (MBA)**

The MBA Concentration in Cyber Security provides graduate students within the Hankamer School of Business exposure to 'best practice' concepts, techniques and methodologies critical to insuring data security

in corporate/organizational environments. Furthermore, it is targeted towards addressing recent calls from the academic literature and professional journals to treat cyber security as a strategic organizational function rather than a back-office technical function. The purpose of the Concentration is to provide business graduate students with the necessary skills to develop and/or manage organizational processes, strategies, methodologies, and technologies designed to mitigate risks to the confidentiality, integrity, and availability of organizational data and information-related resources for preparation to take cyber-security related management positions in industry and/or consulting practices.

Admission to the Cyber Security Concentration is contingent on admission into the Master of Business Administration (see requirements under Business School Admissions).

The Degree requirements are as follows:

Code Title		Hours		
Required Framework Courses				
BUS 5401 Business Frameworks				
Required Core Course	es			
ACC 5300	Accounting Tools for Management Decision Making	3		
BUS 5101	Focus Firm I	1		
BUS 5111	Professional Career Development for First Semester Graduate Students	1		
BUS 5112	Professional Career Development for Second Semester Graduate Students	1		
BUS 5390	Management Communication	3		
ECO 5340	Economic Tools for Management Decision Making	3		
FIN 5360	Seminar in Corporate Finance	3		
MGT 5310	Management of Organizational Behavior	3		
MGT 5320 Manufacturing and Service Operations		3		
MGT 5325 International Management		3		
MGT 5385	Strategic Management and Business Policy	3		
MKT 5310	Seminar in Marketing Strategy	3		
QBA 5330 Business Analytics for Decision Making		3		
<b>Cyber Security Cours</b>	es			
ISEC 5305	Seminar in Information Security Foundations	3		
ISEC 5320	Cyber Security Technology Factors	3		
Select two courses fr	om the following:	6		
ISEC 5310	Cyber Security Human Factors: Ethics, Integrity, Practices, Policies, and Procedures			
ISEC 5330	Cybersecurity Policy and Planning			
ISEC 5340 Cyber Warfare, Threats, Vulnerabilities and Countermeasures				
Other MBA Requirements				
Select one of the following:				
1-hour internship required for students without 2 years of full- time work experience				

Students with more than 2 years can choose to take an

Administration will be required to take the following:

Students who do not have an undergraduate degree in Business

BL 5104 Business Foundations - Business Law (1)

Total Hours 50-51

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## **Entrepreneurship and Corporate Innovation Concentration (MBA)**

The MBA Concentration in Entrepreneurship and Corporate Innovation provides graduate students within the Hankamer School of Business exposure to concepts and techniques critical to success in the area of entrepreneurship and corporate innovation. The purpose of this Concentration will enable graduate students to gain the skills necessary to lead value creation innovation in both corporate and start up environments. Initiatives may include both process design/improvement as well as product design/improvement..

Admission to the Entrepreneurship and Corporate Innovation Concentration is contingent on admission into the Master of Business Administration (see requirements under Business School Admissions).

The Degree requirements are as follows:

Code Title		Hours
Required Framework	rk Courses	
BUS 5401	Business Frameworks	4
Required Core Cour	rses	
ACC 5300	Accounting Tools for Management Decision Making	3
BUS 5101	Focus Firm I	1
BUS 5111	Professional Career Development for First Semester Graduate Students	1
BUS 5112	Professional Career Development for Second Semester Graduate Students	1
BUS 5390	Management Communication	3
ECO 5340	Economic Tools for Management Decision Making	3
FIN 5360	Seminar in Corporate Finance	3
MGT 5310	Management of Organizational Behavior	3
MGT 5320		
MGT 5325	International Management	3
MGT 5385	Strategic Management and Business Policy	3
MKT 5310	Seminar in Marketing Strategy	3
QBA 5330	Business Analytics for Decision Making	3
Select one MIS cou	rse from the following:	3
MIS 5342	Business Intelligence	
MIS 5345	Decision Making Using Excel	
MIS 5346	Data Warehousing	
MIS 5355	Management of Information Systems	
Entrepreneurship a	nd Corporate Innovation Courses	
ENT 5329	Entrepreneurial Finance	3
ENT 5342	Corporate Entrepreneurship: Initiating and Sustaining Innovation	3
ENT 5322	Accelerated Ventures Leadership	3
ENT 5341	Technology Entrepreneurship	3
or MGT 5331	Project Management	
Other MBA Require	ments	
Select one of the following:		

1-hour internship required for students without 2 years of fulltime work experience

Students with more than 2 years can choose to take an elective.

Students who do not have an undergraduate degree in Business Administration will be required to take the following:

BL 5104 Business Foundations - Business Law (1)

Total Hours 53

## Healthcare Administration Specialization (MBA)

Academic Director: Charles North
Administrative Director: Forest Kim

Associate Dean for Graduate Business Programs: Patsy Norman

The Master of Business Administration, Healthcare Administration Specialization provides those who possess a passion for serving others with the requisite quantitative and qualitative skills to prepare them for early career executive positions in health industry organizations. Healthcare administrators are integral to the management of medical organizations including health systems, hospitals, provider practices, consulting firms, insurance companies, and long-term care facilities. Today's healthcare leaders must be prepared to lead and manage dynamic, complex organizations with a servant's heart, a commitment to their communities, and a strong business acumen. The Healthcare Administration Specialization is designed to combine the quantitative strengths of the MBA and the specialized curriculum focused on the healthcare industry with an emphasis on experiential learning and principle-centered leadership.

An integral part of the Healthcare Administration Specialization is the administrative residency. All students are required to complete the residency and placements are made recognizing that placing the right student with the right preceptor at the right site is vital to a successful residency. During the nine-month experience in progressive healthcare organizations located across the United States, students develop a mentoring relationship with their preceptor, observe and develop understanding of the organization's mission, structure and operations, and apply and test the theory and tools acquired in the didactic curriculum.

At the end of the residency, students will return to campus for a capstone course which will include opportunities for sharing their residency experiences, to engage in a case analysis, and to complete comprehensive oral examinations. Professional development is another key element of the program. During the 21-month program, students will be introduced to professional organizations providing lifelong education programs and networking opportunities and will be given the opportunity to attend a major national or state health education event. Through the Executive Leadership in Healthcare series, students will be exposed to senior leaders with diverse backgrounds and serving in a variety of sectors within healthcare.

Admission to the MBA Healthcare Administration Specialization is contingent on admission to the Master of Business Administration (see requirements under the Business School Admissions).

### **Healthcare Administration Specialization**

The Degree requirements are as follows:

Title

Code

Code	Title	Hours
Required Framework	Courses	
BUS 5401	Business Frameworks	4
Required Core Course	es	
ACC 5300	Accounting Tools for Management Decision Making	3
BUS 5390	Management Communication	3
ECO 5340	Economic Tools for Management Decision Making	3
FIN 5360	Seminar in Corporate Finance	3
MGT 5310	Management of Organizational Behavior	3
MGT 5320	Manufacturing and Service Operations	3
MGT 5385	Strategic Management and Business Policy	3
MKT 5310	Seminar in Marketing Strategy	3
QBA 5330	Business Analytics for Decision Making	3
MIS 5355	Management of Information Systems	3
MIS 5345	Decision Making Using Excel	3
Healthcare Aministra	tion Specialization Courses	
HPA 5001	Executive Leadership in Healthcare Administration I	0
HPA 5002	Executive Leadership in Healthcare Administration II	0
HPA 5003	Executive Leadership in Healthcare Administration III	0
HPA 5120	Principles and Methods of Healthcare Delivery System Research	1
HPA 5121	Current Issues in Healthcare Administration	1
HPA 5126	Social Issues in Healthcare Administration	1
HPA 5180	Healthcare Finance Lab	1
HPA 5310	Healthcare Administration	3
HPA 5330	Healthcare Law and Ethics	3
HPA 5350	Health Economics	3
HPA 5367	Managerial Epidemiology	3
HPA 5380	Healthcare Finance	3
HPA 5V90	Healthcare Administrative Internship	2
Total Hours		58

## Healthcare Administration Specialization - Pre-Clinical Track (PCT) (MBA)

The Master of Business Administration, Healthcare Administration Specialization, Pre-Clinical Track (PCT), is intended for students who wish to complete an MBA with a healthcare specialization the year prior to attending an advanced clinical degree program (MD, DO, PA, DPT, DDS, PharmD, etc). Applicants with a strong likelihood of admission to an advanced clinical degree program will be considered for admission. Students in the PCT will complete nearly all requirements of the traditional Healthcare Administration Specialization (see above) with one key exception. PCT students will not complete the administrative residency, rather will receive their clinical orientation in their respective advanced clinical training program. PCT students will complete a

capstone course and participate in comprehensive oral examinations in their final semester.

Students will gain several distinct advantages from the proposed Pre-Clinical Track. First, they will benefit from a cohesive health care-focused educational environment. Students completing this track will be getting the best of Baylor in terms of graduate educational programming, given that they will have been a part of some of the University's most elite and successful programs to date. Moreover, the completion of the Pre-Clinical track will allow them to clearly signal strong and highly unique credentials when applying to advanced clinical degree programs (e.g., medical school, dental school). Given the difficulty in securing a clinical education spot, this unique degree combination could significantly enhance their rate of acceptance to these degree programs as well as their ability to access higher rated programs (i.e., receive admission to the most elite institutions). This will simultaneously build a pipeline of future clinical leaders, which are strongly needed in the US health care system. Of note, the time and curriculum constraints of most advanced clinical programs do not allow for nurturing leadership skills or an understanding of the business side of healthcare. Therefore, the creation of a program specifically designed to create future Christian clinical and health care industry leaders fits ideally with Baylor's mission and current strategic plan and targets a narrow window of opportunity within the students' academic training.

Admission to the Healthcare Administration Pre-Clinical Track is contingent on admission into the Master of Business Administration (see requirements under Business School Admissions).

The Degree requirements are as follows:

Code	Title	Hours
Required Framework	Courses	
BUS 5401	Business Frameworks	4
Required Core Course	es	
ACC 5300	Accounting Tools for Management Decision Making	3
BUS 5390	Management Communication	3
ECO 5340	Economic Tools for Management Decision Making	3
FIN 5360	Seminar in Corporate Finance	3
MGT 5310	Management of Organizational Behavior	3
MGT 5320	Manufacturing and Service Operations	3
MGT 5385	Strategic Management and Business Policy	3
MKT 5310	Seminar in Marketing Strategy	3
QBA 5330	Business Analytics for Decision Making	3
MIS 5355	Management of Information Systems	3
Healthcare Aministra Courses	tion - Pre-Clinical Track Specialization	
HPA 5001	Executive Leadership in Healthcare Administration I	0
HPA 5002	Executive Leadership in Healthcare Administration II	0
HPA 5003	Executive Leadership in Healthcare Administration III (Lean Six Sigma (Black Belt))	0
HPA 5126	Social Issues in Healthcare Administration	1
HPA 5180	Healthcare Finance Lab	1
HPA 5310	Healthcare Administration	3

Total Hours		51
HPA 5380	Healthcare Finance	3
MIS 5345	<b>Decision Making Using Excel</b>	3
HPA 5350	Health Economics	3
HPA 5330	Healthcare Law and Ethics	3

## **Business Administration Minor Minor in Business Administration**

For a graduate minor in business, students must complete any four graduate level business courses (including the required prerequisites). These courses must be completed in no less than three separate disciplines.

## **Business Analytics Graduate Concentration**

### **Concentration in Business Analytics**

The Graduate Concentration in Business Analytics provides graduate students within the Hankamer School of Business exposure to concepts and techniques critical to success in the area of business analytics. The purpose of the Graduate Concentration in Business Analytics will enable graduate students to gain the skills necessary to understand and interpret big data and business analytics.

Admission into the concentration is contingent upon admission into the MBA, MSIS, MAcc, MTax, or the MSEco programs.

The Concentration requirements are as follows:

Code	Title	Hours
<b>Business Analytics</b>	s Courses <sup>1</sup>	
QBA 5330	Business Analytics for Decision Making	3
MIS 5340	Database Management Systems	3
MIS 5342	Business Intelligence	3
MIS 5343	Seminar in Data Visualization	3
Select two courses	s from the following:	6
ECO 5347	Econometric Theory and Methods	
ECO 5349	Causal Inference and Research Design	
ECO 5351	Data Science I	
ECO 5V98	Special Studies in Economics (Data Science II)	
MIS 5322	Advanced Python for Analytics	
MIS 5346	Data Warehousing	
MKT 5398	Directed Studies in Marketing	
Total Hours		18

<sup>&</sup>lt;sup>1</sup> Substitutions may be made with prior Advisor Approval.

## **Cyber Security Graduate Concentration**

### **Concentration in Cyber Security**

The Graduate Concentration in Cyber Security provides graduate students within the Hankamer School of Business exposure to 'best practice'

concepts, techniques and methodologies critical to insuring data security in corporate/organizational environments. Furthermore, it is targeted towards addressing recent calls from the academic literature and professional journals to treat cyber security as a strategic organizational function rather than a back-office technical function. The purpose of the Concentration is to provide business graduate students with the necessary skills to develop and/or manage organizational processes, strategies, methodologies, and technologies designed to mitigate risks to the confidentiality, integrity, and availability of organizational data and information-related resources for preparation to take cyber-security related management positions in industry and/or consulting practices.

Admission into the concentration is contingent upon admission into the MBA, MSIS, MAcc, MTax, or MSEco programs.

The Concentration requirements are as follows:

Code	Title	Hours
MIS Courses		
MIS 5335	Information Systems Analysis and Design	3
MIS 5340	Database Management Systems	3
MIS 5355	Management of Information Systems	3
<b>Cyber Security Cours</b>	es <sup>1</sup>	
ISEC 5305	Seminar in Information Security Foundations	3
ISEC 5320	Cyber Security Technology Factors	3
Select two courses fr	om the following:	6
ISEC 5310	Cyber Security Human Factors: Ethics, Integrity, Practices, Policies, and Procedures	
ISEC 5330	Cybersecurity Policy and Planning	
ISEC 5340	Cyber Warfare, Threats, Vulnerabilities and Countermeasures	
Total Hours		21

<sup>&</sup>lt;sup>1</sup> Substitutions may be made with prior Advisor Approval.

## **Entrepreneurship and Corporate Innovation Graduate Concentration**

## **Concentration in Entrepreneurship and Corporate Innovation**

The Graduate Concentration in Entrepreneurship and Corporate Innovation provides graduate students within the Hankamer School of Business exposure to concepts and techniques critical to success in the area of entrepreneurship and corporate innovation. The purpose of this Concentration will enable graduate students to gain the skills necessary to lead value creation innovation in both corporate and start up environments. Initiatives may include both process design/improvement as well as product design/improvement.

Admission into the Concentration is contingent upon admission into the MBA, MSIS, MAcc, MTax, or MSEco programs.

The Concentration requirements are as follows:

Code	Title	Hours
Entrepreneurship & C	orporate Innovation Courses <sup>1</sup>	
MGT 5385	Strategic Management and Business Policy	3
ENT 5329	Entrepreneurial Finance (Fall Only)	3
ENT 5342	Corporate Entrepreneurship: Initiating and Sustaining Innovation	3
ENT 5322	Accelerated Ventures Leadership	3
Select one course fro	m the following:	3
ENT 5341	Technology Entrepreneurship	
MGT 5331	Project Management (Fall Only)	
Total Hours		15

1	Substitutions	may be	made with	prior A	dvisor Approval	l.
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## **Executive Master of Business Administration (EMBA)**

The Master of Business Administration degree (Executive Program – EMBA) is designed for full-time working professionals who hold management-level positions with their respective firms. Admission requires a personal interview before the graduate business admissions committee. For admission requirements, see requirements under Business School Admissions.

The Executive Master of Business Administration program has the following session start and end dates:

Fall 2022: 8/14/22 - 12/14/22 Spring 2023: 12/30/22 - 5/11/23 Summer 2023: 5/15/23 - 8/10/23

The EMBA is a "lock-step" (sequentially ordered) set of course offerings. Students enter either in fall or spring and progress through the program together. The Baylor EMBA program is offered one weekend each month in Dallas, TX. The EMBA Program requires 21 months for completion and consist of the following:

#### **Executive MBA Core Curriculum**

Code	Title	Hours
BUS 5201	In-Residence: Leading in the 21st Century	2
MGT 5311	Leading with Integrity	3
QBA 5330	Business Analytics for Decision Making	3
ECO 5315	Microeconomic Theory and Business Decisions	3
MIS 5152	The Innovative Tech Leader	1
BL 5201	Business Law: Application and Strategy	2
ACC 5305	Financial Accounting	3
FIN 5260	Financial Decision Making	2
FIN 5263	Managing for Value Creation	2
MGT 5136	Global Human Capital Leadership	1
ACC 5320	Managerial Accounting	3
MGT 5320	Manufacturing and Service Operations	3
MKT 5310	Seminar in Marketing Strategy	3

Total Hours		35
	Competitive Advantage	
MGT 5406	Global Strategy: Building and Sustaining	4

#### **Executive Master of Business Administration**

EXECUTIVE INIA	ster or pasifiess Administration	
Code	Title	Hours
Executive MBA C	ore	
Complete all cour	rses listed under Executive MBA Core Curriculum	35
Required Courses	S	
MGT 5340	Negotiation and Conflict Resolution	3
BUS 5302	In Residence: Government, Business, and Societal Impact	3
MGT 5307	In Residence: Global Strategy: Building & Sustaining Competitive Advantage	3
ECO 5110	Key Global Economic and Strategic Issues	1
FIN 5220	Private Equity Investing	2
BUS 5V98	Special Studies in Business (Leading a Culture of Innovation)	1
Total Hours		48

#### **Executive Master of Business Administration Concentrations**

· Healthcare Administration Concentration (EMBA) (p. 54)

The EMBA program in collaboration with the Online MBA Program (OMBA) offers the following four concentrations. The EMBA program with one of these concentrations includes 38 hours of core courses plus 12 hours of concentration courses for a total 50 credit hours.

- Cybersecurity Technology & Strategy Concentration (EMBA) (p. 55)
- Executive Presence & Communication Concentration (EMBA) (p. 55)
- International Trade and Supply Chain Management Concentration (EMBA) (p. 55)
- · Strategic Marketing Concentration (EMBA) (p. 56)

## Healthcare Administration Concentration (EMBA)

## Concentration in Healthcare Administration

The EMBA with a concentration in Healthcare Administration is a "lock-step" (sequentially ordered) set of course offerings. Students enter either in the fall or spring and progress through the program together, with all healthcare students taking the same courses. Two EMBA programs are offered, a weekend program in Dallas and an evening program in Austin. The program is completed within 21 months and consists of the following courses.

Code	Title	Hours
BUS 5201	In-Residence: Leading in the 21st Century	2
MGT 5311	Leading with Integrity	3
QBA 5330	Business Analytics for Decision Making	3
ECO 5315	Microeconomic Theory and Business Decisions	3
MGT 5340	Negotiation and Conflict Resolution	3

Total Hours		48
MGT 5307	In Residence: Global Strategy: Building & Sustaining Competitive Advantage	3
MGT 5406	Global Strategy: Building and Sustaining Competitive Advantage	4
HPA 5320	Marketing Strategy for Healthcare Professionals	3
HPA 5230	Healthcare Operations	2
ACC 5320	Managerial Accounting	3
HPA 5280	Healthcare Financial Management	2
MGT 5136	Global Human Capital Leadership	1
HPA 5220	Healthcare Law: Application and Strategy	2
FIN 5263	Managing for Value Creation	2
BUS 5V98	Special Studies in Business (Leading a Culture of Innovation)	1
FIN 5260	Financial Decision Making	2
ACC 5305	Financial Accounting	3
BUS 5302	In Residence: Government, Business, and Societal Impact	3
HPA 5250	Analysis of Healthcare Economic Conditions	2
HPA 5150	Aligning IT Healthcare Enterprises	1

## **Cybersecurity Technology & Strategy Concentration (EMBA)**

### **Concentration in Cybersecurity Technology & Strategy (CYST)**

Code	Title	Hours
<b>Executive MBA Core</b>		
Complete all course	s listed under Executive MBA Core Curriculum	35
<b>Required Courses</b>		
MGT 5340	Negotiation and Conflict Resolution	3
BUS 5V98	Special Studies in Business (Leading a Culture of Innovation)	1
Cyber Security & Ted	chnology Strategy Concentration Courses	
ISEC 5405	Cyber Security Fundamentals (taken online)	4
ISEC 5430	Enterprise Cyber Security Planning and Policy: A Strategic Approach (taken online)	4
MIS 5152	The Innovative Tech Leader (listed under Executive MBA core curriculum)	(1)
BUS 5302	In Residence: Government, Business, and Societal Impact	3
Experiential Learning (Optional) <sup>1</sup>		
MGT 5307	In Residence: Global Strategy: Building & Sustaining Competitive Advantage	
Total Hours		50

<sup>1</sup> Additional fees apply

# **Executive Presence & Communication Concentration (EMBA)**

## **Concentration in Executive Presence & Communication (EXPC)**

Code	Title	Hours
Executive MBA Core	•	
Complete all course	s listed under Executive MBA Core Curriculum	35
<b>Additional Course</b>		
BUS 5302	In Residence: Government, Business, and Societal Impact	3
<b>Executive Presence</b>	& Communication Concentration Courses	
MGT 5340	Negotiation and Conflict Resolution	3
BUS 5V98	Special Studies in Business (Leading a Culture of Innovation)	1
BUS 5460	Communicating With Data	4
BUS 5490	Strategic Communication (taken online)	4
<b>Experiential Learnin</b>	g (Optional) <sup>1</sup>	
MGT 5307	In Residence: Global Strategy: Building & Sustaining Competitive Advantage	
Total Hours		50

<sup>&</sup>lt;sup>1</sup> Additional fees apply

## **International Trade and Supply Chain Management Concentration (EMBA)**

## **Concentration in International Trade and Supply Chain Management (ISCM)**

Code	Title	Hours
Executive MBA Core	Curriculum	
Complete all courses	listed under Executive MBA Core Curriculum	35
<b>Required Courses</b>		
MGT 5340	Negotiation and Conflict Resolution	3
MGT 5307	In Residence: Global Strategy: Building & Sustaining Competitive Advantage	3
International Trade a	nd Supply Chain Management Concentration	
Courses		
MGT 5445	Global Supply Chain Strategy (taken online)	4
BL 5445	Global Trade Compliance Strategy (taken online)	4
MGT 5320	Manufacturing and Service Operations (listed under Executive MBA core curriculum)	(3)
BUS 5V98	Special Studies in Business (Leading a Culture of Innovation)	1

Experiential Learning (Optional) 1

Total Hours		50
	Societal Impact	
BUS 5302	In Residence: Government, Business, and	

Additional fees apply

## Strategic Marketing Concentration (EMBA)

## **Concentration in Strategic Marketing** (STMK)

` '		
Code	Title	Hours
<b>Executive MBA Core</b>		
Complete all courses	listed under Executive MBA Core Curriculum	35
Required Courses		
MGT 5340	Negotiation and Conflict Resolution	3
BUS 5302	In Residence: Government, Business, and Societal Impact	3
Strategic Marketing	Concentration Courses	
MKT 5440	Strategic Brand Management (taken online)	4
MKT 5460	Marketing Analytics (taken online)	4
MKT 5310	Seminar in Marketing Strategy (listed under Executive MBA core curriculum)	(3)
BUS 5V98	Special Studies in Business (Leading a Culture of Innovation)	1
<b>Experiential Learning</b>	(Optional) <sup>1</sup>	
MGT 5307	In Residence: Global Strategy: Building & Sustaining Competitive Advantage	

<sup>1</sup> Additional fees apply

**Total Hours** 

## Online Master of Business Administration (OMBA)

The Master of Business Administration degree (Online Program - OMBA) is an accelerated online option designed for working professionals. Students can complete their MBA in as few as 12-16 months with 48-60 credit hours. The Online MBA offers the same acclaimed faculty and education as on campus experiences and provides multiple opportunities for students to immediately apply classroom material in real-world situations.

Students admitted to the MBA program without an undergraduate BBA degree from an AACSB accredited school must complete the Business Foundations courses successfully, or its undergraduate course work equivalent in the study of accounting, micro and macroeconomics, finance, and statistics with a grade of "B" or better in each course:

Code	Title	Hours
Business Founda	tions Courses	
ACC 5301	<b>Business Foundations - Accounting</b>	3
QBA 5302	<b>Business Foundations - Statistics</b>	3
FIN 5203	Business Foundations - Finance	2

BL 5104	Business Foundations - Business Law	1
ECO 5305	Business Foundations - Economics	3

Additional admissions requirements can be found under the Business School Admissions.

The general Master of Business Administration degree is awarded after the successful completion of the requirements listed below. A thesis option to the MBA degree is available, but not required. Students interested in this option should see the Associate Dean for Graduate Programs in the Business School.

All Online MBA students must maintain a minimum overall grade point average of 3.0 during each semester (a semester consists of both terms in summer, fall, or spring). Any Online MBA student whose overall grade point average falls below a 3.0 during the semester, will be placed on probation for the next eight semester hours of course work (see Probation in the General Information section).

No work may be transferred from another college or university. No grade below a "C" is acceptable in a required course. If a grade of "C-", "D+", "D", "D-", or "F" is made in a required course, the student must repeat the course and earn a grade of "C" or higher. When a course is repeated, both the original grade and the new grade for a repeated course will be included in the overall GPA for graduation purposes. To graduate, all Online MBA students must have a minimum overall grade point average of 3.0.

Early in the semester in which the degree is to be awarded, candidates must file an Intent to Graduate form with the Graduate School in compliance with graduation requirements.

The program consists of six terms each year, two in the summer, two in the fall and two in the spring. All MBA courses are offered twice per year.

#### **Business Foundation Courses**

(Required for students without business undergraduate degree):

Code	Title	Hours	
Business Foundation Courses			
ACC 5301	Business Foundations - Accounting	3	
QBA 5302	Business Foundations - Statistics	3	
FIN 5203	Business Foundations - Finance	2	
BL 5104	Business Foundations - Business Law	1	
ECO 5305	Business Foundations - Economics	3	
Total Hours		12	

### **Core Requirements**

Core Courses required for all OMBA degree plans (each course is four hours credit):

Code	Title	Hours
Core Courses		
ACC 5420	Managerial Accounting	4
ECO 5415	Economics for Managers	4
FIN 5460	Fundamentals of Applied Business Finance	4
MGT 5410	Managing For Higher Performance	4
MGT 5420	Operations Management	4
MGT 5485	Strategic Management and Business Policy	4

Total Hours		32
QBA 5435	Business Statistics	4
MIS 5450	Management of Information Systems	4

#### **General MBA**

Code	Title	Hours
Core Requirements		
Complete all the cou	rses listed under Core Requirements	32
General MBA		
BUS 5421	Ethical Leadership	4
MGT 5402	Negotiation	4
Select one Commun	ication course from the following:	4
BUS 5460	Communicating With Data	
or BUS 5490	Strategic Communication	
Select one Marketin	g course from the following:	4
MKT 5410	Strategic Marketing Planning	
MKT 5440	Strategic Brand Management	
MKT 5460	Marketing Analytics	
Total Houre		48

## Online Master of Business Administration Concentrations

- · Cyber Security Concentration (OMBA) (p. 57)
- Executive Communication Concentration (OMBA) (p. 57)
- Global Trade and Supply Chain Management Concentration (OMBA) (p. 57)
- · Marketing Concentration (OMBA) (p. 58)
- · Online Master of Business Administration Certificates (p. 58)

Students may choose more than one concentration or take extra courses; however, your total number of hours for your degree will increase by the added courses. Courses will not be substituted in lieu of required courses.

## **Cyber Security Concentration (OMBA) Concentration in Cyber Security (GYSE)**

Code	Title	Hours
Core Requirement	s	
Complete all the c	ourses listed under Core Requirements	32
<b>Required Courses</b>		
Select one Comm	unication course from the following:	4
BUS 5460	Communicating With Data	
BUS 5490	Strategic Communication	
MGT 5402	Negotiation	
Select one Market	ing course from the following:	4
MKT 5410	Strategic Marketing Planning	
MKT 5440	Strategic Brand Management	
MKT 5460	Marketing Analytics	
Cyber Security Cocourses:	ncentration requires the following three	
ISEC 5405	Cyber Security Fundamentals	4

ISEC 5430 Enterprise Cyber Security Planning and Policy: A Strategic Approach  MIS 5450 Management of Information Systems (4) (which is listed as a core course)	<b>Total Hours</b>		48
Policy: A Strategic Approach		(which is listed as a core course)	
, , , , , , ,	MIS 5450	Management of Information Systems	(4)
ISEC 5430 Enterprise Cyber Security Planning and	.020 0 .00	. , , , , , , , , , , , , , , , , , , ,	·
	ISEC 5430	Enterprise Cyber Security Planning and	4

## **Executive Communication Concentration (OMBA)**

## **Concentration in Executive Communication (EXCO)**

Code	Title	Hours
Core Requirements		
Complete all the co	urses listed under Core Requirements	32
<b>Required Courses</b>		
Select one Marketin	ng course from the following:	4
MKT 5410	Strategic Marketing Planning	
MKT 5440	Strategic Brand Management	
MKT 5460	Marketing Analytics	
	ication Concentration requires the following	
three courses:		
BUS 5460	Communicating With Data	4
BUS 5490	Strategic Communication	4
MGT 5402	Negotiation	4
Total Hours		48

## Global Trade and Supply Chain Management Concentration (OMBA)

## **Concentration in Global Trade and Supply Chain Management (GSCM)**

Code	Title	Hours
Core Requiremen	ts	
Complete all the	courses listed under Core Requirements	32
Required Courses	5	
Select one Comm	nunication course from the following:	4
BUS 5460	Communicating With Data	
BUS 5490	Strategic Communication	
MGT 5402	Negotiation	
Select one Marke	ting course from the following:	4
MKT 5410	Strategic Marketing Planning	
MKT 5440	Strategic Brand Management	
MKT 5460	Marketing Analytics	
	Supply Chain Management Concentration wing three courses:	
BL 5445	Global Trade Compliance Strategy	4
MGT 5445	Global Supply Chain Strategy	4
MGT 5420	Operations Management (which is listed as a core course)	(4)
Total Hours		48

## Marketing Concentration (OMBA) Concentration in Marketing (MKT)

Code	Title	Hours
Core Requirement	ts	
Complete all the o	courses listed under Core Requirements	32
Required Courses		
Select one Comm	unication course from the following:	4
BUS 5460	Communicating With Data	
BUS 5490	Strategic Communication	
MGT 5402	Negotiation	
Marketing Concer	ntration requires the following three courses:	
MKT 5410	Strategic Marketing Planning	4
MKT 5440	Strategic Brand Management	4
MKT 5460	Marketing Analytics	4
Total Hours		48

## Online Master of Business Administration Certificates

#### Overview

Master of Business Administration Certificates allow students to

- Improve their skills in their current occupation by developing expertise in advanced topics,
- 2. Acquire knowledge to pursue careers, and
- Explore emerging fields before committing to the Master in Business Administration degree that requires more courses.

Each for-credit certificate contains three graduate courses (equivalent to 12 graduate credits) that are normally part of the curriculum for a 48-credit Master of Business Administration degree program and can be completed in as little as 6 months. Applicants must meet the same requirements for admission to the for-credit certificates as the Online MBA degree. After successful completion of a graduate certificate, students may decide to continue and complete the Online MBA degree. For OMBA alumni who may have completed a required course as part of their OMBA degree, another course will be approved to meet the 12-credit requirement for the certificate.

Certificates are available in the following areas:

#### **Cyber Security**

Code	Title	Hours
ISEC 5405	Cyber Security Fundamentals	4
ISEC 5430	Enterprise Cyber Security Planning and Policy: A Strategic Approach	4
MIS 5450	Management of Information Systems	4

#### **Executive Communication**

Code	Title	Hours
BUS 5460	Communicating With Data	4
BUS 5490	Strategic Communication	4
MGT 5402	Negotiation	4

#### **Global Trade and Supply Chain Management**

Code	Title	Hours
BL 5445	Global Trade Compliance Strategy	4
MGT 5445	Global Supply Chain Strategy	4
MGT 5420	Operations Management	4

#### Marketing

Code	Title	Hours
MKT 5410	Strategic Marketing Planning	4
MKT 5440	Strategic Brand Management	4
MKT 5460	Marketing Analytics	4

Certificates will be awarded and mailed at the conclusion of each semester during degree certification.

## Joint Master of Business Administration/Master of Divinity

**Associate Dean for Graduate Business Programs:** Patsy Norman **Associate Dean for Truett Seminary:** Dennis Tucker

The MBA/MDiv joint degree is designed to prepare ministers who can implement financial strategies, transform organizational behavior, and ensure financial integrity in their congregations and/or non-profit organizations. Students interested in a career requiring complementary skills in both business and Ministry may complete the Master of Divinity and MBA degrees concurrently. By proper course selection of courses, students can save up to 35 hours compared to the normal requirements of the two separate degrees. Students should consult with advisors in both the seminary and business to determine the best sequence of courses.

#### **Admission**

Students must apply and be accepted separately into both programs. The GMAT or GRE exam is required for the MBA degree. Additional admissions requirements for the MBA can be found under the Business School Admissions.

#### Requirements

Candidates for the joint MBA/Master of Divinity degree must complete 38 core hours for MBA and 78 core hours for Master of Divinity. By proper selection of course work, it may be possible to reduce the requirements of the joint degree by up to 35 hours compared to the normal requirements of the two degrees completed separately. Since both degrees are awarded simultaneously, all requirements in both programs must be completed in order to receive either degree. Students are encouraged to contact appropriate advisors in each program for further details.

Code	Title	Hours
Required Framework	Courses	
BUS 5401	Business Frameworks	4
Required Core Courses		
ACC 5300	Accounting Tools for Management Decision Making	3
BUS 5101	Focus Firm I	1
BUS 5390	Management Communication	3
ECO 5340	Economic Tools for Management Decision Making	3

Total Hours		38
BL 5104	Business Foundations - Business Law	(1)
	ot have an undergraduate degree in Business required to take the following:	
Other Requirements	S	
MIS 5355	Management of Information Systems	
MIS 5346	Data Warehousing	
MIS 5345	Decision Making Using Excel	
MIS 5342	Business Intelligence	
Select one course f	rom the following:	3
MIS Requirement		
QBA 5330	Business Analytics for Decision Making	3
MKT 5310	Seminar in Marketing Strategy	3
MGT 5385	Strategic Management and Business Policy	3
MGT 5325	International Management	3
MGT 5320	Manufacturing and Service Operations	3
MGT 5310	Management of Organizational Behavior	3
FIN 5360	Seminar in Corporate Finance	3

## Joint Master of Business Administration/Master of Engineering

Associate Dean for Graduate Business Programs: Patsy Norman Graduate Directors in Engineering: Ian Gravagne and Douglas E. Smith

Students interested in a career requiring complementary skills in both business and engineering may complete the Master of Engineering and MBA degrees concurrently. By proper selection of courses, students can save up to 21 hours in the joint degree compared to the individual requirements of the two separate degrees. Students should consult with advisors in both engineering and business to determine the best sequence of courses.

Master of Engineering students from industry may, with approval of their advisor, select a project that is relevant to their work responsibilities.

#### **Admission**

Students must apply and be accepted separately into both programs. The MBA degree requires either the GMAT or GRE exams. Additional admissions requirements for the MBA can be found under the Business School Admissions.

### Requirements

Candidates for the joint Master of Engineering/MBA degree must complete 37 hours for MBA and 15 core engineering hours. In addition, the student must complete an additional 15 hours of electives. By proper selection of electives it may be possible to reduce the requirements of the joint degree by up to 21 hours compared to the normal requirements of the two degrees completed separately. This efficiency is achieved by proper selection of business electives for the 15 business course credits allowed for the Master of Engineering program and by a six-credit reduction of the MBA elective requirements reflecting recognition of the additional graduate work in completing the Master of Engineering. Since both degrees are awarded simultaneously, all requirements in both programs must be completed in order to receive either degree. Students are encouraged to contact appropriate advisors in each program for further details.

Code	Title	Hours
Required Framework Courses		
BUS 5401	Business Frameworks	4
Required MBA Core C	Courses	
ACC 5300	Accounting Tools for Management Decision Making	3
BUS 5101	Focus Firm I	1
BUS 5111	Professional Career Development for First Semester Graduate Students	1
BUS 5112	Professional Career Development for Second Semester Graduate Students	1
BUS 5390	Management Communication	3
ECO 5340	Economic Tools for Management Decision Making	3
FIN 5360	Seminar in Corporate Finance	3
MGT 5310	Management of Organizational Behavior	3
MGT 5320	Manufacturing and Service Operations	3
MGT 5325	International Management	3
MGT 5385	Strategic Management and Business Policy	3
MKT 5310	Seminar in Marketing Strategy	3
QBA 5330	Business Analytics for Decision Making	3
MIS Requirement		
Select one course fro	m the following:	3
MIS 5342	Business Intelligence	
MIS 5345	Decision Making Using Excel	
MIS 5346	Data Warehousing	
MIS 5355	Management of Information Systems	
Core Engineering		
Select 15 semester h	ours from Core Engineering courses	15
Required ME Electives		
Select 15 semester h	ours from ME Elective courses	15
Other Requirements		
Students who do not have an undergraduate degree in Business Administration are required to take the following:		
BL 5104	Business Foundations - Business Law	(1)
Total Hours		70

## Joint Master of Business Administration/Master of Science in Information Systems

Students interested in expanding their breadth of business knowledge while concurrently obtaining an in-depth knowledge of information systems may be interested in pursuing the MBA and MSIS degrees concurrently. Within the MSIS degree program, students have the opportunity to develop a program of study that will help them achieve their specific career goals. Prior background in information systems or computer science is not required for admission.

### **Admission**

Students must apply and be accepted separately into both programs. Additional admissions requirements for the MBA can be found under the Business School Admissions.

### Requirements

Students receive twelve hours of credit toward their elective requirement for the MBA upon the successful completion of the required MSIS courses and nine hours of credit toward their MSIS upon the successful completion of the required MBA courses. Thus, MBA/MSIS students complete twenty-seven hours of information systems courses and 47 hours of business courses for a total of seventy-one hours for students pursuing the non-thesis track and sixty-five hours for those pursuing the thesis track. Since both degrees are awarded simultaneously, all requirements in both programs must be completed in order to receive either degree.

Code	Title	Hours
Required Framework	Courses	
BUS 5401	Business Frameworks	4
Required MBA Core (	Courses	
ACC 5300	Accounting Tools for Management Decision Making	3
BUS 5101	Focus Firm I	1
BUS 5111	Professional Career Development for First Semester Graduate Students	1
BUS 5112	Professional Career Development for Second Semester Graduate Students	1
BUS 5390	Management Communication	3
ECO 5340	Economic Tools for Management Decision Making	3
FIN 5360	Seminar in Corporate Finance	3
MGT 5310	Management of Organizational Behavior	3
MGT 5320	Manufacturing and Service Operations	3
MGT 5325	International Management	3
MGT 5385	Strategic Management and Business Policy	3
MIS 5355	Management of Information Systems	3
MKT 5310	Seminar in Marketing Strategy	3
QBA 5330	Business Analytics for Decision Making	3
Other MBA Requirem	ents	
1-hour internship required for students without 2 years of full- time work experience. Students with more than 2 years can choose to take an elective.		1
Total of 6 hours of Grof above	raduate Business electives or in combination	6
	have an undergraduate degree in Business e required to take the following:	
BL 5104	Business Foundations - Business Law	(1)
Required MSIS Cours	ses	
Complete the followi	ng depending on chosen track:	18-24
MIS 5355	Management of Information Systems	
All MSIS students must demonstrate competency in four core content areas; programming, systems analysis and design, database, and information security. This competency may be shown by previous course work (for those with an undergraduate degree in information systems or computer science) or by completion of specific courses as part of their MSIS program.		
MIS 5301	Seminar in Object-Oriented Business Programming	
MIS 5315	NET Systems Development	

MIS 5317	Seminar in Java Development
MIS 5322	Advanced Python for Analytics
MIS 5335	Information Systems Analysis and Design
MIS 5340	Database Management Systems
ISEC 5305	Seminar in Information Security Foundations
Students on the non-thesis track with less than 2 years of full- time work experience will be required to take:	
MIS 5V95	Internship in Information Systems
Thesis track students are not required to complete an internship.	
In addition, six h	nours of MIS or ISEC electives will be chosen in

consultation with your MSIS advisor; for thesis students, six hours of MIS, ISEC, or business electives will be chosen.

Any course taken cannot count both toward the 47 hours of

business courses and 27 (non-thesis) or 21 (thesis) MIS hours.

Total Hours 65-71

### Joint Master of Business Administration/ Master of Science in Information Systems Concentrations

- · Business Analytics Concentration (MBA/MSIS) (p. 60)
- Cyber Security Concentration (MBA/MSIS) (p. 61)
- Entrepreneurship and Corporate Innovation Concentration (MBA/ MSIS) (p. 62)

## **Business Analytics Concentration** (MBA/MSIS)

### **Concentration in Business Analytics**

The Graduate Concentration in Business Analytics provides graduate students within the Hankamer School of Business exposure to concepts and techniques critical to success in the area of business analytics. The purpose of the Graduate Concentration in Business Analytics will enable graduate students to gain the skills necessary to understand and interpret big data and business analytics.

Admission to the Business Analytics Concentration is contingent on admission into the Master of Business Administration and the Master of Science in Information Systems degrees. Additional admissions requirements can be found under the Business School Admissions.

The Degree requirements are as follows:

Code	Title	Hours
Required Framework	Courses	
BUS 5401	Business Frameworks	4
Required Core Courses		
ACC 5300	Accounting Tools for Management Decision Making	3
BUS 5101	Focus Firm I	1
BUS 5111	Professional Career Development for First Semester Graduate Students	1
BUS 5112	Professional Career Development for Second Semester Graduate Students	1

BUS 5390	Management Communication	3
ECO 5340	Economic Tools for Management Decision	3
LCO 3340	Making	3
FIN 5360	Seminar in Corporate Finance	3
MGT 5310	Management of Organizational Behavior	3
MGT 5320	Manufacturing and Service Operations	3
MGT 5325	International Management	3
MGT 5385	Strategic Management and Business Policy	3
MKT 5310	Seminar in Marketing Strategy	3
QBA 5330	Business Analytics for Decision Making	3
<b>Business Analytic</b>	es Courses	
MIS 5342	Business Intelligence	3
MIS 5340	Database Management Systems	3
MIS 5343	Seminar in Data Visualization	3
Select two course	es from the following:	6
ECO 5347	Econometric Theory and Methods	
ECO 5349	Causal Inference and Research Design	
ECO 5351	Data Science I	
ECO 5352	Data Science II	
MIS 5322	Advanced Python for Analytics	
MIS 5346	Data Warehousing	
MKT 5398	Directed Studies in Marketing	
Required MSIS Co	purses (Non-thesis)	
MIS 5355	Management of Information Systems	3
content areas; pro database, and info shown by previou degree in informa	s must demonstrate copetency in four core ogramming, systems analysis and design, ormation security. This competency may be s course work (for those with an undergraduate tion systems or computer science) or by ecific courses as part of their MSIS program.	15
MIS 5301	Seminar in Object-Oriented Business Programming	
MIS 5315	NET Systems Development	
MIS 5317	Seminar in Java Development	
MIS 5317	· ·	
	Advanced Python for Analytics	
MIS 5335	Information Systems Analysis and Design	
MIS 5340	Database Management Systems	
ISEC 5305	Seminar in Information Security Foundations	
Other MBA Requir	rements	
1-hour internship time work experie	required for students without 2 years of full- nce	1
Students with mo	re than 2 years can choose to take an elective.	
	not have an undergraduate degree in Business Il be required to take the following:	
BL 5104	Business Foundations - Business Law	(1)
DL 3104		

**Total Hours** 

## **Cyber Security Concentration (MBA/MSIS)**

### **Concentration in Cyber Security**

The Graduate Concentration in Cyber Security provides graduate students within the Hankamer School of Business exposure to 'best practice' concepts, techniques and methodologies critical to insuring data security in corporate/organizational environments. Furthermore, it is targeted towards addressing recent calls from the academic literature and professional journals to treat cyber security as a strategic organizational function rather than a back-office technical function. The purpose of the Concentration is to provide business graduate students with the necessary skills to develop and/or manage organizational processes, strategies, methodologies, and technologies designed to mitigate risks to the confidentiality, integrity, and availability of organizational data and information-related resources for preparation to take cyber-security related management positions in industry and/or consulting practices.

Admission to the Cyber Security Concentration is contingent on admission into the Master of Business Administration and the Master of Science in Information Systems degrees. Additional admissions requirements can be found under the Business School Admissions.

The Degree requirements are as follows:

Code	Title	Hours	
Required Framework	Required Framework Courses		
BUS 5401	Business Frameworks	4	
Required Core Course	es		
ACC 5300	Accounting Tools for Management Decision Making	3	
BUS 5101	Focus Firm I	1	
BUS 5111	Professional Career Development for First Semester Graduate Students	1	
BUS 5112	Professional Career Development for Second Semester Graduate Students	1	
BUS 5390	Management Communication	3	
ECO 5340	Economic Tools for Management Decision Making	3	
FIN 5360	Seminar in Corporate Finance	3	
MGT 5310	Management of Organizational Behavior	3	
MGT 5320	Manufacturing and Service Operations	3	
MGT 5325	International Management	3	
MGT 5385	Strategic Management and Business Policy	3	
MKT 5310	Seminar in Marketing Strategy	3	
QBA 5330	Business Analytics for Decision Making	3	
<b>Cyber Security Cours</b>	es		
ISEC 5330	Cybersecurity Policy and Planning	3	
Select two courses fr	om the following:	6	
ISEC 5310	Cyber Security Human Factors: Ethics, Integrity, Practices, Policies, and Procedures		
ISEC 5320	Cyber Security Technology Factors		
ISEC 5340	Cyber Warfare, Threats, Vulnerabilities and Countermeasures		

Required MSIS Courses (Non-thesis)

71

Total Hours		65
BL 5104	Business Foundations - Business Law	(1)
	not have an undergraduate degree in Business Il be required to take the following:	
	re than 2 years can choose to take an elective.	
1-hour internship i time work experies	required for students without 2 years of full- nce	1
Other MBA Requir		
ISEC 5305	Seminar in Information Security Foundations	3
MIS 5340	Database Management Systems	3
MIS 5335	Information Systems Analysis and Design	3
or MIS 5317	Seminar in Java Development	
MIS 5315	NET Systems Development	3
MIS 5301	Seminar in Object-Oriented Business Programming	3
content areas; pro database, and info shown by previous degree in informat	must demonstrate copetency in four core orgramming, systems analysis and design, commetion security. This competency may be so course work (for those with an undergraduate tion systems or computer science) or by cific courses as part of their MSIS program.	
MIS 5355	Management of Information Systems	3

# **Entrepreneurship and Corporate Innovation Concentration (MBA/MSIS)**

## **Concentration in Entrepreneurship and Corporate Innovation**

The Graduate Concentration in Entrepreneurship and Corporate Innovation provides graduate students within the Hankamer School of Business exposure to concepts and techniques critical to success in the area of entrepreneurship and corporate innovation. The purpose of this Concentration will enable graduate students to gain the skills necessary to lead value creation innovation in both corporate and start up environments. Initiatives may include both process design/improvement as well as product design/improvement.

Admission to the Entrepreneurship and Corporate Innovation Concentration is contingent on admission into the Master of Business Administration and the Master of Science in Information Systems degrees. Additional admissions requirements can be found under the Business School Admissions.

The Degree requirements are as follows:

Code	Title	Hours
Required Frameworl	Courses	
BUS 5401	Business Frameworks	4
Required Core Cours	ses	
ACC 5300	Accounting Tools for Management Decision Making	3
BUS 5101	Focus Firm I	1
BUS 5111	Professional Career Development for First Semester Graduate Students	1

BUS 5112	Professional Career Development for Second Semester Graduate Students	1
BUS 5390	Management Communication	3
ECO 5340	Economic Tools for Management Decision Making	3
FIN 5360	Seminar in Corporate Finance	3
MGT 5310	Management of Organizational Behavior	3
MGT 5320	Manufacturing and Service Operations	3
MGT 5325	International Management	3
MGT 5385	Strategic Management and Business Policy	3
MKT 5310	Seminar in Marketing Strategy	3
QBA 5330	Business Analytics for Decision Making	3
Entrepreneurship and	d Corporate Innovation Courses	
ENT 5329	Entrepreneurial Finance	3
ENT 5342	Corporate Entrepreneurship: Initiating and Sustaining Innovation	3
ENT 5322	Accelerated Ventures Leadership	3
ENT 5341	Technology Entrepreneurship	3
or MGT 5331	Project Management	
Required MSIS Courses (Non-thesis)		
MIS 5355	Management of Information Systems	3
All MSIS students must demonstrate copetency in four core content areas; programming, systems analysis and design, database, and information security. This competency may be shown by previous course work (for those with an undergraduate degree in information systems or computer science) or by completion of specific courses as part of their MSIS program.		21
MIS 5301	Seminar in Object-Oriented Business Programming	
MIS 5315	NET Systems Development	

MIS 5301	Seminar in Object-Oriented Business Programming
MIS 5315	NET Systems Development
MIS 5317	Seminar in Java Development
MIS 5322	Advanced Python for Analytics
MIS 5335	Information Systems Analysis and Design
MIS 5340	Database Management Systems
ISEC 5305	Seminar in Information Security Foundations

Three hours of MIS or ISEC electives will be chose in consultation with your MSIS advisor.

#### Other MBA Requirements

1-hour internship required for students without 2 years of fulltime work experience
Students with more than 2 years can choose to take an elective.
Students who do not have an undergraduate degree in Business

Administration will be required to take the following:

BL 5104

Business Foundations - Business Law

Total Hours 7

(1)

## Joint Juris Doctor/Master of Business Administration

Associate Dean of the Law School: Leah W. Teague
Associate Dean for Graduate Business Programs: Patsy Norman

Students interested in a career requiring complementary skills in both law and business may complete the JD and MBA degrees concurrently.

Law courses substitute for electives in the MBA curriculum described in this catalog, and business courses substitute for twelve quarter hours (one quarter) in the JD curriculum. Completing the combined program effectively "saves" one semester and one quarter of study. Students should consult with advisors in both the Law School and Business School to determine the best sequence of courses.

#### **Admission**

Students must apply and be accepted separately into both programs. Therefore, the GMAT or GRE is required for the MBA application and LSAT exam is required for the Law School application. Additional admissions requirements for the MBA can be found under the Business School Admissions.

#### Requirements

Students receive twelve hours credit toward their JD upon the successful completion of the MBA required courses and credit toward their elective requirement for the MBA upon successful completion of Law School course work. Thus, JD/MBA students complete 114 quarter hours of law and thirty-seven semester hours of graduate business. Since both degrees are awarded simultaneously, all requirements in both programs must be completed in order to receive either degree.

The following lists the required MBA courses for the joint degree.

Code	Title	Hours
Required Framework	Courses	
BUS 5401	Business Frameworks	4
Required Core Cours	ees	
ACC 5300	Accounting Tools for Management Decision Making	3
BUS 5101	Focus Firm I	1
BUS 5390	Management Communication	2-3
or BUS 5111 & BUS 5112	Professional Career Development for First Semester Graduate Students and Professional Career Development for Se Semester Graduate Students	cond
ECO 5340	Economic Tools for Management Decision Making	3
FIN 5360	Seminar in Corporate Finance	3
MGT 5310	Management of Organizational Behavior	3
MGT 5320	Manufacturing and Service Operations	3
MGT 5325	International Management	3
MGT 5385	Strategic Management and Business Policy	3
MKT 5310	Seminar in Marketing Strategy	3
QBA 5330	Business Analytics for Decision Making	3
MIS Requirement		
Select one course from	om the following:	3
MIS 5342	Business Intelligence	
MIS 5345	Decision Making Using Excel	
MIS 5346	Data Warehousing	
MIS 5355	Management of Information Systems	
Total Hours		37-38

## Joint Master of Business Administration/Master of Social Work

Associate Dean for Graduate Business Programs: Patsy Norman Associate Dean for Academic Affairs: Melody Zuniga

The MBA/MSW joint degree is designed to educate leaders who are prepared to effectively implement financial strategies, transform organizational behavior, and activate marketing strategies to sustain and improve human services organizations. The joint degree will groom social work and business administration graduates to serve as administrators, executive directors, and innovators in human service organizations. In addition, the MSW/MBA will equip and encourage graduates to develop human service organizations nationally and internationally, serving in developing countries or underserved urban areas where human needs are great and resources are scarce. Students interested in a career requiring complementary skills in both business and Social Work may complete the Master of Social Work and MBA degrees concurrently. By proper selection of courses, students can save up to 29 hours compared to the normal requirements of the two separate degrees. Student should consult with advisors in both social work and business to determine the best sequence of courses.

#### **Admission**

Students must apply and be accepted separately into both programs. The GMAT or GRE exam is required for the MBA degree. The Master of Social Work offers two degree plans, the Advanced Standing for those who have completed a BSW degree from an accredited program or the Standard for those without the BSW degree. Additional admissions requirements can be found under the Business School Admissions.

### Requirements

Candidates for the joint MBA/Master of Social Work degree must complete 38 core hours for MBA and 51 core hours for Social Work if admitted to Social Work under the standard degree plan or 29 core Social Work hours if admitted under the advanced degree plan. By proper selection of course work, it may be possible to reduce the requirements of the joint degree by up to 29 hours compared to the normal requirements of the two degrees completed separately. Since both degrees are awarded simultaneously, all requirements in both programs must be completed in order to receive either degree. Students are encouraged to contact appropriate advisors in each program for further details.

The Master of Social Work catalog may be found here: https://www.baylor.edu/social\_work/index.php?id=956644 (https://www.baylor.edu/social\_work/?id=956644)

Code	Title	Hours
Required Framework	Courses	
BUS 5401	Business Frameworks	4
Required MBA Core Courses		
ACC 5300	Accounting Tools for Management Decision Making	3
BUS 5101	Focus Firm I	1
BUS 5390	Management Communication	3
ECO 5340	Economic Tools for Management Decision Making	3

Standard degree plan (60 sem. hrs.)	
MGT 5320 Manufacturing and Service Operations MGT 5325 International Management MGT 5385 Strategic Management and Business Policy MKT 5310 Seminar in Marketing Strategy QBA 5330 Business Analytics for Decision Making MIS Requirement Select one course from the following: MIS 5342 Business Intelligence MIS 5345 Decision Making Using Excel MIS 5346 Data Warehousing MIS 5355 Management of Information Systems Core Social Work Select one plan from the following: Standard degree plan (60 sem. hrs.)	3
MGT 5325 International Management MGT 5385 Strategic Management and Business Policy MKT 5310 Seminar in Marketing Strategy QBA 5330 Business Analytics for Decision Making MIS Requirement Select one course from the following: MIS 5342 Business Intelligence MIS 5345 Decision Making Using Excel MIS 5346 Data Warehousing MIS 5355 Management of Information Systems Core Social Work Select one plan from the following: Standard degree plan (60 sem. hrs.)	3
MGT 5385 Strategic Management and Business Policy MKT 5310 Seminar in Marketing Strategy QBA 5330 Business Analytics for Decision Making MIS Requirement Select one course from the following: MIS 5342 Business Intelligence MIS 5345 Decision Making Using Excel MIS 5346 Data Warehousing MIS 5355 Management of Information Systems Core Social Work Select one plan from the following: Standard degree plan (60 sem. hrs.)	3
MKT 5310 Seminar in Marketing Strategy QBA 5330 Business Analytics for Decision Making  MIS Requirement  Select one course from the following: MIS 5342 Business Intelligence MIS 5345 Decision Making Using Excel MIS 5346 Data Warehousing MIS 5355 Management of Information Systems  Core Social Work  Select one plan from the following: Standard degree plan (60 sem. hrs.)	3
QBA 5330 Business Analytics for Decision Making  MIS Requirement  Select one course from the following:  MIS 5342 Business Intelligence  MIS 5345 Decision Making Using Excel  MIS 5346 Data Warehousing  MIS 5355 Management of Information Systems  Core Social Work  Select one plan from the following:  Standard degree plan (60 sem. hrs.)	3
MIS Requirement  Select one course from the following:  MIS 5342  Business Intelligence  MIS 5345  Decision Making Using Excel  MIS 5346  Data Warehousing  MIS 5355  Management of Information Systems  Core Social Work  Select one plan from the following:  Standard degree plan (60 sem. hrs.)	3
Select one course from the following:  MIS 5342  Business Intelligence  MIS 5345  Decision Making Using Excel  MIS 5346  Data Warehousing  MIS 5355  Management of Information Systems  Core Social Work  Select one plan from the following:  Standard degree plan (60 sem. hrs.)	3
MIS 5342 Business Intelligence MIS 5345 Decision Making Using Excel MIS 5346 Data Warehousing MIS 5355 Management of Information Systems  Core Social Work  Select one plan from the following: 3 Standard degree plan (60 sem. hrs.)	
MIS 5345 Decision Making Using Excel  MIS 5346 Data Warehousing  MIS 5355 Management of Information Systems  Core Social Work  Select one plan from the following: 3  Standard degree plan (60 sem. hrs.)	3
MIS 5346 Data Warehousing MIS 5355 Management of Information Systems  Core Social Work  Select one plan from the following: Standard degree plan (60 sem. hrs.)	
MIS 5355 Management of Information Systems  Core Social Work  Select one plan from the following: 3  Standard degree plan (60 sem. hrs.)	
Core Social Work  Select one plan from the following:  Standard degree plan (60 sem. hrs.)	
Select one plan from the following: Standard degree plan (60 sem. hrs.)	
Standard degree plan (60 sem. hrs.)	
	32-60
Advanced degree plan (32 sem. hrs.)	
Students who do not have an undergraduate degree in Business Administration are required to take:	
BL 5104 Business Foundations - Business Law	(1)

## **Master of Accountancy (MAcc)**

**Director of Graduate Accounting Programs and Advisor:** Tim S. Thomasson

Associate Dean for Graduate Business Programs: Patsy Norman

The Master of Accountancy program provides students with the technical background and professional skills necessary for successful careers in public accounting, industry, and government. The program consists of eighteen semester hours of accounting course work, and fifteen semester hours of business electives, for a total of thirty-three semester hours. Other than these general requirements there are no specified courses within the degree program, allowing each student to tailor a program to meet his or her specific career objectives.

The Master of Accountancy degree also assists students in meeting the requirements of the Texas Public Accountancy Act of 1991 and similar professional certification requirements in other states. The Act requires that a candidate for the Uniform Certified Public Accountant Examination after September 1, 1997, show completion of a baccalaureate or graduate degree program with completion of courses recognized by the Texas State Board of Accountancy reflecting no fewer than 150 semester hours.

#### **Admission**

**Total Hours** 

A baccalaureate degree with a major in accounting, or its equivalent, is required. The application for admission is processed in the same manner as other graduate business programs; all applicants must submit a GMAT score. Applicants receiving (or have received) their baccalaureate degree from Baylor University, with a major in Accounting, do not have to submit a GMAT score. International applicants must submit a TOEFL, IELTS, or Duolingo score unless their baccalaureate degree is from an accredited U.S. university. Additional admissions requirements can be found under the Business School Admissions.

#### Requirements

#### **Curriculum for the Master of Accountancy Degree**

All course selections must have the approval of the Director of Graduate Accounting Programs.

Requirement	Hours
Graduate Accounting Courses	18
Graduate Business Electives	15
Total Graduate Hours	33

All MAcc candidates must earn an average grade of "B" (3.0) or higher in eighteen hours of graduate accounting courses. Students not having an overall average of 3.0 or higher in these courses are required to repeat one or more of the courses in which a grade below "B" was earned in order to increase their average to 3.0. When an accounting course is repeated, the new grade substitutes for the old grade in the calculated accounting GPA. In some cases, more advanced work may be prescribed in place of the course on which a grade below "B" was earned. Both the original grade and the new grade for a repeated course will be included in the overall GPA for graduation purposes.

## Joint Bachelor of Business Administration/Master of Accountancy

Director of Graduate Accounting Programs and Advisor. Tim S. Thomasson

Associate Dean for Graduate Business Programs: Patsy Norman

Students pursuing a Bachelor of Business Administration degree with a major in accounting may complete the BBA and MAcc degrees concurrently. Under the joint program, up to seven semester hours of undergraduate electives are waived for up to seven semester hours of graduate business electives. Since both degrees are awarded simultaneously and some undergraduate elective hours may be waived, generally all requirements in both programs must be completed in order to receive either degree.

#### **Admission**

70-98

Students must apply and be accepted into the Master of Accountancy program during their senior year. Students should consult with the Director of Graduate Accounting Programs to determine the appropriate timing of actual enrollment in the Master of Accountancy program. Additional admissions requirements can be found under the Business School Admissions.

### Requirements

#### **Curriculum for the BBA/MAcc Joint Degree**

Requirement	Hours
Undergraduate Arts and Sciences	39-45
Undergraduate Business Core	50
Undergraduate Accounting Major	18
Undergraduate Elective	As needed
Chapel (2 semesters)	N/A
Total Undergraduate	117 (at least)

Note: After completion of all requirements for Arts and Sciences, the undergraduate business core, and the undergraduate accounting major, a student must take elective hours, if needed, to reach a total of 117 undergraduate hours. Hours taken towards additional majors or minors can count as electives for this purpose. Accordingly, a student may end up with more than 117 undergraduate hours.

#### **Curriculum for the BBA/MAcc Joint Degree**

All course selections must have the approval of the Director of Graduate Accounting Programs.

Requirement	Hours
Graduate Accounting Courses	18
Graduate Business Electives	15
Total Graduate Hours	33
<b>Total Combined Program</b>	150 (at least)

All BBA/MAcc candidates must earn an average grade of "B" (3.0) or higher in eighteen hours of graduate accounting courses. Students not having an overall average of 3.0 or higher in these courses are required to repeat one or more of the courses in which a grade below "B" was earned in order to increase their average to 3.0. When an accounting course is repeated, the new grade substitutes for the old grade in the calculated accounting GPA. In some cases, more advanced work may be prescribed in place of the course on which a grade below "B" was earned. Both the original grade and the new grade for a repeated course will be included in the overall GPA for graduation purposes.

## **Master of Taxation (MTax)**

**Director of Graduate Accounting Programs and Advisor.** Tim S. Thomasson

Associate Dean for Graduate Business Programs: Patsy Norman

The Master of Taxation program seeks to provide students the technical background in taxation and related fields required for employment with public accounting firms, government agencies, or industry and commercial businesses. The program emphasizes an understanding of all major areas of tax authority, including the Internal Revenue Code, Treasury Regulations, administrative (IRS) interpretations, and judicial sources of tax law. This program should enable students to enter the accounting and tax profession prepared to analyze and to solve a variety of complex tax and business problems.

The Master of Taxation degree also assists students in meeting the requirements of the Texas Public Accountancy Act of 1991 and similar professional certification requirements in other states. The Act requires that a candidate for the Uniform Certified Public Accountant Examination after September 1, 1997, show completion of a baccalaureate or graduate degree program with completion of courses recognized by the Texas State Board of Accountancy reflecting no fewer than 150 semester hours.

#### **Admission**

A baccalaureate degree with a major in accounting, or its equivalent, is required. The application for admission is processed in the same manner as other graduate business programs; all applicants must submit a GMAT score. Applicants receiving (or have received) their baccalaureate degree from Baylor University, with a major in Accounting, do not have to submit a GMAT score. International applicants must submit a TOEFL, IELTS, or Duolingo score unless their baccalaureate degree is from an

accredited U.S. university. Additional admissions requirements can be found under the Business School Admissions.

#### Requirements

#### **Curriculum for the Master of Taxation Degree**

Code	Title	Hours
ACC 5361	Corporate Taxation	3
ACC 5362	Partnership and S Corporation Taxation	3
ACC 5364	International Taxation	3
ACC 5365	Advanced Individual Taxation	3
ACC 5370	Tax Research	3
Graduate Accounting	Elective	3
Graduate Business Electives <sup>1</sup>		15
Total Hours		33

All business electives must have the approval of the Director of Graduate Accounting Programs.

All MTax candidates must earn an average grade of "B" (3.0) or higher in eighteen hours of graduate accounting courses. Students not having an overall average of 3.0 or higher in these courses are required to repeat one or more of the courses in which a grade below "B" was earned in order to increase their average to 3.0. When an accounting course is repeated, the new grade substitutes for the old grade in the calculated accounting GPA. In some cases, more advanced work may be prescribed in place of the course on which a grade below "B" was earned. Both the original grade and the new grade for a repeated course will be included in the overall GPA for graduation purposes.

### Joint Bachelor of Business Administration/Master of Taxation

 $\begin{tabular}{ll} \textbf{Director of Graduate Accounting Programs and Advisor.} & \textbf{Tim S.} \\ \textbf{Thomasson} \end{tabular}$ 

Associate Dean for Graduate Business Programs: Patsy Norman

Students pursuing a Bachelor of Business Administration degree with a major in accounting may complete the BBA and MTax degrees concurrently. Under the joint program, up to seven semester hours of undergraduate business electives are waived for up to seven semester hours of graduate business electives. Since both degrees are awarded simultaneously and some undergraduate elective hours may be waived, all requirements in both programs must be completed in order to receive either degree.

### **Admission**

Students must apply and be accepted into the Master of Taxation program during their senior year. Students should consult with the Director of Graduate Accounting Programs to determine the appropriate timing of actual enrollment in the Master of Taxation program. Additional admissions requirements can be found under the Business School Admissions.

### Requirements

#### **Curriculum for the BBA/MTax Joint Degree**

Requirement	Hours
Undergraduate Arts and Sciences	39-45
Undergraduate Business Core	50
Undergraduate Accounting Major	18
Undergraduate Elective	As needed
Chapel (2 semesters)	N/A
Total Undergraduate	117 (at least)

Note: After completion of all requirements for Arts and Sciences, the undergraduate business core, and the undergraduate accounting major, a student must take elective hours, if needed, to reach a total of 117 undergraduate hours. Hours taken towards additional majors or minors can count as electives for this purpose. Accordingly, a student may end up with more than 117 undergraduate hours.

#### **Curriculum for the BBA/MTax Joint Degree**

All course selections must have the approval of the Director of Graduate Accounting Programs.

Code	Title	Hours
Required Course	es	
ACC 5361	Corporate Taxation	3
ACC 5362	Partnership and S Corporation Taxation	3
ACC 5364	International Taxation	3
ACC 5365	Advanced Individual Taxation	3
ACC 5370	Tax Research	3
Graduate Accou	nting Elective	3
Graduate Busine	ess Elective	15
<b>Total Combined</b>	Program 150 (at least)	
Total Haura		22

All MTax candidates must earn an average grade of "B" (3.0) or higher in eighteen hours of graduate accounting courses. Students not having an overall average of 3.0 or higher in these courses are required to repeat one or more of the courses in which a grade below "B" was earned in order to increase their average to 3.0. When an accounting course is repeated, the new grade substitutes for the old grade in the calculated accounting GPA. In some cases, more advanced work may be prescribed in place of the course on which a grade below "B" was earned. Both the original grade and the new grade for a repeated course will be included in the overall GPA for graduation purposes.

## Accounting Data and Analytics Certificate

Students enrolled in either the Master of Accountancy or Master of Taxation programs, including joint degrees, can also earn the Certificate in Accounting Dara and Analytics.

Code	Title	Hours
<b>Required Courses</b>		
ACC 5312	Data and Analytics in Accounting <sup>1</sup>	3
ACC 5330	Seminar in Auditing and Assurance Services <sup>1,2</sup>	3
ACC 5350	Advanced Auditing Analytics <sup>2,3</sup>	3

<b>Total Hours</b>		15
MIS 5345	Decision Making Using Excel	
MIS 5343	Seminar in Data Visualization	
MIS 5342	Business Intelligence	
Select one course	e from the following:	3
QBA 5330	Business Analytics for Decision Making	3

- ACC 5312 Data and Analytics in Accounting must be taken prior to or concurrently with ACC 5330 Seminar in Auditing and Assurance Services.
- ACC 5330 Seminar in Auditing and Assurance Services must be taken prior to ACC 5350 Advanced Auditing Analytics.
- <sup>3</sup> Upon approval by the Director of Innovation in Accounting Data & Analytics, a student may substitute ACC 5395 Internship in Accounting, Internship in Accounting, for ACC 5350 Advanced Auditing Analytics. Approval will be based on review of a student's involvement in advanced data analytics projects during the internship. To document data and analytics projects during the internship, the student should follow the requirements established by the Director of Accounting Internships.

### Requirements

The following requirements must be met to complete the certificate:

- Students in the program must also complete either the Master of Accountancy or Master of Taxation graduate degree programs in the Hankamer School of Business to be awarded the Graduate Certificate in Accounting Data and Analytics upon graduation.
- Students must earn no less than a B in each course for this certificate to be awarded the graduate certificate.

### **Joint Juris Doctor/Master of Taxation**

Associate Dean of the Law School: Leah W. Teague Director of Graduate Accounting Programs: Tim S. Thomasson Associate Dean for Graduate Business Programs: Patsy Norman

Students interested in a tax career requiring complementary skills in both law and tax accounting may complete the JD and MTax degrees concurrently. Law courses substitute for twelve semester hours of course work (one semester) in the MTax curriculum and accounting courses substitute for twelve quarter hours of course work (one quarter) in the JD curriculum. Completing the combined program effectively "saves" one semester and one quarter of study. Students must consult with advisors in both the Law School and Business School to determine course substitutions and the best sequence of courses.

### **Admission**

Students must apply and be accepted separately into both programs. Therefore, both the GMAT and LSAT exams are required. International applicants must submit a TOEFL, IELTS, or Duolingo score unless their baccalaureate degree is from an accredited U.S. university. Additional admissions requirements can be found under the Business School Admissions

## Requirements

Students receive twelve hours of credit toward their JD upon the successful completion of the required MTax courses and twelve hours of credit toward their elective requirement for the MTax upon successful

completion of Law School course work. Thus, JD/MTax students complete 114 quarter hours of law and twenty-one semester hours of graduate tax. Since both degrees are awarded simultaneously, all requirements in both schools must be completed in order to receive either degree.

While completing the JD curriculum, students concurrently enroll in the following classes:

#### **Curriculum for the JD/MTax Joint Degree**

Code Required Courses	Title	Hours
ACC 5361	Corporate Taxation	3
ACC 5362	Partnership and S Corporation Taxation	3
ACC 5364	International Taxation	3
ACC 5365	Advanced Individual Taxation	3
ACC 5370	Tax Research	3
Graduate Busines	s Electives <sup>1</sup>	6
Total Hours		21

<sup>&</sup>lt;sup>1</sup> Must be approved by the Director of Graduate Accounting Programs.

### **Economics**

### **Department of Economics**

Chairperson: Jim Henderson

Graduate Program Director: Finley Edwards

#### **Description of Degree Programs**

The Department of Economics offers the Master of Science in Economics. This degree program prepares students for doctoral training in economics and related disciplines and for employment in the private and public sectors in the U.S. and abroad. The program includes core economics and field courses, modern statistical techniques, and tools of data science. Students can choose electives to follow a data science track, a financial economics track or an international/development economics track. Applicants do not need an undergraduate degree in economics to be admitted, although evidence of strong analytical skills is required.

#### **Admission Guidelines**

Applicants must hold a bachelor's degree from an accredited college or university unless they are current Baylor undergraduates applying for the Joint BBA/MS program. Applicants are admitted on the basis of undergraduate record, GRE or GMAT score, and letters of recommendation. International students are also required to take either the Test of English as a Foreign Language (TOEFL), the International English Language Testing System (IELTS), or Duolingo exam unless the applicant has a degree conferred by a U.S. accredited higher education institution. In addition, before admission, applicants must have taken the following undergraduate economics courses, or their equivalents: ECO 3306 Intermediate Microeconomic Analysis and ECO 3307 Intermediate Macroeconomic Analysis (i.e., intermediate microeconomics and intermediate macroeconomics), or fifteen hours of economics. Applicants are also strongly advised to complete undergraduate courses in calculus and statistics before the course of study begins. Additional admissions requirements can be found under the Business School Admissions.

- · Economics, M.S. (p. 67)
- Joint Bachelor of Business Administration/Master of Science in Economics (p. 68)
- · Economics Minor (p. 68)
- · Health Research and Policy, Ph.D. (p. 68)

### **Economics, M.S.**

#### **Master of Science in Economics**

#### **Degree Requirements**

Students may earn the Master of Science in Economics by fulfilling the requirements of one of the two options detailed below:

#### **Thesis Option**

Code	Title	Hours
Requirements		
Complete 24 hours of	of course work including the following:	24
ECO 5001	Research Seminar	
ECO 5002	Research Seminar	
ECO 5310	Macroeconomic Analysis in the Global Economy	
ECO 5315	Microeconomic Theory and Business Decisions	
ECO 5347	Econometric Theory and Methods	
ECO 5349	Causal Inference and Research Design	
or ECO 5351	Data Science I	
Thesis		6

Eighteen hours of course work must be in economics (prefixed by ECO), and 15 of these 18 hours must be at the 5000-level

18 hours of course work, whether within or outside of economics, must be at the 5000-level

Only those 4000-level courses approved for graduate credit will count toward the degree's requirements  $^{\rm 1}$ 

Total Hours 30

#### **Non-thesis Option**

Code	Title	Hours
Requirements		
Complete 36 hours o	f course work including the following:	36
ECO 5001	Research Seminar	
ECO 5002	Research Seminar	
ECO 5310	Macroeconomic Analysis in the Global Economy	
ECO 5315	Microeconomic Theory and Business Decisions	
ECO 5343	History of Economic Thought	
ECO 5347	Econometric Theory and Methods	
ECO 5349	Causal Inference and Research Design	
or ECO 5351	Data Science I	
		_

Twenty-four hours of course work must be in economics (prefixed by ECO), and 15 of these 24 hours must be at the 5000-level

24 hours of course work, whether within or outside of economics, must be at the 5000-level

i.e., courses that appear in the Graduate Catalog

Only those 4000-level courses approved for graduate credit will count toward the degree's requirements <sup>1</sup>

Total Hours 36

## Joint Bachelor of Business Administration/Master of Science in Economics

Students pursuing a Bachelor of Business Administration degree with a major in economics may complete the BBA and MS in Economics (thesis option) programs concurrently. This joint program does not reduce the number of semester hours required in either degree and does not allow double counting of hours. However, it provides greater flexibility in course scheduling, may reduce the time required to complete the two degrees, and may allow more efficient use of financial aid. The BBA in Economics (and any additional undergraduate majors) will be awarded simultaneously with the MS in Economics upon completion of all degree requirements. Students who decide to withdraw from the joint program will be allowed to finish the BBA program, but will not be allowed to reenter the joint degree program at a later date.

#### **Admission**

Interested students should engage in early degree planning and may apply for the joint program upon completion of 90 semester hours of credit. Applicants must be making good progress in the BBA program, must be majoring in economics, and must have an economics GPA of 3.5 or higher prior to applying for the program. Admission decisions will be based on the prior undergraduate record, GRE scores, and two letters of recommendation from professors in economics or related disciplines. Additional admissions requirements can be found under the Business School Admissions.

### Requirements

Code	Title	Hours
Requirements		
Undergraduate Art	s and Sciences	41-53
Undergraduate Bus	siness Core	50
Undergraduate Eco	onomics Minor	15
Undergraduate Ele	ctives (as needed)	6
Chapel (2 semeste	rs)	N/A
Total Undergradua	te Minimum - 124 sem. hrs.	
Graduate Economi	cs Core	
ECO 5001	Research Seminar	0
ECO 5002	Research Seminar	0
ECO 5310	Macroeconomic Analysis in the Global Economy	3
ECO 5315	Microeconomic Theory and Business Decisions	3
ECO 5347	<b>Econometric Theory and Methods</b>	3
ECO 5349 or ECO 5351	Causal Inference and Research Design Data Science I	3
Graduate Electives	1	12

Total Hours	142-154
Thesis	6

Course selections must be approved by the Economics Graduate Program Director.

Note: For Baylor Business Fellows, the undergraduate portion will be adjusted to the requirements of that program.

At least eighteen hours of graduate course work must be in economics (courses prefixed by ECO), and 15 of these hours (not including thesis hours) must be at the 5000-level. Additionally, 18 hours of overall course work (in or out of economics) must be at the 5000-level. Only 4000-level courses approved for graduate credit will count toward the degree requirements. BBA/MS in Economics candidates must maintain a GPA of 3.0 or higher in their graduate economics courses. Students in this program must complete the version of the MS in Economics that includes a thesis requirement. The minimum duration of the joint program is four years.

### **Economics Minor**

The graduate program in economics is also offered as a minor in various master's and doctoral programs. If a minor in economics is selected by a student enrolled in another graduate program, it must be approved by the Graduate Program Director in the Department of Economics. To qualify for a minor in economics, the student must complete at least three 5000-level economic courses.

## Health Research and Policy, Ph.D.

Department Chair: Jim Henderson

**Program Directors:** Scott Cunningham and Michael Richards **Associate Dean for Graduate Programs:** Patsy Norman

### **Program Description**

The purpose of Baylor University's Ph.D. program in Health Services Research & Policy is to train the next generation of scholars to integrate the disciplines of economics, statistics, and epidemiology to study and move forward health care delivery and health policy. Graduates will be prepared to collaborate with other contributors to improve the health and health care of individuals and populations around the world. The growing role of data analytics in all facets of health and health care has increased the need for professionals who can provided rigorous, methodologically-sound solutions to the many challenges facing business and industry leaders as well as policymakers.

Our faculty have expertise and established publication records in these areas and are capable of training new researchers who are committed to improving health care through making its delivery more efficient and more equitable. The program prepares scholars for research-driven careers in academia, health care delivery systems, provider entities, insurance and other health care companies, policy think tanks and organizations, and government positions.

The curriculum is highly quantitative, and successful candidates will be awarded the MS in Economics (thesis track) after the requirements for that degree are satisfied. Students will engage in research projects with Baylor University faculty throughout their PhD experience.

<sup>1</sup> i.e., courses that appear in the Graduate Catalog

#### **Admissions Requirements**

Applicants must have a degree from an accredited university or college and must meet all general admission requirements of Baylor's Graduate School for admission to Ph.D. level studies. Successful applicants will provide strong evidence of the ability to conduct quantitative research and to communicate research findings effectively. Prerequisites for admission include two semesters of calculus (three preferred) and one semester of statistics (more than one preferred). The admission decision is based on a holistic review of an applicant's previous academic record, GRE scores, research experience, two letters of recommendation that speak to the applicant's existing research experience and potential for future research work, and applicant essays.

#### **Curriculum**

Code

The PhD in Health Services Research & Policy is a 60-hour degree program designed to be completed in four years. The program is also designed for students to meet the requirements for the Master of Science in Economics by the end of the second year.

Title

Health Services Res	search Required Courses	
HSR 6315	Health Economics & Policy: Demand	3
HSR 6320	Health Economics & Policy: Supply	3
HSR 6325	(HSR 6325:: Advanced Casual Inference)	3
<b>Economics Require</b>	d Courses	
ECO 5315	Microeconomic Theory and Business Decisions	3
ECO 5310	Macroeconomic Analysis in the Global Economy	3
ECO 5347	Econometric Theory and Methods	3
ECO 5349	Causal Inference and Research Design	3
ECO 5001	Research Seminar	0
ECO 5002	Research Seminar	0
<b>Economics Elective</b>	s	
program Directors.	re to be agreed upon by the student and the Qualifying electives must be at the 5000 level ended electives include:	12
ECO 5351	Data Science I	
ECO 5352	Data Science II	
ECO 5317	Contemporary Government and Business Relations	
ECO 5320	The Economics of Government	
ECO 5314	Seminar in Behavioral and Experimental Economics	
MS Thesis		
ECO 5V99	Thesis	6
<b>Additional Elective</b>	Courses	
approval. Recomme	el courses with program Directors' ended subjects include: Health Policy and A), Public Health (PUBH), Sociology (SOC), and	9
Dissertation		
Dissertation Propos	sal (1-3 hours)	3
Dissertation (9-11 h	nours)	9
Total Hours		60

### **Program Completion Requirement**

A student will be recognized as a candidate for the doctoral degree only after having completed the required and elective Economics coursework as well as the thesis to earn the MS in Economics, completed all residence and departmental requirements except for the dissertation, and received approval by the Dean of the Graduate School for their formal application for admission to candidacy for the degree. Candidates will then undergo the dissertation proposal process. As is customary, after having completed the dissertation research, the candidate must successfully make an oral defense of the dissertation.

## **Entrepreneurship Department of Entrepreneurship**

Department Chair: Peter Klein
Program Director: Matthew Wood
Associate Dean for Graduate Programs: Patsy Norman

• Entrepreneurship, Ph.D. (p. 69)

Hours

## **Entrepreneurship, Ph.D. Program Description**

The Ph.D. in Entrepreneurship is a research-based degree drawing on classic and modern literature in economics, sociology, psychology, political science, history, statistics, and other disciplines. It equips students to investigate the great questions confronting entrepreneurs, policymakers, and other actors. Students work closely with faculty mentors in developing an appreciation for theory, research methods, and the publication process. The doctoral program is personalized to reflect the intellectual interests of the students while capitalizing on the strengths of Baylor's entrepreneurship faculty. Students work directly with faculty mentors to produce and publish research, and the program aims to place graduates in faculty positions at highly ranked universities and similar institutions. The Ph.D. in Entrepreneurship uniquely emphasizes excellence in teaching and does so in a way that is consistent with Christian principles of stewardship. This includes required courses in pedagogy along with a mentorship plan that builds teaching skills. While the primary focus is entrepreneurship, students also receive training in strategic management and organization theory. The Department of Entrepreneurship is also home to the Baugh Center for Entrepreneurship and Free Enterprise, which studies the effects of public policy and institutions on entrepreneurship. Baylor University provides tuition remission for all admitted students. The Hankamer School of Business and the Department of Entrepreneurship provide a competitive annual stipend to doctoral students, as well as support in attending key conferences in entrepreneurship. Competitive summer research grants are available from the Baugh Center for Entrepreneurship to support research interests of doctoral students.

### **Admission Requirements**

Applicants must hold a bachelor's degree from an accredited university or college. A Masters Degree from an accredited university or college is preferred. An acceptable score on the GMAT or GRE is required. Applicants must adhere to the general admissions requirements of Baylor's Graduate School for admission to Ph.D. level graduate studies. In general, applicants should meet the common body of knowledge (CBK) requirements for business degrees. CBK is sometimes referred to as business core courses. Students not meeting the CBK requirements

can satisfy this requirement by satisfactorily completing the Integrated Management Seminars (BUS 5401 Business Frameworks and BUS 5602 Business Foundations II) and by completing MGT 5310 Management of Organizational Behavior.

#### Curriculum

The Entrepreneurship Ph.D. is a full-time, four-year, residential program. The first two years involve 36 hours of formal coursework, with the rest comprising independent research, teaching, and other activities. Besides required courses in entrepreneurship theory and research methods students take EDL 6302 Teaching and Learning in Higher Education. Teaching and Learning in Higher Education to develop an understanding of curricular issues, course development and content, teaching techniques, and learning theories. Upon completion of this course, students undergo a teaching apprenticeship during the second year of the program. During the third year in the program, students transition from apprentice to instructor of record for one course per semester. Admission to doctoral candidacy requires passing a comprehensive qualifying examination. Students also enroll in summer research practicums (6 hours) and complete three hours of prospectus research. After admission to candidacy, students complete nine hours of dissertation work. Completion of the program requires the production and defense of a dissertation on an important issue in entrepreneurship theory, history, policy, or practice, under the supervision of a faculty advisor and committee.

Code	Title	Hours
Entrepreneurship Rec	quired Courses	
ENT 6320	Seminar in Entrepreneurship	3
EDL 6302	Teaching and Learning in Higher Education	3
ECO 5349	Causal Inference and Research Design	3
ENT 6310	Seminar in Strategic Management	3
ENT 6340	Seminar in Research Methods	3
EDP 6362	Applied Multiple Regression/Correlation Analysis in Education	3
ENT 6330	Theoretical Perspectives in Strategy and Entrepreneurship	3
MIS 6320	Quantitative Methods in Information Systems Research	3
ENT 6350	Seminar in Organization Theory	3
MIS 6350	Conducting Effective Literature reviews: A Doctoral Seminar for pre-Dissertation Students	3
Research Practicum		
ENT 6V98	Entrepreneurship Research Practicum	6
Electives		6
Dissertation Credit		
ENT 6V00	Dissertation Proposal and Prospectus	3
ENT 6V99	Dissertation	9
Total Hours		54

### **Degree Plan**

A formal degree plan will be developed in consultation with the advisor/committee. The recommended course sequence is as follows:

Course Year 1 Fall	Title	Hours
ENT 6320	Seminar in Entrepreneurship	3
EDL 6302	Teaching and Learning in Higher Education	3
ENT 6340	Seminar in Research Methods	3
•	Hours	9
Spring	Compined in Opposite the Theory	2
ENT 6350	Seminar in Organization Theory  Ouantitative Methods in Information	3
MIS 6320	Systems Research	3
EDP 6362	Applied Multiple Regression/Correlation Analysis in Education	3
	Hours	9
Summer		
ENT 6V98	Entrepreneurship Research Practicum	3
	Hours	3
Year 2		
Fall		
ENT 6330	Theoretical Perspectives in Strategy and Entrepreneurship	3
ECO 5349	Causal Inference and Research Design	3
Elective		3
	Hours	9
Spring		
ENT 6310	Seminar in Strategic Management	3
MIS 6350	Conducting Effective Literature reviews: A Doctoral Seminar for pre-Dissertation Students	3
Elective		3
	Hours	9
Summer		
ENT 6V98	Entrepreneurship Research Practicum	3
	Hours	3
Year 3		
Fall		
ENT 6V00	Dissertation Proposal and Prospectus	3
	Hours	3
Spring		
ENT 6V99	Dissertation	3
	Hours	3
Year 4		
Fall		
ENT 6V99	Dissertation	3
0	Hours	3
Spring	Discontation	_
ENT 6V99	Dissertation	3
	Hours	3
	Total Hours	54

### **Program Completion Requirement**

Students will be recognized as candidates for the doctoral degree only after having

- 1. passed the written comprehensive exam,
- completed all residence and departmental requirements except the dissertation and
- 3. received approval by the Dean of the Graduate School of their formal application for admission to candidacy for the degree.

The comprehensive exam will take place during the summer following each student's second year of study. The comprehensive exam is written and will cover material from the five core ENT required courses (ENT 6310 Seminar in Strategic Management, ENT 6320 Seminar in Entrepreneurship, ENT 6330 Theoretical Perspectives in Strategy and Entrepreneurship, ENT 6340 Seminar in Research Methods, and ENT 6350 Seminar in Organization Theory) and three required quantitative methods courses (EDP 6360 Experimental Design I, EDP 6362 Applied Multiple Regression/Correlation Analysis in Education and MIS 6320 Quantitative Methods in Information Systems Research or approved equivalents). The candidate must also complete and defend successfully the dissertation at an oral examination.

## **Information Systems**

## **Department of Information Systems and Business Analytics**

Advisor: Gina Green

Associate Dean for Graduate Programs: Patsy Norman

- Information Systems, M.S. (p. 71)
- · Business Analytics, M.S. (p. 73)
- · Information Systems, Ph.D. (p. 73)

## Information Systems, M.S. Objectives

The Master of Science in Information Systems (MSIS) is designed to provide graduates with the knowledge and skills to leverage information technology that improves business processes and effectiveness. The program enables graduates to attain a solid background in information systems management in the public or private sectors, and serves as foundation for continued professional growth in the field. It is also designed for the student who wants to develop depth and expertise in the information systems field.

The MSIS program provides students the opportunity to tailor their program of study to their specific career goals. Prior background in information systems is not required for admission.

### **Admission**

Applicants must have a bachelor's degree from an accredited university or college. Applicants must present a grade point average and scores on the GMAT or GRE that are predictive of success in this program. Applicants must adhere to the general admissions requirements for graduate study at Baylor University and also meet the admission requirements of the Master of Science in Information Systems degree

program. Additional admissions requirements can be found under the Business School Admissions.

#### Curriculum

As a part of the MSIS curriculum, all MSIS students are required to demonstrate competency in four core content areas; programming, systems analysis and design, database, and information security. This competency may be shown by successful completion of specific courses as a part of their matriculation in the MSIS program, or by successful completion of these courses in previous undergraduate information systems or computer science programs:

Code	Title	Hours
MIS 5301	Seminar in Object-Oriented Business Programming	3
MIS 5315	NET Systems Development	3
MIS 5317	Seminar in Java Development	3
MIS 5322	Advanced Python for Analytics	3
MIS 5335	Information Systems Analysis and Design	3
MIS 5340	Database Management Systems	3
ISEC 5305	Seminar in Information Security Foundations	3

In all cases, students are required to complete either 36 hours (nonthesis option) or 30 hours (thesis hours) of coursework during their MSIS program. MIS or ISEC electives will be chosen in consultation with the MSIS advisor.

#### **MSIS Non-Thesis Track**

Code	Title	Hours
<b>Required Courses</b>		
ISEC 5305	Seminar in Information Security Foundations	3
MIS 5111	MSIS Career and Professional Development	1
MIS 5301	Seminar in Object-Oriented Business Programming	3
MIS 5335	Information Systems Analysis and Design	3
MIS 5340	Database Management Systems	3
MIS 5355	Management of Information Systems	3
Additional Programmi	ng Course	
Select one course fro	m the following:	3
MIS 5315	NET Systems Development	
MIS 5317	Seminar in Java Development	
MIS 5322	Advanced Python for Analytics	
MIS or ISEC Elective C	ourses	5
Choose 2 MIS/ISE	C courses not previously taken	
MIS 5V95	Internship in Information Systems (if less than 2 years full-time work experience)	
Business Electives (ca	nn also be additional MIS or ISEC courses)	12
Total Hours		36

#### **MSIS Thesis Track**

Code	Title	Hours
Required Courses		
ISEC 5305	Seminar in Information Security Foundations	3

**Total Hours** 

MIS 5111	MSIS Career and Professional Development	1
MIS 5301	Seminar in Object-Oriented Business Programming	3
MIS 5335	Information Systems Analysis and Design	3
MIS 5340	Database Management Systems	3
MIS 5355	Management of Information Systems	3
Additional Programmii	ng Course	
Select one course fro	m the following:	3
MIS 5315	NET Systems Development	
MIS 5317	Seminar in Java Development	
MIS 5322	Advanced Python for Analytics	
MIS 5V99	Thesis	5
Business Electives (ca	n be additional MIS or ISEC courses)	6
Choose 2 MIS/ISE	C courses not previously taken	

All students in the MSIS program are required to have successfully completed introductory courses in finance, managerial accounting, and business statistics. If this requirement is not met prior to entrance into the MSIS program, the student must complete a series of foundational courses in addition to the program requirements described above. The foundational courses may be satisfied by completing the Business Frameworks course offered by the MBA program.

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## **Business Analytics Concentration** (MSIS)

## **Concentration in Business Analytics** (MSIS)

Code	Title	Hours
Required Core Courses		
ISEC 5305	Seminar in Information Security Foundations	3
MIS 5111	MSIS Career and Professional Development	1
MIS 5301	Seminar in Object-Oriented Business Programming	3
MIS 5335	Information Systems Analysis and Design	3
MIS 5340	Database Management Systems	3
MIS 5355	Management of Information Systems	3
Required Additional F	Programming Course	
Select one course fro	om the following	3
MIS 5315	NET Systems Development	
MIS 5317	Seminar in Java Development	
MIS 5322	Advanced Python for Analytics	
Required Additional (	Concentration Courses	
MIS 5342	Business Intelligence	3
MIS 5343	Seminar in Data Visualization	3
QBA 5330	Business Analytics for Decision Making	3
<b>Elective Concentration</b>	on Courses	
Select two courses fr	om the following	6
ECO 5347	Econometric Theory and Methods	
ECO 5349	Causal Inference and Research Design	
ECO 5351	Data Science I	

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## **Cyber Security Concentration (MSIS) Concentration in Cyber Security (MSIS)**

Code	Title	Hours		
Required Core Courses				
ISEC 5305	Seminar in Information Security Foundations	3		
MIS 5111	MSIS Career and Professional Development	1		
MIS 5301	Seminar in Object-Oriented Business Programming	3		
MIS 5335	Information Systems Analysis and Design	3		
MIS 5340	Database Management Systems	3		
MIS 5355	Management of Information Systems	3		
Required Additional Programming Course				
Select one course fro	om the following	3		
MIS 5315	NET Systems Development			
MIS 5317	Seminar in Java Development			
MIS 5322	Advanced Python for Analytics			
Required Additional Concentration Course				
ISEC 5320	Cyber Security Technology Factors	3		
Elective Concentration Courses				
Select two courses from the following				
ISEC 5310	Cyber Security Human Factors: Ethics, Integrity, Practices, Policies, and Procedures			
ISEC 5330	Cybersecurity Policy and Planning			
ISEC 5340	Cyber Warfare, Threats, Vulnerabilities and Countermeasures			
<b>Business Electives</b>		8		
Select three busin curriculum	ess courses from outside MIS/ISEC			
MIS 5V95	Internship in Information Systems (if less than 2 years of full-time work experience)			

## **Entrepreneurship Concentration** (MSIS)

**Total Hours** 

## **Concentration in Entrepreneurship (MSIS)**

36

Code	Title	Hours
Required Core C	courses	
ISEC 5305	Seminar in Information Security	3
	Foundations	

Total Hours		36
MIS 5V95	Internship in Information Systems (if less than 2 years of full-time work experience)	
curriculum	es courses from outside MIS/ISEC	
<b>Business Electives</b>		5
MIS 5V98	Special Studies in Information Systems	
MGT 5331	Project Management	
ENT 5341	Technology Entrepreneurship	
Select one course fro	m the following	3
<b>Elective Concentration</b>	n Courses	
ENT 5329	Entrepreneurial Finance	3
ENT 5329	Entrepreneurial Finance	3
ENT 5322	Accelerated Ventures Leadership	3
Required Additional (	Concentration Courses	
MIS 5322	Advanced Python for Analytics	
MIS 5317	Seminar in Java Development	
MIS 5315	NET Systems Development	
Select one course fro	m the following	3
<b>Required Additional F</b>	Programming Course	
MIS 5355	Management of Information Systems	3
MIS 5340	Database Management Systems	3
MIS 5335	Information Systems Analysis and Design	3
MIS 5301	Seminar in Object-Oriented Business Programming	3
MIS 5111	MSIS Career and Professional Development	1

# **Business Analytics, M.S.**

Program Director: James Stamey

Associate Dean for Graduate Programs: Patsy Norman

### **Objectives**

The Master of Science in Business Analytics (MSBA) is designed to provide graduates with the knowledge and skills to leverage analytics tools that assist businesses to overcome data-related challenges. The program is cross-disciplinary in nature, encompassing multiple fields of study within the School of Business and courses from the Department of Statistical Science in the College of Arts and Sciences.

### **Admission**

Applicants must have a bachelor's degree from an accredited university or college. Applicants must present a grade point average and scores on the GMAT or GRE that are predictive of success in this program. Applicants must adhere to the general admissions requirements for graduate study at Baylor University. All applicants will need to demonstrate proficiency in Python and have completed at least one course in statistics/QBA. Additional admissions requirements can be found under Business School Admissions.

### **Curriculum**

The MSBA is a 36-hour program with courses from MIS, STA, and various business disciplines. This degree is intended to prepare students for careers as professional business analysts by:

- · Learning the fundamentals of information technology and statistics
- · Learning tools to understand and visualize data
- Learning fundamental skills in modeling and analysis of multivariate data
- · Learning tools for predictive data analysis and forecasting
- Improving programming skills to the professional level for data analytics
- Providing a framework to examine ethical implications of collecting and managing big data

Code	Title	Hours
Required Courses		
STA 5300	Statistical Methods (Summer)	3
MIS 5340	Database Management Systems	3
MIS 5390	Ethics in Data Analytics	3
MIS 5322	Advanced Python for Analytics	3
MIS 5342	Business Intelligence	3
MIS 5343	Seminar in Data Visualization	3
STA 5384	Multivariate Statistical Methods	3
STA 5303	Applied Regression Analysis	3
Select three courses fi	rom the following	9
STA 5371	Methods in Data Mining and Management	
STA 5362	Time Series Analysis	
STA 4350	Statistical Machine Learning	
STA 5373	Computational Statistical Methods	
CSI 5352	Advanced Object-Oriented Development	
CSI 5357	Cloud Computing	
ECO 5347	Econometric Theory and Methods	
ECO 5351	Data Science I	
ECO 5352	Data Science II	
ECO 5349	Causal Inference and Research Design	
MKT 4360	Customer Analytics	
STA 5V85	Practice in Statistics	3
Total Hours		36

# Information Systems, Ph.D.

**Department Chair:** Jonathan K. Trower **Program Director:** Stacie Petter

Associate Dean for Graduate Programs: Patsy Norman

## **Program Description**

The Ph.D. in Information Systems seeks to train future researchers, scholars, and teachers to analyze and understand the multi-faceted impact of information systems and technologies on individuals. Students examine the positive and negative consequences of information systems as well as the moral and ethical dilemmas introduced in societies coordinated by and highly dependent upon information. Understanding the consequences of information systems and technologies requires a solid theoretical background that spans various disciplines. The program requires students to take courses outside the Information Systems & Business Analytics department, to expand their theoretical and methodological knowledge. Students also take courses in pedagogy and engage in a mentoring program to help them develop their teaching

skills. Ultimately, the program aims to graduate and place highly-trained students in colleges and universities around the world.

### **Admission Requirements**

Applicants must have a bachelor's degree from an accredited university or college, and a master's degree from an accredited university in a related discipline is preferred. An acceptable score on the GMAT or GRE is required. Applicants must adhere to the general admissions requirements of Baylor's Graduate School for admission to Ph.D. level graduate studies. In general, applicants should meet the common body of knowledge (CBK) requirements for business degrees. CBK is sometimes referred to as business core courses. Students not meeting the CBK requirements may need to complete additional general business courses.

### **Curriculum**

The Ph.D. in Information Systems is a full-time, four-year residential program. The first two years require 36 hours of formal coursework, with the remaining time comprised of independent research, teaching, and student development. Of the eight required courses, five are doctoral seminars offered in the Information Systems & Business Analytics department. Two required courses (ENT 6340 Seminar in Research Methods and ECO 5349 Causal Inference and Research Design) are research methods courses that are part of a foundational research methods course sequence required by all Hankamer School of Business PhD students. Prior to entering the program, students will have access to an online introductory statistics course for no credit. Students should complete this prior to the start of their Ph.D. program to ensure they have the basic statistical knowledge needed to complete the coursework required for the program. The final required course, EDL 6302 Teaching and Learning in Higher Education, teaches students about course development, teaching techniques, and learning theories. Students supplement these required courses with doctoral level electives offered by the Information Systems & Business Analytics department, the Hankamer School of Business, or other departments across the university. Ph.D. students interested in completing 5000-level (master's) courses in their support area must obtain prior approval from the program director.

After successfully completing 36 hours of coursework, students must complete a written comprehensive exam, which takes the form of a qualifying paper. Students will complete this requirement during the summer after their second year of coursework. After the completion of the comprehensive exam, students will write and orally defend a dissertation proposal and dissertation on an important issue related to information systems theory, policy, or practice under the supervision of a faculty advisor and committee.

Students receiving a graduate assistantship, which includes an annual stipend and tuition remission, will be assigned to work as a research assistant or a teaching assistant. Students assigned as research assistants will gain experience in developing and producing academic research. Later in the program, typically after coursework is completed, students will be the instructor of record for courses offered in the Information Systems & Business Analytics department.

Code	Title	Hours
Information System	ns Required Courses	
MIS 6310	Foundations in Information Systems Research	3
MIS 6320	Quantitative Methods in Information Systems Research	3

Total Hours		51
Dissertation Credit		12
Dissertation		
Information Systems	or other supporting areas	18
Electives		
MIS 6399	Research Apprenticeship II	3
ENT 6340	Seminar in Research Methods	3
MIS 6350	Conducting Effective Literature reviews: A Doctoral Seminar for pre-Dissertation Students	3
MIS 6340	Qualitative Methods in Information Systems Research	3
MIS 6330	Theoretical Perspectives in Information Systems Research	3

### **Degree Plan**

A formal degree plan will be developed in consultation with the program director or dissertation advisor. A maximum of six hours of graduate-level course work may be transferred from another accredited university.

The recommended course sequence is as follows:

Course Year 1 Fall	Title	Hours
ENT 6340	Seminar in Research Methods	3
MIS 6340	Qualitative Methods in Information Systems Research	3
Elective		3
	Hours	9
Spring		
MIS 6320	Quantitative Methods in Information Systems Research	3
ECO 5349	Causal Inference and Research Design	3
MIS 6330	Theoretical Perspectives in Information Systems Research	3
	Hours	9
Summer		
Electives		6
	Hours	6
Year 2 Fall		
MIS 6310	Foundations in Information Systems Research	3
MIS 6350	Conducting Effective Literature reviews: A Doctoral Seminar for pre-Dissertation Students	3
Elective		3
	Hours	9
Spring		
EDL 6302	Teaching and Learning in Higher Education	3
Electives		6
	Hours	9

#### Summer

Comprehensive Exam (Qualifying Paper)			
	Hours	0	
Year 3			
MIS 6V00	Dissertation Proposal	3	
MIS 6V99	Dissertation	3	
	Hours	6	
Year 4			
MIS 6V99	Dissertation	6	
	Hours	6	
	Total Hours	54	

### **Program Completion Requirement**

Students will be recognized as candidates for the doctoral degree only after having

- 1. Passed the written comprehensive exam (qualifying paper)
- Completed all residence and departmental requirements except the dissertation
- 3. Received approval by the Dean of the Graduate School of their formal application for admission to candidacy for the degree.

The written comprehensive exam (qualifying paper) will be completed following the student's second year of study. The candidate must also successfully complete and defend the dissertation at an oral examination.

# **Chemistry and Biochemistry**

Chair: John L. Wood
Director of Graduate Affairs: Michael A. Trakselis

Director of Graduate Recruiting: Darrin J. Bellert

The department offers the Master of Science and Doctor of Philosophy degrees.

### **Admission**

A bachelor's degree equivalent to a B.S. degree in chemistry or biochemistry at Baylor is the standard requirement for admission. A personal statement from the applicant as well as three letters of reference are also required. A current TOEFL/IELTS/Duolingo exam score is required for all international applicants. Prior research experience at the undergraduate level during the summer, or in the workplace is valued highly. Complete application packages for admission to the Ph.D. program will be evaluated holistically by the Graduate Admissions Committee of the Department of Chemistry and Biochemistry.

### Requirements

Students are required to qualify in three areas of chemistry either by taking ACS style division exams or by passing appropriate coursework with a grade of B or better no later than by the end of the second semester. A student will take at least three courses within their major field of specialization and two courses outside of that area, as well as CHE 5260 Scientific Communication and CHE 5101 Responsible Conduct of Research. The student's dissertation or thesis committee may require any course work that it deems proper and advisable. The Ph.D. Dissertation Committee will consist of at least 5 members, the Advisor, two members from the student's division, one member from Chemistry

and Biochemistry outside of the student's division, and one member from outside the Department of Chemistry and Biochemistry. The M.S.Thesis Committee will consist of at least four members, the Advisor, one member from the student's division, one member from Chemistry and Biochemistry outside of the student's division and one member from outside of the Department of Chemistry and Biochemistry. All Committee members must be Graduate Faculty. M.S. and Ph.D. students specialize in one of the following areas: analytical, biochemistry, inorganic, organic, or physical, as set forth below. A written Thesis/Dissertation of the student's research is required for the thesis M.S. and the Ph.D. degrees. There is a mandatory publication requirement of at least two contributed works in recognized national or international journals for awarding of a Ph.D. All doctoral degree program students must fulfill at least two semesters as a graduate teaching assistant. There is no foreign language requirement for the Ph.D.

Note: The requirement for a minor field of study (as described in the Graduate Catalog) does not apply to the graduate degrees in chemistry and biochemistry.

- · Chemistry and Biochemistry, M.S. (Non-Thesis) (p. 75)
- · Chemistry and Biochemistry, M.S. (p. 76)
- · Chemistry and Biochemistry, Ph.D. (p. 76)

# Chemistry and Biochemistry, M.S. (Non-Thesis)

### **Master of Science (Non-Thesis)**

The minimum semester-hour requirement for the M.S. non-thesis degree is thirty semester hours.

Code	Title	Hours
<b>Lecture Courses</b>		
Lecture course we	ork in the major area	9
Additional lecture	course work outside the major area	6
<b>Chemistry Course</b>	es	
CHE 5260	Scientific Communication	2
CHE 5101	Responsible Conduct of Research	1
CHE 5050	Chemistry Colloquium (Register every Fall/ Spring semester)	0
<b>Additional Require</b>	ements	
Additional lecture	and/or research course work 1	11
Pre-candidacy Sen	ninar	
CHE 5150	Graduate Seminar	1
Total Hours		30

<sup>&</sup>lt;sup>1</sup> i.e. CHE 5V98 Graduate Research

Note: Students are not directly admitted into the non-thesis M.S. program. The maximum time limit for the completion of the M.S. degree is five years. A typical time frame for completion of M.S. is 2-3 years.

# **Chemistry and Biochemistry, M.S. Master of Science**

The minimum semester-hour requirement for the M.S. degree is thirty semester hours including six semester hours of CHE 5V99 Thesis.

Code	Title	Hours
<b>Lecture Courses</b>		
Lecture course wor	k in the major area	6
Additional lecture of	course work outside the major area	3
<b>Chemistry Courses</b>		
CHE 5260	Scientific Communication	2
CHE 5101	Responsible Conduct of Research	1
CHE 5050	Chemistry Colloquium (Register every Fall/ Spring)	0
<b>Additional Requirer</b>	nents	
Additional lecture a	and/or research course work as determined by ee <sup>1</sup>	10
Pre-candidacy Semi	nar	
CHE 5150	Graduate Seminar	1
Defense Seminar		
CHE 5150	Graduate Seminar	1
Thesis		
CHE 5V99	Thesis	6
Total Hours		30

<sup>&</sup>lt;sup>1</sup> i.e. CHE 5V98 Graduate Research

Note: Students are not directly admitted into the M.S. program. The maximum time limit for the completion of the M.S. degree is five years. A typical time frame for completion of M.S. is 2-3 years.

# Chemistry and Biochemistry, Ph.D. Doctor of Philosophy

General requirements for the Doctor of Philosophy degree are given in the general requirements section of this catalog. It is not necessary that students with the B.S. degree obtain an M.S. degree in chemistry before pursuing the doctorate.

Code	Title	Hours	
<b>Lecture Courses</b>			
Lecture course work	in the major area	9	
Additional lecture co	urse work outside the major area	6	
<b>Chemistry Courses</b>			
CHE 5260	Scientific Communication	2	
CHE 5101	Responsible Conduct of Research	1	
Additional Requirements			
Additional lecture and/or research course work as determined by the dissertation committee <sup>1</sup>			
Pre-candidacy Semina			
CHE 5150	Graduate Seminar	1	
Candidacy Seminar			
CHE 5150	Graduate Seminar	1	
Defense Seminar			

Total Hours		78
CHE 6V99	Dissertation	12
Dissertation		
CHE 5150	Graduate Seminar	1

<sup>&</sup>lt;sup>1</sup> i.e. CHE 5V98 Graduate Research

### Courses

Prefix	Analytical	Biochemistr	Inorganic	Organic	Physical
CHE	5310	5345	5301	4334	5320
CHE	5314	5346	5302	5335	5322
CHE	5315	5347	5305	5336	5325
CHE	5316	5348	5306	5331	5326
CHE	5312	5306	5304		5323
CHE	5345	5341	5323		5347

### **Analytical**

Code	Title	Hours
CHE 5310	Advanced Chemical Instrumentation	3
CHE 5312	Advanced X-omics Mass Spectrometry	3
CHE 5314	Separation Science	3
CHE 5315	Electroanalytical Chemistry	3
CHE 5316	Analytical Spectroscopy	3
CHE 5345	Selected Topics in Bioanalytical Chemistry	3
ENV 5387	Advanced Environmental Chemistry	3

### **Biochemistry**

Code	Title	Hours
CHE 5306	Bioinorganic Chemistry	3
CHE 5345	Selected Topics in Bioanalytical Chemistry	3
CHE 5346	Chemical Biology	3
CHE 5347	Physical Biochemistry	3
CHE 5348	Enzymology	3
BIO 5300	Advanced Studies in Biology	3
BIO 5304	Nucleic Acids	3
BIO 5307	Advanced Cell Biology	3
BIO 5311	Advanced Genetic Analysis	3

#### Inorganic

Code	Title	Hours
CHE 5301	Chemistry of the Elements	3
CHE 5302	Symmetry and Group Theory in Chemistry	3
CHE 5304	Special Topics in Inorganic Chemistry	3
CHE 5305	Organometallic Chemistry and Homogenous Catalysis	3
CHE 5306	Bioinorganic Chemistry	3
CHE 5323	Structural Studies by X-ray Crystallography	3

### **Organic**

Code	Title	Hours
CHE 4334	Organic Spectroscopy	3
CHE 5331	Stereochemistry	3

CHE 5335	Physical Organic Chemistry	3
CHE 5336	Advanced Synthesis and Natural Products	3
Physical		
Code	Title	Hours
CHE 5320	Thermodynamics and Statistical Thermodynamics	3
CHE 5322	Chemical Kinetics and Mechanisms	3
CHE 5323	Structural Studies by X-ray Crystallography	3
CHE 5325	Quantum Chemistry	3
CHE 5326	Lasers and Molecular Spectroscopy	3
CHE 5347	Physical Biochemistry	3

### **Performance Standard**

A minimum grade of "B-" is required to satisfy a core course requirement. Grades of B or better are required to qualify in specific areas of chemistry. Students must also maintain a minimum overall graduate lecture course only GPA of 3.0. Falling below the minimum lecture course GPA will result in departmental probation. Students must attain the minimum overall lecture course GPA of 3.0 by the end of their subsequent semester. Failure to maintain the minimum GPA for two consecutive semesters will result in expulsion from the chemistry graduate program. *Important:* Graduate School policy states that failure to maintain a minimum overall GPA of 3.0 results in immediate probationary status. Students on probation are ineligible for stipend support and tuition waivers.

Further details regarding all degrees may be obtained by request from the Graduate Program Director of the Department of Chemistry and Biochemistry or can be found in the current Graduate Student Handbook of the department. Prior to graduation, all candidates for the Master of Science or Doctor of Philosophy degree must comply with Department regulations concerning laboratory checkout. The checkout procedure includes a satisfactory inspection of the candidate's work area by the Department Safety Officer and Risk Management, as well as completion of the Department Clearance Form.

# **Classics**

## **Department of Classics**

**Chairperson:** Kenneth R. Jones **Graduate Program Director:** Meghan J. DiLuzio

- · Classics, M.A. (p. 77)
- · Joint Bachelor of Arts/Master of Arts in Classics (p. 78)

# Classics, M.A. Admission

Applicants for the Master of Arts in Classics should be directed to the Graduate School. The application deadline is February 15. In addition to all admissions requirements listed in the General Information section of this catalog, the Department of Classics requires the following:

- An undergraduate major in Classics, Greek, or Latin, or at least twenty-four semester hours of Greek and/or Latin. Those deficient in these requirements may be admitted on a probationary basis.
- 2. GPA and GRE scores predictive of success in the program.
- 3. Three letters of recommendation from current or former professors.

- A personal statement outlining an area of interest and reasons for seeking the degree.
- 5. A writing sample at least ten pages in length, normally from a course in Classics or a related discipline. Teachers may submit a statement of teaching philosophy and representative teaching materials (e.g., a week of lesson plans and any supporting material for a Greek or Latin class).

### **Degree Requirements**

The Master of Arts in Classics degree consists of thirty-three semester hours, including the successful completion of a three-hour thesis or non-thesis project. The requirements are as follows:

Code	Title	Hours
Requirements		
Thirty semester hou hours at the 5000 le	rs of coursework, including at least eighteen vel:	
Materials and Method	ds	
CLA 5300	Proseminar in Classics	3
Greek		
GKC courses at the	5000 level <sup>1</sup>	9
Latin		
LAT courses at the f	īnal 5000 level <sup>2</sup>	9
Supplementary Fields	3	
Select one course fr	om three of the following subfields:	9
Ancient History		
CLA 5302	Topics in Ancient History	
REL 5331	History of Ancient Christianity	
Papyrology, Paleogra	aphy, Linguistics, and Textual Criticism	
LAT 5303	Latin Paleography	
ENG 5303	Studies in Linguistics	
Art and Archaelogy		
ANT 4341	Archaeology of the Mediterranean <sup>3</sup>	
ANT 4V16	Archaeological Research <sup>3</sup>	
CLA 4368	Special Topics in Greek and Roman Art and Archaeology	
CLA 4369	Greek and Roman Sport and Spectacle	
Ancient Thought		
GTX 4V99	Special Topics in Great Texts <sup>3</sup>	
PHI 5301	Readings from Plato <sup>3</sup>	
PHI 5302	Readings from Aristotle <sup>3</sup>	
PHI 5312	Topics in Classical Philosophy <sup>3</sup>	
PSC 5343	Classical Political Thought <sup>3</sup>	
Thesis/Non-Thesis		
Select one of the fol	lowing:	3
CLA 5V99	Thesis	
CLA 5V90	Final Project (non-thesis)	
Intermediate Proficie	ncy	
or Italian by one of t	mediate proficiency in French, German, he methods listed in the Specific Degree	

Requirements for the Master of Arts degree in the general

inforamtion section of this catalog.

Written Exams

Three written exams, including a translation exam on Greek literature, a translation exam on Latin literature, and an exam on Greek or Roman history. Students must pass one of the two translation exams before beginning their second year of study. A student may retake a failed exam once, but failing an exam twice will result in dismissal from the program.

#### Oral Defense

An oral defense of the thesis or non-thesis project.

#### **Total Hours**

Except for GRK 5321 Greek Grammar for Reading Knowledge, GRK 5322 Greek Prose for Reading Knowledge

Except for LAT 5303 Latin Paleography, LAT 5321 Latin Grammar for Reading Knowledge, LAT 5322 Latin Prose and Poetry for Reading Knowledge

- Designates a course that must be approved by the Graduate Program Director. Students may petition the Graduate Program Director for a second course in a given subfield. Some students may be permitted to fulfill the requirements for this degree with courses in one classical language if they
  - 1. have at least twelve undergraduate hours of the other language,
  - 2. demonstrate an equivalent proficiency by passing a departmental examination, or
  - achieve a grade of B or better in GRK 5321 Greek Grammar for Reading Knowledge and GRK 5322 Greek Prose for Reading Knowledge, or LAT 5321 Latin Grammar for Reading Knowledge and LAT 5322 Latin Prose and Poetry for Reading Knowledge.

# Joint Bachelor of Arts/Master of Arts in Classics

### **Admission**

Applicants for the joint Bachelor of Arts/Master of Arts in Classics should be directed to the Graduate Program Director. The application deadline is August 1 prior to the senior year. The requirements for admission are as follows:

- Active progress toward a Bachelor of Arts in Classics, Greek, or Latin. Students pursuing a major in Greek or Latin must have begun study in the other language before applying.
- 2. GPA and GRE scores predictive of success in the program.
- 3. A personal statement outlining an area of interest and reasons for seeking the degree.

### **Degree Requirements**

The joint Bachelor of Arts/Master of Arts in Classics degree consists of 151 semester hours, including the successful completion of a three-hour thesis or non-thesis project.

The requirements are as follows:

- All requirements for the Bachelor of Arts degree with a major in Classics, Greek, or Latin listed in the Undergraduate Catalog. A maximum of nine semester hours from the undergraduate major may be waived for nine graduate hours.
- 2. All requirements for the Master of Classics (p. 77) (33 hours) degree.

# **Communication Sciences and Disorders**

- Speech-Language Pathology and Audiology, M.S. (Residential) (p. 78)
- Speech-Language Pathology and Audiology, M.S. (Online) (p. 79)
- · Communication Sciences and Disorders, Ph.D. (p. 80)

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# Speech-Language Pathology and Audiology, M.S. (Residential)

**Department Chair.** Diane Loeb, Ph.D., CCC-SLP **Graduate Program Director.** Susan Sherman, M.S., CCC-SLP

The Master of Science program (M.S.) in Speech-Language Pathology at Baylor University is accredited by the:

Council on Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association 2200 Research Blvd. Rockville, MD 20850 (301) 296-5700

The requirements governing the selection of courses and clinical practicum experiences must be individualized based upon the date when a student begins the program and the courses that he or she takes. Therefore, all students must consult with the Graduate Program Director for guidance in fulfilling the American Speech-Language-Hearing Association's standards.

Students with an undergraduate major in communication sciences and disorders must complete forty-five semester hours and a comprehensive examination for the degree of Master of Science. A Thesis Track is available which requires written approval from a faculty member who is willing to act as the thesis committee chair and the Graduate Program Director. Students on the Thesis Track are required to defend their thesis and are not exempt from taking the comprehensive examination.

Students choosing the thesis track must take all academic courses required for the non-thesis track and enroll in clinical practicum each semester. Thus, both tracks lead to eligibility for the Certificate of Clinical Competence in Speech-Language Pathology. The Thesis Track students must enroll in the Thesis course (CSD 5V99 Thesis) for at least 3 semesters beginning from as early as the second semester to the semester of completion of the research project.

Graduate students must participate in Certification Day at the end of their program where all academic and professional documentation will be completed.

All graduate students must work with the Graduate Program Director to develop an approved Graduate Course-work Program Plan.

### **Leveling Courses**

Students who have been accepted to Baylor's CSD graduate program but do not have an undergraduate CSD degree are considered a graduate student with leveling status and will be accepted in the fall semester only. Graduate students with leveling status are required to complete 25 hours (two semesters) of leveling courses to meet requirements for state licensure and professional certification to be completed prior to beginning graduate coursework. These courses are required to be

taken in the Baylor CSD program. Students must work with the Graduate Program Director to develop an approved Graduate Course-work Program Plan.

### **ASHA Courses**

In addition, ASHA requires all students to have completed college level science courses consisting of the biological sciences, physical sciences (either chemistry or physics), statistics, and social/behavioral sciences (Standard IV-A) from an accredited college or university (https://www.asha.org/Certification/2020-SLP-Certification-Standards/). A passing grade of D or better is required to count towards a passing credit for these courses. With approval from the Graduate Program Director, a student missing a basic science may begin the graduate program but must have all the basic sciences completed by the beginning of the second semester in the program.

### **Admissions**

Admission decisions are based on faculty review of undergraduate transcripts, cumulative undergrad (or graduate if degree conferred) GPA from degree bearing university, personal statements, resume, and three letters of recommendation. Students who earned their primary undergraduate degree with a major in CSD are admitted in the fall, spring, and summer semesters. Leveling students who do not have an undergraduate degree with a major in CSD are admitted in the fall semester. The department admits about 75 graduate students each year.

Policies and operating procedures for the graduate program are detailed in the Residential CSD Graduate Handbook and provided to each student electronically at the start of the semester.

# Speech-Language Pathology and Audiology, M.S. (Online)

**Department Chair:** Diane Loeb, Ph.D., CCC-SLP **Online Graduate Program Director:** Venessa Grandjean, SLPD, CCC-SLP

The Communication Sciences and Disorders Department also offers an Online Master of Science degree for graduate students who do not prefer a residential program on the Baylor campus. This online program is also accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association (ASHA).

The Speech@Baylor platform incorporates web technologies that can be accessed in most states. Students do not need to be proficient with distance education technology before enrolling, but basic computer literacy, such as knowing how to access a website, is required. Students log into the learning management platform using a secure Baylor login and password. Synchronous sessions are small (approximately 20 students) and conducted via a web video camera. An orientation module for the program is provided and a technology help desk is available to both students and faculty. Asynchronous material is also completed outside of online class time for additional learning.

### **Admissions**

Admission decisions are based on faculty review of undergraduate transcripts, cumulative undergrad (or graduate if degree conferred) GPA from degree bearing university, personal statements, resume, and three letters of recommendation. Policies and operating procedures for the online graduate program are detailed in the Online CSD Graduate

Handbook and provided to each student electronically at the start of the semester. Start dates for each student can be individualized to begin in the fall (August), spring (January), or summer (June) trimesters.

### **Graduate Courses**

Online CSD graduate students must complete 45 trimester hours (30 hours of graduate coursework, 6 hours of electives and 9 hours for practicum and internship), accrue 400 clinical hours (including 25 hours of observation), take the National Praxis examination, and pass the required comprehensive examination. This program takes 5 trimesters (approximately 20 months) for full time students and 7 trimesters (approximately 28 months) for part time students. Although this is an online program, over 375 clock hours are spent out in the field completing 3 practicum and 1 internship during weekly workdays. A student who selects this degree should not plan to work more than 10 hours a week at a place of employment during the 3 trimesters of practicum and not at all during the internship.

#### Required courses for graduate level work consist of:

Code	Title	Hours
<b>Required Courses</b>		
CSD 5151	Clinical Practicum Placement 1 (needs departmental approval)	1
CSD 5152	Clinical Practicum Placement 2 (needs departmental approval)	1
CSD 5153	Clinical Practicum Placement 3 (needs departmental approval)	1
CSD 5311	Aphasiology	3
CSD 5312	Fluency Disorders	3
CSD 5313	Augmentative Communication and Severe Populations	3
CSD 5314	Voice Pathology	3
CSD 5316	Motor Speech Disorders	3
CSD 5318	Methods in Graduate Study in Communication Sciences and Disorders	3
CSD 5319	EBP Evaluation and Interprofessional Practice in a Diverse Society	3
CSD 5325	Speech Sound Disorders	3
CSD 5328	Diagnosis and Treatment of Dysphagia	3
CSD 5341	Birth to Five Language Disorders	3
CSD 5649	Speech Pathology Internship (needs departmental approval)	6
Total Hours		39

### **Electives**

Students are also required to complete two electives (6 credits) as part of the curriculum. These courses currently consist of:

Code	Title	Hours
Electives		
Select two	courses from the following:	6
CSD 436	Introduction to Aural Reh	abilitation <sup>1</sup>
CSD 533	Multicultural Issues in Sp Pathology	peech-Language
CSD 533	School-Age Language an Disorders	d Literacy

Total Hours		6
	Disorders	
CSD 5330	Cognitive Linguistic Communication	
	Communication Sciences and Disorders	
CSD 5354	Mentored Research Experience in	

All leveling and graduate students who have not had a course in aural rehabilitation will be requested to enroll in this course as an elective.

### **Leveling Courses**

Students who have been accepted to Baylor's online CSD graduate program but do not have recent undergraduate CSD prerequisite courses (within the past 5 years) are considered a graduate student with leveling status. All students are required to have completed 18 hours (one trimester) of undergraduate courses to meet requirements for state licensure and professional certification although they will not be part of the graduate transcript. Any of these courses (or their equivalency from another university) that are missing from a student's undergraduate transcript will need to be completed prior to beginning graduate coursework. A student may be waived out of a leveling course if a passing grade has been obtained from another university and the course syllabus description meets the requirements of the Baylor CSD program as determined by the admissions committee.

#### These required leveling courses consist of:

Code	Title	Hours	
Required Leveling Courses			
CSD 5101	Leveling-Observation (25 hours of observation)	1	
CSD 5201	Leveling-Clinical Methods	2	
CSD 5305	Leveling-Survey of Speech Pathology and Audiology	3	
CSD 5306	Leveling-Language Development	3	
CSD 5307	Leveling-Introduction to Phonological Science	3	
CSD 5308	Leveling-Structures and Functions in Communication and Swallowing	3	
CSD 5309	Leveling-Introduction to Clinical Audiology	3	
Total Hours		18	

### **ASHA Courses**

In addition, ASHA requires all students to have completed 12 hours of college level science courses consisting of the biological sciences, physical sciences (either chemistry or physics), statistics, and the social/behavioral sciences (Standard IV-A) from an accredited college or university (https://www.asha.org/Certification/2020-SLP-Certification-Standards/). A passing grade of D or better is required to count towards a passing credit for these courses.

# Communication Sciences and Disorders, Ph.D.

**Department Chair.** Diane Loeb, Ph.D., CCC-SLP **Doctoral Graduate Program Director.** Diane Loeb, Ph.D., CCC-SLP

The Ph.D. in CSD is offered by Baylor University through the Department of Communication Sciences and Disorders. The emphasis in this degree

program is on the education of basic and applied scholars in the areas of speech-language pathology, speech, language, and hearing sciences, and deafness. There is a critical need for individuals trained at the level of Ph.D. in our profession. Our future graduates will transform the world, reflecting Baylor's servant leadership model at the highest level of research skill. Graduates of our program will be prepared to be servant leaders and research educators nationally and internationally in the areas of speech, language, hearing, deafness, and swallowing disorders.

### **Admission Requirements**

Students must meet the general admission requirements for graduate study, and must have demonstrated in their undergraduate and any postgraduate courses a scholarly and professional interest considerably above the average. There are three types of applicants that may apply for the CSD Ph.D. First, most applicants will have a Master of Arts or Master of Science degree in Communication Sciences and Disorders, Speech-Language Pathology, or Speech and Hearing Science. Students with Master's degrees from other professions will be considered and evaluated on a case-by-case basis for admission. Second, students may pursue a combined MS and Ph.D. in CSD. Students who are interested in a combined degree should apply for the MS program. During the first semester of Master's study, students can meet with faculty and participate in faculty research to identify an area of research focus and a potential doctoral mentor. At the start of the second or third semester, if the student has a very strong academic record and a faculty member has agreed to become their Ph.D. advisor, the student can apply to the Ph.D. program. Third, students with a Bachelor's degree and exceptional academic records and backgrounds may pursue a Ph.D. in CSD. These types of students who are admitted into CSD Ph.D. program will be required to take additional prerequisite CSD core courses, which will be determined by the primary mentor and the CSD Ph.D. admission committee. A personal statement from the applicant as well as three letters of reference are required. A current TOEFL/IELTS is required for all international applicants. Prior research experience at the undergraduate or master's level is valued highly.

Admission to this program is made on a rolling basis, meaning that applicants can apply at any time and be admitted to begin during the summer, fall, or spring semester. Full-time study is preferred and part-time study permissible. Applicants who are admitted at full-time status will be offered four years of funding, contingent on successful progress each year. To determine "successful progress," annual reviews will be completed by the student and reviewed by the student's mentor, the Ph.D. Director, and the Department Chair, with financial support offered only as available and necessary. Admission will require the concurrence of the chairperson of the Department of Communication Sciences and Disorders, the applicant's faculty mentor, and the Graduate School. Students must apply to this doctoral program even though another graduate degree may have been earned at Baylor University.

# Program Requirements Period of Study

The Doctor of Communication Sciences and Disorders degree is a four-year program. Four years, including summers, consist of campus residency, including didactic courses and research totaling 60 semester hours beyond the baccalaureate degree. Students may take Master's level courses (up to 9 credits) to meet program requirements. All courses selected by the student must be approved by the student's mentor for the first semester and by the student's Plan of Study Committee. Courses follow a sequence established by the program faculty; a student may not

alter this sequence or omit courses from the specified program without written approval by the program director.

#### Time Limitation

The maximum time limit for the doctoral degree is eight years from the time the student first matriculates into the doctoral program. After this time the student may request a one-year extension. Once a student's time limit expires, any student wishing to return to complete their degree after a one-year absence, must reapply for admission to graduate school. The student would enter under the current catalog and the appropriate course work for degree completion may be revalidated or not, according to the policy of the individual program in consultation with the Graduate School.

### **Foreign Language Requirement**

There is no requirement for competency in a foreign language for the CSD Ph.D. program.

### Residency

Consecutive semesters of residency are required. Students must be registered for at least one semester hour of graduate credit during the semester of intended graduation.

#### **Comprehensive Examination**

The student must pass the written Comprehensive examination at the end of their course work and before the beginning of the dissertation.

The committee for the examination will include three members of the CSD faculty and a faculty member from the student's interdisciplinary area. If any part of the Comprehensive examination is failed, the examining committee may recommend reexamination. Candidates who fail this examination may take a second one only upon the recommendation of the Ph.D. Graduate Program Director and the student's research faculty mentor. In no case will this examination be given until an interval of at least four months has elapsed. After two failures, no further examination is permitted. If the student does not pass the reexamination, they will be dismissed from the program.

#### **Admission to Candidacy**

Admission to the doctoral program is not equivalent to admission to candidacy. Formal application for admission to candidacy is made through procedures established by the Graduate School. Students must complete the following to apply to advance to candidacy:

- · Satisfactory completion of all course work.
- Satisfactory completion and submission of article for publication (Prof Writing II).
- Teaching portfolio completed from Mentored Teaching in CSD II.
- · Satisfactory annual student activity reports from all previous years.
- · Passing the written comprehensive examination.

#### **Dissertation Supervision**

A Dissertation Committee is designated by the student's faculty research mentor and the student. This committee may be the same committee that assumes responsibility for the student's plan of study, or it may be newly appointed. The committee consists of four readers, all members of Graduate Faculty. The student's mentor is the chairperson of the committee.

#### Dissertation

Candidates for the Doctor of Communication Sciences and Disorders degree must present an acceptable dissertation on a problem in the field of their major subject. The dissertation must give evidence that

the candidate has pursued a program of research, the results of which reveal scholarly competence and a significant contribution to knowledge. Candidates should acquire the Guidelines for Preparing the Dissertation and Thesis and other necessary materials at the beginning of the semester in which the dissertation is being prepared. The most recent edition of Guidelines is available on the Baylor Graduate School website. Additional degree completion materials not available on the homepage are provided to students when they file for graduation. The Guidelines contain the directions for the procedure to complete the dissertation, an explanation of forms necessary, the semester calendar, and an explanation of fees associated with the process.

#### **Dissertation Examination**

This oral examination is conducted by an examining body appointed by the Graduate School upon the recommendation of the graduate program director only after all research and dissertation requirements have been fulfilled. The dissertation research committee is an integral part of the examining committee. The dissertation examining committee will include a minimum of four members. At least two members, including the chairperson, will be Baylor Graduate Faculty from the degree-granting program. At least one member must be a member of Baylor's Graduate Faculty whose primary appointment is from a program other than the one conferring the degree. This non-program member helps to ensure a consistent level of quality, rigor, and fairness across all graduate programs at Baylor University. The committee may also include one member from outside of Baylor with approval of the candidate's Graduate Program Director. Non-Baylor committee members are not eligible to serve as the dissertation chairperson. The Graduate Program Director is responsible for ensuring the relevant expertise of the non-Baylor committee member and notifying the Graduate School through the Announcement of Doctoral Oral Examination form. The candidate's dissertation director will serve as the chairperson of the committee and ensure that formal announcement of the examination is made, that the exam is conducted fairly, and that it is open to the faculty. The committee may include additional members beyond the required minimum of four. Preferably, the student and the examiners will be present in person, but in certain cases (e.g., online degree programs, extenuating circumstances, etc.) this may not be logistically possible. The Ph.D. Graduate Program Director may approve alternative formats for examination, including virtual, video-conferenced participation of one or more examiner(s). Such approval needs to be accompanied with justification to the Graduate School.

Candidates who fail this examination may take a second one only upon the recommendation of the Ph.D. Graduate Program Director and the approval of the Graduate School. In no case will this examination be given until an interval of at least four months has elapsed. After two failures, no further examination is permitted.

No longer than ten days after the oral examination, but no later than the "last day" deadline posted in the Graduate School Academic Calendar for the semester of graduation, an electronic pdf copy of the dissertation in its final departmentally approved form should be submitted to the Graduate School. With the dissertation copy, the student should also submit the appropriate forms required, as stated in the Guidelines. A student is certified for graduation once the pdf copy of the dissertation is submitted electronically and approved, and all remaining steps, as stated in the Guidelines, have been completed.

### **Other Requirements**

Each student is required to comply in full with all additional policies and rules specified in the CSD Doctoral Program manual. This manual

is distributed to all students enrolled in the program. Additional information. See "Communication Sciences and Disorders" in the courses section of the catalog.

# **Communication Department of Communication**

Chairperson: David W. Schlueter Graduate Program Director: Leslie A. Hahner

- · Communication, M.A. (p. 82)
- · Joint Bachelor of Arts/Master of Arts in Communication (p. 83)

# Communication, M.A.

The goal of the MA in Communication program is to instill knowledge and skills vital to becoming ethical, articulate, and innovative leaders in communication-related fields. Students in this program have the opportunity to explore humanistic and social-scientific methods of research and practice and learn alongside faculty in their specialized areas of study and practice. This program engages the relational, collaborative, strategic, symbolic, and adaptive nature of communication and challenges students to assess how communication constructs the social world. Through rhetorical studies, students investigate the socio-political implications of discourse and argument, and through interpersonal and organizational studies, students analyze the dynamics of communication in shaping relationships and organizations. With diverse course offerings and degree paths that cultivate research and application as well as technical and creative skills, graduates are positioned for careers in academia, consulting, business and nonprofit practice, and public service.

### **Admission**

The majority of students begin the program in the fall when teaching assistantships and scholarships are competitively awarded. To be considered for funding, applications should be received on or before February 1. The final application deadline for fall enrollment is May 1. Occasionally, students begin the program in the spring. The application deadline for spring enrollment is October 1. Applications for admission are completed online through the Graduate School and should include: a personal statement, writing sample, three letters of recommendation, and transcripts of all college/university work. International students are required to submit either TOEFL, IELTS, or Duolingo scores, unless they have received a degree from a U.S. accredited institution of higher education.

## **Degree Path Options**

There are three paths or options, a thesis option and two non-thesis options (internship or project), to completing the MA in Communication:

#### 1. Thesis

Students completing a thesis will craft an original research project that demonstrates abilities to synthesize research literature, gather and analyze original data or texts, and make explanatory arguments for the findings and interpretations of that analysis. Students who write a thesis may aspire to doctoral studies or other research-oriented careers. Successful completion of the thesis requires an oral examination where students present their work for review and approval by a faculty committee.

#### 2. Professional Project

The nature of professional projects vary based on students goals and interests, but each project must include a scholarly writing component and involve submission to an external outlet or audience (outside the university) for consumption or use – for example, a conference. Students who pursue this option undergo an oral exam where they present their work for review and approval by a faculty committee.

#### 3. Internship

The internship requires securing and successfully completing an approved professional communication-related internship and preparing an extensive final report. This option is intended for students seeking careers that are not academic or research-oriented in nature and does not require an oral exam process with a faculty committee

### Curriculum

Hour and course requirements vary based on the degree path option:

### **Thesis Option Degree Plan**

THESIS OPTION I	Degree Flair	
Code	Title	Hours
Required Courses		
CSS 5V99	Thesis	6
CSS 5310	Modern Communication Theory	3
CSS 5351	Methods of Graduate Study	3
or CSS 5352	Seminar in Methods of Rhetorical Criticism	n
or CSS 5354	Quantitative Research Methods in Commu	ınication
Additional 5000-lev	rel CSS courses <sup>1</sup>	12
Electives		
Select six semeste	r hours from the following:	6
	4000-level CSS courses (approved for not previously taken for BA credit)	
Up to 6 hours of	5000-level courses outside of CSS	
Up to 6 hours of	CSS 5V35 Problems in Communication	
Any 5000-level C	CSS courses	
Total Hours		30

Excluding CSS 5V35 Problems in Communication

#### **Non-Thesis Option Degree Plan**

•	3	
Code	Title	Hours
Required Courses		
CSS 5V90	Professional Paper in Communication	3
or CSS 5380	Internship in Communication	
CSS 5310	Modern Communication Theory	3
CSS 5351	Methods of Graduate Study	3
or CSS 5352	Seminar in Methods of Rhetorical Criticism	
or CSS 5354	Quantitative Research Methods in Communi	cation
Additional 5000-level	CSS courses <sup>1</sup>	12
Electives		
Select 15 semester h	ours from the following:	15
Up to 6 hours of 4	000-level CSS courses (approved for	
graduate credit; no	ot previously taken for BA credit)	
Up to 6 hours of 5	000-level courses outside of CSS	
Up to 6 hours of C	SS 5V35 Problems in Communication	

Any 5000-level CSS courses 2

Total Hours 36

- Excluding CSS 5V35 Problems in Communication
- Excluding CSS 5380 Internship in Communication for students on the Internship option

# Joint Bachelor of Arts/Master of Arts in Communication

Director of the Joint BA/MA in Communication: Leslie A. Hahner

Students pursuing a Bachelor of Arts degree with a major in Communication may pursue the Master of Arts in Communication as a joint degree program on an accelerated track. Students apply to the program in their senior year and take 6 hours of graduate-level work as part of their undergraduate degree program. After being admitted to the Graduate School, students complete an additional 24 hours of graduate-level work in a "+1" year.

### **Admission**

Students must meet the following requirements to apply for the program:

- At the time of application, demonstrate a cumulative undergraduate GPA of 3.0 or higher and major GPA of 3.4 or higher<sup>1</sup>
- Prior to enrolling in graduate-level credits, hold senior status (i.e., at least 90 hours completed) and complete 24 CSS hours, earning a C or higher in each CSS course taken<sup>1</sup>
- Students may petition for special consideration of exceptions to the GPA standard and hours completed.

Students should consult with the Joint Degree Program Director to confirm the application deadline (typically, February 1), required materials, and appropriate timing of actual enrollment into the Master's program. Once enrolled, students must earn a "B" (3.0) or higher in the first 12 hours of graduate coursework to remain in good standing in the program.

### **Curriculum**

Joint degree students fulfill the requirements of all undergraduate CSS majors. The 30-hour MA requirement for the joint degree is typically completed during the senior and +1 year. However, students will construct an individual coursework plan with the Graduate Program Director.

### **Curriculum for the MA Portion of the Joint Degree**

All course selections must have the approval of the Program Director.

Code	Title	Hours
Requirements		
CSS 5V35	Problems in Communication	3
CSS 5351	Methods of Graduate Study	3
or CSS 5352	Seminar in Methods of Rhetorical Criticism	
or CSS 5354	Quantitative Research Methods in Commun	ication
CSS courses, 5000	-level	12
Electives		
Select any CSS or	nterdisciplinary course in Graduate Catalogue	6
Practicum or Thesis	<b>1</b>	

Total Hours		30
or CSS 5V99	Thesis	
CSS 5V98	Praxis Practicum	6

# **Institute for Ecological, Earth, and Environmental Sciences**

Director: Joe C. Yelderman, Jr.

Graduate Program Director: William C. Hockaday

· Ecological, Earth, and Environmental Sciences, Ph.D. (p. 83)

# Ecological, Earth, and Environmental Sciences, Ph.D.

The Institute for Ecological, Earth, and Environmental Sciences (TIE<sup>3</sup>S) offers a unique program for advanced interdisciplinary study leading to the doctoral (Ph.D.) degree. This program utilizes courses and faculty partners from Anthropology, Biology, Chemistry & Biochemistry, Engineering, Environmental Science and Geology.

Graduate applicants to the program will be required to submit a letter of intent, a supporting letter from a TIE<sup>3</sup>S Fellow mentor, along with standard GRE scores (taken within the last five years), transcripts, and if necessary TOEFL, IELTS, or Duolingo scores. The letter of intent should indicate a research plan that has been discussed with a potential (TIE<sup>3</sup>S) Fellow mentor. Applicants are expected to have superior GRE scores and grade point averages. For non-native English speakers, recommended TOEFL scores will be 600 for the "paper" exam and 250 for the "computer" exam.

Students accepted into the program are expected to enter with a master's degree in Biology, Ecology, Geology, Physical Science, Environmental Science, Chemistry or a related discipline. Candidates with a bachelor's degree may be accepted provided they demonstrate through their application exceptional qualities including research experience. A graduate course in basic statistics is also required. Most students are expected to have at least one published work related to their previous research experience. Appropriate background courses or their equivalents for applicants should be in one of the following areas:

- Life Sciences. 24 semester hours in life sciences including courses in ecology, genetics, physiology (animal or plant), and evolutionary biology (e.g., taxonomy or systematics), or
- Physical Sciences. 24 semester hours including courses in geology, earth science, atmospheric science, hydrology, and at least 3 hours in chemistry or biochemistry, or
- Environmental Science. 24 semester hours of science or engineering, including a minimum of 8 hours in advanced chemistry and physical sciences, engineering or environmental science, or
- Chemistry. 24 semester hours including courses in physical chemistry and instrumental analysis, and at least 6 additional hours of course work in one of the three areas listed above.

The degree program has two components:

- 1. the course work component, and
- 2. the research component.

The course work component requires a qualifying examination early in the Ph.D. program and not less than 60 semester hours, which

includes credit for course work beyond the bachelor's degree and approved by the student's committee and the Baylor University Graduate School. Course credit from the master's degree may be applied for by petition to the Graduate School with a maximum of 24 hours allowable. After successfully completing all required course work, the student will concentrate on the remaining research planning leading to the preliminary examination, the doctoral research, dissertation preparation, and the final defense. The dissertation committee administers the preliminary (comprehensive) exam and evaluates the proposal and the student's preparedness in the area of his/her dissertation and related fields. The preliminary exam will include a written and an oral portion. The written exam will assess the student's knowledge of foundations of general areas of Biotic Systems, Physical Systems, and Quantitative Analysis. The oral portion will test the student's knowledge of their proposal background and methodology as an assessment of the student's preparation to move on to the dissertation phase of their program. Admission to doctoral candidacy requires successful completion of the preliminary exam coupled with acceptance of the written dissertation proposal by the doctoral committee.

Specific requirements include a minimum of 60 semester hour credits of approved course work and research credit hours beyond the bachelor's degree, at least 21 of which must be in regular graduate-level foundation courses as required for the Ph.D. by the Baylor University Graduate Catalog. A master's degree from an accredited university may be accepted for up to 24 semester hour credits upon approval of the faculty mentor and Baylor Graduate School. The minimum 60 semester hours required beyond the bachelor's degree may be expanded depending on the student's research concentration, background and recommendation of the graduate committee. Students entering the program with graduate-level work or a master's degree in a related scientific discipline may apply up to 30 semester hours of approved courses toward the Ph.D.

The dissertation will be composed of three published (or submitted) written papers. A student may proceed to the defense with one published work, with two additional submitted manuscripts in national or international journals pertinent to the field of study.

The TIE<sup>3</sup>S doctoral program does not have a foreign language requirement for the Ph.D. degree; however, students are strongly encouraged to become competent in technological interface skills including computer programming, instrumentation, or analytical software such as SAS, Mathematika or IDL. At least half of the hours of course work (exclusive of dissertation) must be at the 5000/6000 level. The remaining hours will normally come from the dissertation (minimum of 12 hours) and its associated research, but a portion may be devoted to additional course and laboratory work at the discretion of the student's dissertation committee.

A core curriculum is required and available from the Biology, Chemistry & Biochemistry, Environmental Science, Geology, and Statistics departments. All Ph.D. students must fulfill the core curriculum, which consists of foundational course work associated with the holistic earth system curricula and philosophy of the program. These courses exclude research specialization that will depend on mentor expertise and consultation.

Individual courses cannot fulfill more than one core requirement, but may count toward requirements for specialization areas. Students who have completed equivalent courses in a master's program may request waivers from the Graduate Program Director and Graduate Committee. These foundational competencies are designed to give the student a common base for scientific research in the TIE<sup>3</sup>S program. A plan for completing

the foundation courses is to be prepared by the student and their advisor, and then submitted to the student's graduate committee for approval by the start of the student's second semester. Courses taken to fulfill these requirements must be taken for credit and listed on the student's program of study. An overall GPA of 3.0 must be maintained in these courses. The following are acceptable courses to satisfy competency requirement for these foundational areas:

Hours

Title

Code

Code	litle	Hours
Advanced Chemistry	y Foundation Course	
Select 3-4 course ho	ours from the following:	3-4
CHE 4316	Instrumental Analysis	
CHE 4341	General Biochemistry	
CHE 5314	Separation Science	
ENV 5387	Advanced Environmental Chemistry	
GEO 5320	Geochemistry	
GEO 5321	Isotope Geochemistry	
ENV 4304	Aquatic Chemistry	
ENV 5303	Environmental Chemical Analysis	
ENV 5370	Advanced Environmental Toxicology and Chemistry	
ENV 5387	Advanced Environmental Chemistry	
ENV 5393	Atmospheric Chemistry and Physics	
Numerical Methods	of Analysis Foundation Course	
Select 3-4 course ho	ours from the following:	3-4
BIO 5320	Ecological Biophysics	
BIO 5340	Ecosystem Process Modeling	
BIO 5413	Advanced Ecological Data Analysis	
GEO 4386	Remote Sensing	
GEO 5348	Applied Ground Water Modeling	
ENV 5391	Measurement Methods and Data Analysis for Air Pollution Research	
STA 5300	Statistical Methods	
STA 5305	Advanced Experimental Design	
Physical Systems F	oundation Course	
Select 3-4 course ho	ours from the following:	3-4
GEO 4341	Introduction to Hydrology	
GEO 4346	Hydrogeology	
GEO 4459	Engineering Geology	
GEO 5308	Advanced Studies in Earth Science	
GEO 5340	Paleopedology	
GEO 5342	Micromorphology of Soils and Paleosols	
GEO 5347	Advanced Hydrogeology	
GEO 5389	Earth System Science	
Ecological Foundati	on Course	
Select 3-4 course ho	ours from the following:	3-4
BIO 4310	Biogeography	
BIO 4405	Limnology	
BIO 5300	Advanced Studies in Biology	
BIO/ENV 5330	Conservation Biology	
BIO/ENV 5360	Biological Invasions: Ecology and Management	
BIO 5377	Landscape Ecology	
BIO 5404	Wetland Ecology and Management	

BIO 5405	Stream Ecology
ENV 4450	Applied Forest Ecology
ENV 5342	Ecological Risk Assessment
ENV 5379	Ecosystem Management

Other course requirements include Seminar Courses (2 course hours) such as EEES 6100 Seminar in Ecology, Earth, and Environmental Sciences. Six more credits in upper-division earth science, ecology, environmental science, and chemistry courses most related to the intended research interest. A maximum of 9 hours of Special Problems (5V90 from participating departments) can be applied to degree requirements. The number of upper-division credits required varies with the research program recommended by the student's committee. Completion of any courses listed as prerequisites for the courses listed above is also generally required. Finally, twelve or more credits in dissertation research credit as currently offered as 6V99 courses TIE<sup>3</sup>S.

#### Existing Courses Applicable to the Ph.D. Degree Program:

Tiel.

### **Biology**

Code	Title	Hours
BIO 4405	Limnology	4
BIO 4406	Aquatic Biology	4
BIO 4418	Biology of Wetland and Aquatic Vascular Plants	4
BIO 4422	Ichthyology	4
BIO 4310	Biogeography	3
BIO 4306	Molecular Genetics and Genomics	3
BIO 4307	Biochemistry and Physiology of the Cell	3
BIO 4381	Restoration Ecology	3
BIO 5201	Research Methods in Biology	2
BIO 5300	Advanced Studies in Biology	3
BIO 5303	Behavioral Ecology	3
BIO 5306	Molecular Evolution	3
BIO 5310	Advanced Microbiology	3
BIO 5320	Ecological Biophysics	3
BIO 5330	Conservation Biology	3
BIO 5340	Ecosystem Process Modeling	3
BIO 5360	Biological Invasions: Ecology and Management	3
BIO 5377	Landscape Ecology	3
BIO 5380	Integrative Ecophysiology	3
BIO 5400	Population Genetics	4
BIO 5401	Microbial Ecology	4
BIO 5402	Invertebrate Zoology	4
BIO 5403	Population Ecology	4
BIO 5404	Wetland Ecology and Management	4
BIO 5405	Stream Ecology	4
BIO 5407	Bioenergetics	4
BIO 5412	Biometrics	4
BIO 5413	Advanced Ecological Data Analysis	4
BIO 5425	Molecular Ecology	4

# **Chemistry**

Code	Title	Hours
CHE 4316	Instrumental Analysis	3
CHE 4341	General Biochemistry	3
CHE 5314	Separation Science	3

# **Environmental Science**

Code	Title	Hours
ENV 4304	Aquatic Chemistry	3
ENV 4307	Environmental Law	3
ENV 4333	Coastal Zone Management	3
ENV 4344	Fundamentals of Toxicology	3
ENV 4365	The Environment and Energy	3
ENV 4375	Natural Landscape Evaluation and Planning	3
ENV 4349	Pollution Abatement and Prevention Systems	3
ENV 4355	Principles of Renewable Resource Management	3
ENV 4450	Applied Forest Ecology	4
ENV 4487	Advanced GIS Analysis	4
ENV 4393	Environmental Ethics	3
ENV 5303	Environmental Chemical Analysis	3
ENV 5310	Agricultural Ecology	3
ENV 5330	Conservation Biology	3
ENV 5342	Ecological Risk Assessment	3
ENV 5360	Biological Invasions: Ecology and Management	3
ENV 5368	Integrated Energy Resource Systems	3
ENV 5370	Advanced Environmental Toxicology and Chemistry	3
ENV 5373	Advanced Environmental Biotechnology	3
ENV 5376	Advanced Urban and Regional Comprehensive Environmental Planning	3
ENV 5379	Ecosystem Management	3
ENV 5387	Advanced Environmental Chemistry	3
ENV 5391	Measurement Methods and Data Analysis for Air Pollution Research	3
ENV 5393	Atmospheric Chemistry and Physics	3

# **Geology**

Code	Title	Hours
GEO 4312	Oceanography	3
GEO 4313	Astronomy	3
GEO 4314	Meteorology	3
GEO 4337	Paleoecology	3
GEO 4340	Geomorphology	3
GEO 4341	Introduction to Hydrology	3
GEO 4346	Hydrogeology	3
GEO 4339	Advanced Marine Field Studies	3
GEO 4459	Engineering Geology	4
GEO 4371	Wetlands	3
GEO 4373	Global Soil Systems	3

GEO 4375	Natural Landscape Evaluation and Planning	3
GEO 4485	Introduction to Geographic Information Systems	4
GEO 4386	Remote Sensing	3
GEO 4487	Advanced GIS Analysis	4
GEO 5308	Advanced Studies in Earth Science	3
GEO 5320	Geochemistry	3
GEO 5321	Isotope Geochemistry	3
GEO 5337	Advanced Studies in Remote Sensing Geomorphology	3
GEO 5340	Paleopedology	3
GEO 5342	Micromorphology of Soils and Paleosols	3
GEO 5347	Advanced Hydrogeology	3
GEO 5348	Applied Ground Water Modeling	3
GEO 5349	Urban Geology	3
GEO 5378	Advanced Studies in Hydrogeology	3
GEO 5388	Advanced Studies in Hydrology-Engineering Geology	3
GEO 5389	Earth System Science	3

### TIE 3S

Code	Title	Hours
EEES 6100	Seminar in Ecology, Earth, and Environmental Sciences	1
EEES 6V99	Dissertation in Ecology, Earth, and Environmental Sciences	1-3

## **School of Education**

Dean: Shanna Hagan-Burke

Graduate programs in the School of Education seek to prepare students for professional roles in teaching, administration, school psychology, quantitative methods, gifted and talented, special education, applied behavior analysis, learning and development, and related areas. Each program emphasizes the development of an eclectic understanding of the educational process as well as a competency in a specific area. The balance between theory/research and practice leads to the development of a professional who can adapt to a variety of educational situations and effectively implement educational programs. Students will demonstrate not only high levels of academic ability but outstanding interpersonal skills, motivation, and dedication to the profession. Graduate degrees in the School of Education are offered through the School and the Departments of Curriculum and Instruction, Educational Leadership, and Educational Psychology.

The School of Education offers the

· Master of Arts in Teaching (M.A.T.).

The Department of Curriculum and Instruction offers the

- · Master of Arts (M.A.),
- · Master of Science in Education (M.S.Ed.),
- Doctor of Education (Ed.D.),
- · Doctor of Philosophy (Ph.D.),
- · Joint Master of Arts (M.A.) and Master of Divinity (M.Div.), and the

 Joint Master of Science in Education (M.S.Ed.) and Master of Divinity (M.Div.)

The Department of Educational Leadership offers the

- · Master of Science in Education (M.S.Ed.),
- the Doctor of Education (Ed.D.), and
- · the Doctor of Philosophy (Ph.D.).

The Department of Educational Psychology offers the

- · Master of Arts (M.A.),
- · the Master of Science in Education (M.S.Ed.),
- · the Education Specialist (Ed.S.), and
- the Doctor of Philosophy (Ph.D.).

### **Admission**

The general procedures for admission to graduate study are listed earlier in the Graduate Catalog. All applications for admission must be processed through the Graduate School and then forwarded to the appropriate department's Graduate Program Director in the School of Education for recommendation. The "major" on the application should list the department or certification area in which the student intends to study.

Applicants should consult the individual department sections in the School of Education for specific test requirements. The GRE General Test (or, where allowed by the department, GMAT) is required of most students applying for admission to any level of graduate study, including non-degree, in the School of Education. Scores must be received before any action will be taken on the application and before any coursework may be taken. The GRE is not required for admission into the Doctor of Education (Ed.D.) in Learning and Organizational Change in the department of Curriculum and Instruction.

GPAs that are predictive of success are required for full admission without restrictions on the student's graduate work. In addition to these academic variables, students are evaluated on the basis of their writing skills and their background strengths, including the strength of their undergraduate institution and academic program, the diversity of their undergraduate experiences, and their professional experiences. A student's application may be strengthened by his/her professional development, diversity, and career focus. Specific criteria have been established to evaluate each of these categories, and an admissions committee makes the final decision concerning a student's admission.

# Master of Arts and Master of Science in Education

The Master of Arts in Education requires a total of 30-36 semester hours, including the satisfactory completion of a thesis.

The Master of Science in Education requires the completion of a minimum of thirty-six semester hours of graduate work, twenty-one of which must be from a single department or in a specific certification program, and eighteen of which must be 5000 level or above. Departments may require more than the minimum, particularly for degrees related to certification or licensure. Please see the section of the catalog that describes departmental programs. The Department of Curriculum and Instruction offers the following programs: Specializations in informal education, instructional technology, language and literacy, math education, media literacy, science education, social studies education, urban education, and other content teaching fields. The

Department of Educational Psychology offers the following programs: master of arts and master of science in education with specializations in assessment, research and statistics, learning and development, special education, gifted and talented, applied behavior analysis, and quantitative methods.

### Master of Arts in Teaching

The Master of Arts in Teaching requires the completion of thirty-six semester hours of graduate work leading to teacher certification. Certification and the Master of Arts in Teaching degree may be pursued concurrently. Please see the section of the catalog that describes M.A.T. certification program options. The M.A.T. may be pursued as a joint degree program, with undergraduate seniors completing graduate-level work as part of their undergraduate degree program, if approved by their home department.

# Master of Arts/Master of Divinity Master of Science in Education/Master of Divinity

The Master of Arts/Master of Divinity and the Master of Science in Education/Master of Divinity joint degrees link the faculties, resources, and education of two of Baylor's premier schools, School of Education and George W. Truett Theological Seminary. The program offers students an education that prepares them for careers in local congregations, in denominational leadership, in private school teaching and administration, or in some combination of these.

### **Education Specialist**

The Educational Specialist degree (Ed.S.) is for students seeking a degree in school psychology. The basis of this degree is for students to study no less than 60 hours of graduate coursework in school psychology. The degree requires a full-year (minimum of 1200 hours) internship that aligns with the accrediting organizations in school psychology (i.e., National Association of School Psychologist, or the American Psychological Association). At the termination of the period of study, students must pass a comprehensive special field examination. Upon completion of the program, which includes passing the examination, the faculty of the School of Education will recommend that the University present the students with an Educational Specialist degree.

### **Doctor of Education**

Admission requirements for the Doctor of Education Degree (Ed.D.) in the Departments of Curriculum and Instruction and Educational Leadership are outlined earlier in the Graduate Catalog.

Delivered by the Department of Curriculum & Instruction, the Doctor of Education Degree (Ed.D.) in Learning and Organizational Change prepares students to apply essential principles of education to manage the dynamics of organizational change. The program is designed for experienced educators and other professionals in learning and development roles interested in leading and managing positive change in school systems, corporations, governmental or non-governmental agencies, and community programs. The Ed.D. in Learning and Organizational Change is a 54-credit program that can be completed in 36 months or on a flexible schedule. The program consists of two oncampus immersion experiences and an innovative Problem of Practice dissertation.

Students may enroll in the Department of Educational Leadership upon completion of admission requirements and acceptance into the K-12 Education Leadership program. Preparation for Texas Superintendent Certification is part of the program; however, the primary intent of the degree is to prepare professionals with in depth understanding of leadership skills and knowledge important in leadership functions. Candidates are expected to learn to effectively frame and develop solution options for challenging complex problems of practice facing executive leadership in K-12 education. A minimum of sixty-five semester hours beyond the master's degree is required for completion of the program. The supervisory committee based upon the student's prior preparation and the student's performance on written and oral examinations will determine the total number of hours required above the minimum. At least thirty-three hours of work must be completed in the educational leadership-management core, twelve hours in disciplined inquiry, three hours in persuasive communication, and eleven hours in clinical experience and six hours in dissertation. Students may wish to also pursue an additional emphasis in a special 12-hour professional specialty/cognate area outside of K-12 leadership, with the approval of the committee, to support their major work.

### **Doctor of Philosophy**

Students pursuing a Ph.D. in Educational Psychology are those interested in becoming instructors in higher education settings and competent researchers. Students pursuing a Ph.D. in School Psychology are those interested in becoming applied psychologists and competent scientistpractitioners who pursue academic careers or roles in schools, clinics, or other health service settings. Students must meet the admission requirements outlined earlier in the Graduate Catalog and must also meet the Department of Educational Psychology entrance requirements. These requirements for the Doctor of Philosophy (Ph.D.) are outlined in more detail within the program descriptions in the Department of Educational Psychology. Students pursuing a Ph.D. in Curriculum and Teaching are those interested in becoming teachers, researchers, and leaders in the theories and practices that comprise the disciplines and sub-disciplines of curriculum and pedagogy. Students must meet the admission requirements outlined in more detail in the Department of Curriculum and Instruction section.

- · Master of Arts in Teaching with Teaching Certification (p. 88)
  - Twice Exceptionalities Certification M.A.T. Degree Plan (p. 89)
  - · Special Education Certification M.A.T. Degree Plan (p. 89)
  - Elementary (EC-6) Education Certification M.A.T. Degree Plan (p. 89)
  - Middle Grades Education Certification M.A.T. Degree Plan (p. 89)
  - Secondary Education Certification M.A.T. Degree Plan (p. 89)
- · Curriculum and Instruction (p. 90)
  - · Master of Arts, M.A. (p. 90)
  - Master of Science in Education, M.S.Ed. (p. 91)
  - Master of Arts/Master of Divinity Master of Science in Education/Master of Divinity (p. 91)
  - Doctor of Education, Ed.D. (p. 92)
  - · Curriculum and Teaching, Ph.D. (p. 93)
- · Educational Leadership (p. 94)
  - School Leadership and Principal Certification Preparation, M.A. (p. 94)
  - · Higher Education & Student Affairs (HESA), M.S.Ed. (p. 95)
  - · Combined Baylor Masters/Ph.D. Student Pathway (p. 96)

- · Sport Management (SPM), M.S.Ed. (p. 97)
- · K-12 Educational Leadership, Ed.D. (p. 98)
- · Higher Education Studies & Leadership, Ph.D. (p. 99)
- · Educational Psychology (p. 100)
  - · Master of Arts in Educational Psychology, M.A. (p. 101)
  - · Master of Science in Education, M.S.Ed. (p. 102)
  - · Master of Science in School Psychology, M.S. (p. 103)
  - Education Specialist in School Psychology, Ed.S. (p. 104)
  - · Doctor of Philosophy in Educational Psychology, Ph.D. (p. 105)
  - · Doctor of Philosophy in School Psychology, Ph.D. (p. 107)

# Master of Arts in Teaching with Teaching Certification

M.A.T. Graduate Program Director: Suzanne M. Nesmith

One graduate degree program is offered through the School of Education: Master of Arts in Teaching (M.A.T.).

The Master of Arts in Teaching (M.A.T.) is a School-wide residential program offering teacher certification. Based on Baylor's national award-winning teacher-education model, the M.A.T. provides thorough preparation through a program rich in faculty-guided field-based experiences.

Baylor undergraduates may pursue the M.A.T. as a joint degree program, with Baylor seniors taking up to 12 hours of graduate-level work as part of their undergraduate degree program, if approved by their home department. Students much first be admitted to the Graduate School and the M.A.T. program. Upon completion of the M.A.T., students will receive the bachelor's degree and M.A.T. simultaneously. If taking full advantage of the option, students could graduate within 12 months of their originally scheduled baccalaureate graduation. The M.A.T. is also available to graduates of Baylor and other universities as a standalone post-baccalaureate master's program offering initial and additional teacher certification.

#### Admission

To be fully admitted to the program, applicants must be accepted both by the Baylor Graduate School and the School of Education as an M.A.T. candidate. A passing score on the diagnostic TExES content exam (state certification exam) is also required for full admission as a candidate in the School of Education M.A.T. Educator Preparation Program.

Admission to the program is competitive and based on the following criteria:

- 1. Completed applications (Graduate School and School of Education)
- 2. Overall GPA of 2.75
- 3. Content Area GPA of 2.75
- Completed content-specific coursework for middle and secondary education certifications
  - a. 24 hours in content field with at least 12 of these hours at the upper level (junior or senior level coursework)
- 5. Interview
- 6. Writing sample (personal statement)
- Passing score on diagnostic TEXES (Texas Examinations of Educator Standards) content exam in teaching area
  - a. For those seeking middle and secondary education certification, you must complete and earn a passing score on the diagnostic

- exam in your designated teaching area prior to admission to the  ${\sf M.A.T.}$  program.
- b. For those seeking EC-6 Elementary certification, Twice
   Exceptionalities certification, or All Level Special Education
   certification, you must complete the diagnostic exam for all
   5 core subject exams and earn a passing score on at least 3
   of the 5 exams, with one of the passing scores being on the
   mathematics core subject exam. Additionally, all scores will be
   examined to determine the need for additional review, preparation,
   and retesting prior to admission to the M.A.T. program.

### **Certificate and Endorsement Programs**

Certification and the Master of Arts in Teaching degree may be pursued concurrently.

Certification is through the State Board for Educator Certification and the awarding of a graduate degree from Baylor University does not mean the individual has been certified. For further information on certification, please contact the School of Education or the State Board for Educator Certification.

## **Certificate Options**

- Twice Exceptionalities (All-Level Special Education and Gifted-Talented Supplemental certifications)
- Special Education (All-Level Special Education certification)
- Elementary (EC-6) Education (Early Childhood Grade 6 General Education certification)
- Middle Grades Education (Grades 4-8 content-specific certification)
- Secondary Education (Grades 7-12 content-specific certification / 6-12 for physical science certification)

# **Content Areas (Middle and Secondary Education)**

- Art
- · Business and Finance
- English (English Language Arts and Reading)
- French
- · History
- · Life Science
- Mathematics
- · Physical Science
- · Physics/Mathematics
- · Science
- · Social Studies
- Spanish
- Twice Exceptionalities Certification M.A.T. Degree Plan (p. 89)
- Special Education Certification M.A.T. Degree Plan (p. 89)
- Elementary (EC-6) Education Certification M.A.T. Degree Plan (p. 89)
- Middle Grades Education Certification M.A.T. Degree Plan (p. 89)
- · Secondary Education Certification M.A.T. Degree Plan (p. 89)

# Twice Exceptionalities Certification - M.A.T. Degree Plan

(All-Level Special Education and Gifted-Talented Supplemental certifications)

Only available as an initial certification.

Code	Title	Hours
Required Courses for	MAT	
Complete required co	ourses for MAT	36
Required Courses for	Certification Program	
EDP 5332	Human Growth and Development	3
EDP 5366	Psychology of Exceptional Children	3
EDU 5377	Applied Behavior Analysis	3
EDP 5361	Challenging Behavior and Developmental Disabilities	3
EDU 5650	Teaching Associate: Special Ed and Twice Exceptionalities	6
EDU 5371	Assessment of Students with Exceptionalities	3
EDU 5652	Internship: Special Education with Gifted Education	6
EDU 5354	Curriculum Differentiation	3
EDU 5374	Literacy for Learners with Exceptionalities	3
Total Hours		69

# Special Education Certification - M.A.T. Degree Plan

(All-Level Special Education certification)

Only available as an initial certification.

Code	Title	Hours
Required Courses for	MAT	
Complete required co	ourses for MAT	36
Required Courses for	Certification Program	
EDP 5332	Human Growth and Development	3
EDU 5354	Curriculum Differentiation	3
EDP 5366	Psychology of Exceptional Children	3
EDP 5361	Challenging Behavior and Developmental Disabilities	3
EDU 5371	Assessment of Students with Exceptionalities	3
EDU 5374	Literacy for Learners with Exceptionalities	3
EDU 5377	Applied Behavior Analysis	3
EDP 5379	(EDP 5379:: Education of Students with Mod/Severe)	3
EDU 5650	Teaching Associate: Special Ed and Twice Exceptionalities	6
EDP 5662	Internship Special Education	6
Total Hours		72

# Elementary (EC-6) Education Certification - M.A.T. Degree Plan

(Early Childhood through Grade 6 General Education certification)

Code	Title	Hours
Required Courses for	r MAT	
Complete required co	ourses for MAT	36
Required Courses for	r Certification Program	
EDC 5392	Issues in Diversity	3
EDC 5332	Mathematics in the Elementary Grades	3
EDC 5360	Advanced Elementary Science Curriculum	3
EDC 5300	Advanced Elementary Social Studies Methods	3
EDC 5304	Reading Intervention for Students	3
TED 4312	Methods of Teaching English as a Second Language	3
EDC 5690	Teaching Associate EC-6	6
EDC 5699	Graduate Teaching Internship	6
EDC 5318	Elementary Language Arts	3
EDC x3xx	Elective	3
Total Hours		72

# Middle Grades Education Certification - M.A.T. Degree Plan

(Grades 4 - 8 content-specific certification)

Code	Title	Hours
Required Courses fo	r MAT	
Complete required o	ourses for MAT	36
Required Courses for	r Certification Program	
EDC 5392	Issues in Diversity	3
EDC 5303	Models of Teaching and Learning	3
EDC 5370	Applications of Technology to Teaching and Learning	3
TED 4312	Methods of Teaching English as a Second Language	3
Select one course fr	om the following	3
TED 43xx	Content Curriculum	
EDC x3xx	Elective	
EDC 5691	Teaching Associate Middle Grades	6
EDC 5699	Graduate Teaching Internship	6
EDC x3xx	Elective	3
EDC x3xx	Elective	3
EDC x3xx	Elective	3
Total Hours		72

# Secondary Education Certification - M.A.T. Degree Plan

(Grades 7 - 12 content-specific certification / 6 - 12 for physical science certification)

**Total Hours** 

Code	Title	Hours
Required Courses for	MAT	
Complete required co	ourses for MAT	36
Required Courses for	Certification Program	
EDC 5392	Issues in Diversity	3
EDC 5303	Models of Teaching and Learning	3
EDC 5317	Special Techniques in Secondary Schools	3
TED 4312	Methods of Teaching English as a Second Language	3
Select one of the foll	owing:	3
TED 43xx	Content Curriculum	
EDC 53xx	Content Curriculum	
EDC 5363	Observation and Participation in Middle and Secondary Schools	3
EDC 5390	Seminar. Education	3
EDC 5699	Graduate Teaching Internship	6
EDC x3xx	Elective	3
EDC x3xx	Elective	3
EDC x3xx	Elective	3

# Curriculum and Instruction Department of Curriculum and Instruction

Chairperson: Trena Wilkerson Graduate Program Director: Lakia M. Scott Graduate Program Director, Ed.D.: Laila Sanguras

Four graduate degree programs are offered through the Department of Curriculum and Instruction: Master of Arts (M.A.), Master of Science in Education (M.S.Ed.) Doctor of Education (Ed.D.), and Doctor of Philosophy (Ph.D.). Two joint degrees, the M.A/M.Div. and the M.S.Ed./M.Div., are offered through an agreement with the George W. Truett Theological Seminary.

Graduates from the Baylor University School of Education with master's or doctoral degrees in Curriculum and Instruction are found throughout the world, occupying a variety of unique positions. Their successes are due in large measure to the quality of the program they completed at Baylor. These graduates reflect the mission of the School of Education, which is to prepare educators for leadership, research, instructional and other professional roles to meet the demands of a dynamic and culturally diverse world.

#### **Goals of the Master's Programs**

Students completing the master's in Curriculum and Instruction will demonstrate an understanding of:

- 1. The philosophical and historical foundations of curriculum,
- 2. Research methodologies in education,
- 3. Contemporary instructional strategies,
- Issues and trends in curriculum and instruction, including issues of social justice in education, and
- 5. The relationship between curriculum, culture and diversity.

### **Goals of the Doctoral of Philosophy Program**

Students completing the Doctor of Philosophy in Curriculum and Instruction will:

- Demonstrate an in-depth understanding of the philosophical, sociocultural, and historical foundations of curriculum and teaching from a global perspective,
- Acquire significant knowledge of seminal and contemporary pedagogical and curricular theories and practices in order to impact the initial preparation and continued professional development of educators at all levels.
- Critically evaluate quantitative, qualitative, and mixed methods research literature in the disciplines and sub-disciplines of curriculum and pedagogy,
- Develop a depth and breadth of research knowledge and skills in order to design, conduct, and disseminate original research that impacts the theories and practices in education in order to address complex issues with innovation and creativity, and
- Apply the knowledge, skills, and values required to become the next generation of scholars guiding the preparation of individuals for transformative global leadership in curriculum, teaching and learning.

### **Goals of the Doctor of Education Program**

The emerging leaders who are engaged in the Ed.D. in Learning and Organizational Change program require a dynamic curriculum to equip them fully with the knowledge, mindsets, networks, skills, and practices for the sort of equilibrium-shifting work they strive to do, cultivating organizational change in their own professional context. Graduates of this program are emerging leaders who will:

- 1. Utilize a professional knowledge base that integrates practical and research-based knowledge to cultivate systemic change,
- 2. Address problems of practice by exploring multiple perspectives that lead to the development of meaningful and creative solutions, and
- Build professional partnerships and develop local, national, and /or global networks through collaboration and communication.
- · Master of Arts, M.A. (p. 90)
- · Master of Science in Education, M.S.Ed. (p. 91)
- Master of Arts/Master of Divinity Master of Science in Education/ Master of Divinity (p. 91)
- · Doctor of Education, Ed.D. (p. 92)
- · Curriculum and Teaching, Ph.D. (p. 93)

## Master of Arts, M.A.

The Master of Arts degree is designed to develop a scholarly understanding of educational thought and practice. It seeks to prepare students for continued graduate study in a research program.

The Master of Arts (M.A.) degree requires a total of thirty-three semester hours, including the completion and defense of a thesis. The degree program constitutes a twenty-one hour major in Curriculum and Instruction and a twelve-hour cognate specialization approved by the Curriculum and Instruction Graduate Faculty Committee. The cognate may be completed in graduate programs offered by the School of Education (such as Educational Studies, Instructional Technology, Language and Literacy, Social Studies Education, Urban Education, Informal Education, Media Literacy, Science Education, or Mathematics Education) or by other Baylor University academic units.

### **Admission (M.A.)**

The general requirements for admission to the Master of Arts degree in the Department of Curriculum and Instruction follow the requirements outlined earlier in this catalog for the Master's degree. All applicants must submit an official transcript to indicate completion of a baccalaureate degree from a regionally accredited institution, scores from within the last five years for the General Test of the GRE, a curriculum vita/resume, a professional goals statement, and three letters of recommendation. Admission is competitive and based on a review of the application materials. The Department of Curriculum and Instruction Graduate Program Director and the Graduate Faculty Committee conduct the review. The review may include an on-campus interview and/or an on-site writing sample.

## M.A. Degree Plan

 $\mbox{M.A.}$  students follow the M.S.Ed. Degree plan (p. 91) with three exceptions:

- 1. 15 hours rather than 18 hours in the Curriculum and Instruction Core,
- 2. the required cognate is 12 hours, and
- 3. the six hours of electives are dedicated to thesis preparation and defense.

# Master of Science in Education, M.S.Ed.

The Master of Science in Education (M.S.Ed.) is a professional degree designed to improve educational practice and to provide preparation for continued graduate study in education.

The degree requires the completion of a minimum of thirty-six semester hours in graduate work with an eighteen-hour Department of Curriculum and Instruction core, a fifteen-hour cognate specialization, and three hours of approved electives. The cognate may be used to develop a specialty area related to education or to improve preparation in a teaching field. With approval, up to fifteen hours may be taken outside the School of Education. Specialty areas offered in the Department of Curriculum and Instruction, include, but are not limited to: Educational Studies, Instructional Technology, Language and Literacy, Social Studies Education, Urban Education, Informal Education, Media Literacy, Science Education, and Mathematics Education.

A written Comprehensive Examination upon program completion is required for the Master's degree.

## Admission (M.S.Ed.)

The general requirements for admission to the Master of Science in Education degree in curriculum and instruction follow the requirements outlined earlier in this catalog for the Master's degree. All applicants must submit an official transcript to indicate completion of a baccalaureate degree from a regionally accredited institution, recent scores from the General Test of the GRE taken within the last five years, a curriculum vita/resume, a professional goals statement, and three letters of recommendation. Admission is competitive and based on a review of the application materials. The Department of Curriculum and Instruction Graduate Program Director and the Graduate Faculty Committee conduct the review. The review may include an on-campus interview and/or an onsite writing sample.

### M.S.Ed. Degree Plan

Code	Title	Hours
Required Courses		
EDC 5303	Models of Teaching and Learning	3
EDC 5321	Contemporary Curriculum-Designing and Implementing	3
EDC 5370	Applications of Technology to Teaching and Learning	3
EDC 5348	Issues in Curriculum Development	3
EDC 5391	Social Foundations of Education	3
EDC 5335	Research in Algebraic Thinking	3
Electives		
An approved elective	at the 5000-level	3
Cognate Area		
These courses are de	termined during advisement.	15
Total Hours		36

# Master of Arts/Master of Divinity - Master of Science in Education/ Master of Divinity

The Master of Arts/Master of Divinity and the Master of Science in Education/Master of Divinity joint degrees link the faculties, resources, and education of two of Baylor's premier schools, School of Education and George W. Truett Theological Seminary. The program offers students an education that prepares them for careers in local congregations, in denominational leadership, in private school teaching and administration, or in some combination of these. The M.S.Ed. is a 36 hour program in Department of Curriculum and Instruction with a 15 hour cognate and the M.A. is a 33 hour program with a 12 hour cognate and a thesis.

### M.A./ M.Div. Degree Plan

Code	Title	Hours
Required Course	es	
EDC 5303	Models of Teaching and Learning	3
EDC 5321	Contemporary Curriculum-Designing and Implementing	3
EDC 5370	Applications of Technology to Teaching and Learning	3
EDC 5348	Issues in Curriculum Development	3
EDC 5391	Social Foundations of Education	3
EDP 5335	Research in Education (or other approved courses)	3
Master's Thesis		
EDC 5V99	Thesis	6
Cognate Area		
Seminary course	es or approved EDC courses	12
Total Hours		36

## M.S.Ed. / M.Div. Degree Plan

Code	Title	Hours
<b>Required Courses</b>		
EDC 5303	Models of Teaching and Learning	3

Total Hours		36
Seminary courses o	r approved EDC courses	15
Cognate Area		
EDC Course or other	approved graduate course at the 5000-level	3
Electives		
EDC 5335	Research in Algebraic Thinking	3
EDC 5391	Social Foundations of Education	3
EDC 5348	Issues in Curriculum Development	3
EDC 5370	Applications of Technology to Teaching and Learning	3
EDC 5321	Contemporary Curriculum-Designing and Implementing	3

# **Doctor of Education, Ed.D.**

Organizations evolve at the hands of motivated leaders who possess the skills to impart systemic change, whether those systems are present in schools and universities, government or private corporations, or nonprofit organizations. Through the Ed.D. degree in Learning and Organizational Change, students learn to examine educational practices in all settings by taking both a micro and macro view of learning. Graduates emerge prepared to address cross-functional challenges, influence systemic growth opportunities, and foster effective learning environments based on data-driven processes. Graduates of the Ed.D. program often pursue careers in leadership roles such as Education-focused entrepreneurs, Coordinators of learning and development, Educational consultants, Adult learning facilitator, Curriculum developers, Directors of human resources, Chief learning officers, or K-12 school system administrators.

The Ed.D. in Learning and Organizational Change is a 54-credit program that can be completed in 36 months or on a flexible schedule and is offered in an online format. The program consists of two on-campus immersion experiences that bring students together with peers and professors at Baylor University. The immersion experience, held twice during the program, allows participants to apply new skills and creatively solve problems collaboratively. The organization of a Problem of Practice dissertation provides students with the opportunity to engage in research applicable to their own professional experiences, preparing them to implement meaningful learning and organizational change in those professional settings.

This program emphasizes the development of a broad understanding of the educational process as well as building a skill set that can be adapted to organizational change. Courses take a practitioner-oriented approach to shaping transformative leaders with expertise in the fields of curriculum, teaching and learning, and organizational change. Through this curriculum, students in the Ed.D. in Learning and Organizational Change will develop a multitude of skills that can be applied across professional settings. Upon completion, students will be prepared to demonstrate leadership in areas such as: curriculum design and instruction, dynamics of organizational change, contextual learning and design, program assessment and evaluation, professional development, research design evaluation, assessment, and measurement.

### Admission (Ed.D.)

Applicants to the Ed.D. in Learning and Organizational Change program must hold a master's degree with a GPA that demonstrates strong academic success, which is 3.0 or higher, and at least two years of professional experience. The online Ed.D. program starts three times per year — in January, May, and August. The admissions team accepts and

reviews applications year-round on a rolling basis. Successful applicants possess backgrounds that demonstrate an ability to excel in a doctoral program and a strong desire to have a positive impact in their field. GRE test scores are not required to apply to the Ed.D. in Learning and Organizational Change program.

All applicants must submit the online application, a resume/curriculum vitae, official transcripts of baccalaureate and master's degrees from accredited institutions, three letters of recommendation, a personal statement, and a video introduction.

### **Ed.D. Degree Plan**

Course	Title	Hours
Year 1		
Term 1		
EDC 5391	Social Foundations of Education	3
EDC 5392	Issues in Diversity	3
	Hours	6
Term 2		
EDP 5333	Psychology of Learning, Cognition, and Affect	3
EDC 6336	Qualitative Research and Data Analysis	3
	Hours	6
Term 3		
EDP 5334	Statistical Methods	3
EDP 5327	Educational Evaluation	3
	Hours	6
Year 2		
Term 4		
EDC 6359	Mixed Methods Research Design and Analysis	3
EDC 6360	Instructional Design	3
	Hours	6
Term 5		
EDC 6391	Problem of Practice Phase One	3
EDC 6392	Problem of Practice Phase Two	3
	Hours	6
Term 6		
EDC 5350	Teaching for Understanding	3
EDC 6361	Leadership and Organizational Change	3
	Hours	6
Year 3		
Term 7		
EDC 6362	Community Leadership & Collaboration	3
EDC 6376	Organizational Change in a Technological	3
or EDC 6368	Society or Future Trends in Leadership	
	Hours	6
Term 8		
EDC 6333	Problem of Practice Phase Three	3
EDC 6346	Mentoring and Supervision	3
	Hours	6
Term 9		
EDC 6365	Philosophy and Ethics in Leadership	3

15

EDC 6393	Problem of Practice Final Phase: Capstone	3
	Hours	6
	Total Hours	54

Students may take up to 12 hours of EDC 6V99 Dissertation (as needed).

## **Curriculum and Teaching, Ph.D.**

The Doctor of Philosophy in Curriculum & Teaching prepares graduate students for university-based leadership in the field of Curriculum and Teaching. The degree requires a minimum of seventy semester hours of graduate work arranged in five blocks of courses:

- I. Foundations of Education,
- II. Curriculum and Teaching,
- III. Research and Statistics,
- IV. Cognate, and
- V. Pro Seminar.

All Ph.D. in C&T students complete a fifteen-hour cognate that typically consists of course work from both inside and outside of the School of Education. Common cognate choices include mathematics, history, English, social studies, science, moral education, philosophy, literacy, curriculum theory, urban education, media literacy, informal education, and foundations of education. The degree plan may exceed 70 hours if students choose to complete additional courses.

### Admission (Ph.D.)

Admission to the Ph.D. program in Curriculum & Teaching is selective. Admission is based upon student vocational and professional goals as well as background, skill sets/aptitudes, and dispositional factors that indicate potential success in the program. The expectations are an expressed commitment for the university-based preparation of future teachers and other educators, promising academic aptitude, successful experience teaching in a K-12 setting, dispositions relevant to being an ethically-principled teacher educator/researcher, strong interpersonal and foundational communication skills (especially writing ability), and reasonable fit with available Baylor faculty resources. All applicants must submit scores from the General Test of GRE taken within the last five years, official transcripts of baccalaureate and master's degrees from regionally accredited institutions, a curriculum vita/resume, a professional goals statement, and three letters of recommendation. A writing sample may also be required after review of GRE writing score.

Admission is competitive and based on a review of the application materials. Preference in admissions is given to applicants who have prior K-12 teaching experience. The Department of Curriculum and Instruction Graduate Programs Director and the Graduate Faculty Committee conduct the review. The review may include an on-campus interview and/or an on-site writing sample.

Students are not admitted on probation to the Ph.D. program.

## Ph.D. Degree Plan

#### **Block I: Foundations of Education**

Total hours required: 15

Code	Title	Hours
Required Courses		
EDC 5392	Issues in Diversity	3

EDC 6330	The History of American Education <sup>1</sup>	3
EDC 6331	Sociopolitical Contexts of Schooling	3
Approved Researc	h Electives	
	above required hours, students choose six (6) red research electives such as:	6
EDC 6345	Christian Faith and Education	
EDC 6310	Seminar in Curriculum and Instruction (Philosophy of Education)	
EDC 6310	Seminar in Curriculum and Instruction <sup>2</sup>	
EDC 6390	Seminar. Education <sup>2</sup>	
	C 6000 other approved foundations of ses (See faculty advisor and GPD for approval.)	

Or equivalent completed graduate social foundations course. Approval by GPD for substitution.

### Block II: Curriculum and Teaching

Total hours required: 15

**Total Hours** 

Code	Title	Hours
Required Courses		
EDC 5350	Teaching for Understanding	3
EDC 6311	Fundamentals of Curriculum	3
EDC 6312	Curriculum Inquiry and Analysis	3
EDC 6355	Concepts of Teaching and Teacher Education <sup>1</sup>	3
Approved Research E	lectives	
	ve required hours, students choose three (3) research electives such as:	3
EDC 6246	Montaring and Cunantiaian	

EDC 6346	Mentoring and Supervision
EDC 6372	Teaching and Learning in Online Environments
EDC 6310	Seminar in Curriculum and Instruction <sup>2</sup>
EDC 6390	Seminar. Education <sup>2</sup>
	C 6000 other approved curriculum and ate course (See faculty advisor and GPD for

Total Hours 15

#### **Block III: Research Methodologies and Methods**

Total hours required: 24

Code	Title	Hours
Required Courses		
EDC/EDP 6336	Qualitative Research and Data Analysis	3
EDP 6360	Experimental Design I <sup>1</sup>	3
EDC 6V99	Dissertation (Minimum of 9 hours required)	9

May be taken three times for a maximum of 9 semester hours. Approval required from faculty advisor and GPD.

Or equivalent completed graduate curriculum and teaching course. Approval by GPD for substitution.

May be taken three times for a maximum of 9 semester hours. Approval required from faculty advisor and GPD.

#### **Approved Research Electives**

In addition to the above required hours, students choose nine (9) hours from approved research electives such as:		9
EDC/EDP 6339	Ethnographic Research Methods in Education	
EDC/EDP 6359	Mixed Methods Research Design and Analysis	
EDC 6358	Design Research	
EDP 6361	Experimental Design II	
EDP 6362	Applied Multiple Regression/Correlation Analysis in Education	
EDC/EDP 6370	Case Study Research Methods and Analysis in Education	
EDC 6390	Seminar. Education (Advanced Qualitative Research)	
EDC 5000 or EDC 6000 approved research methodology and		

Total Hours 24

methods graduate course (See faculty advisor and GPD for

### **Block IV: Cognate Area Options**

Total hours required: 15

approval.)

Specific required courses in cognate area will be selected by students and their faculty adviser. Courses may be taught by a variety of Baylor departments. Examples of cognates include:

- · Bilingual Education
- Curriculum Theory
- · English Education
- · Foundations of Education
- Informal Education
- · Instructional Technology
- · Literacy and Reading Education
- · Mathematics Education
- Media Literacy
- · Qualitative Research
- · Science Education
- · Social and Cultural Studies Education
- Urban Education

### **Block V: Professional Development Seminar**

Code Required Course	Title	Hours
EDC 6101	Professional Seminar	1
Total Hours		1

Total Hours Required: 70

Total number of hours in the program: 70

The Ph.D. Degree plan is often modified during advisement on an individual basis to meet each student's needs. The student's faculty

advisor with approval from the GPD may submit official course petition requests for review.

# **Educational Leadership Department of Educational Leadership**

Acting Chairperson: Jeffrey Petersen

#### Mission

The primary mission of the department is to prepare quality leadership for elementary and secondary schools, school districts, colleges, universities, and sport settings.

- School Leadership and Principal Certification Preparation, M.A. (p. 94)
- · Higher Education & Student Affairs (HESA), M.S.Ed. (p. 95)
- · Combined Baylor Masters/Ph.D. Student Pathway (p. 96)
- · Sport Management (SPM), M.S.Ed. (p. 97)
- K-12 Educational Leadership, Ed.D. (p. 98)
- · Higher Education Studies & Leadership, Ph.D. (p. 99)

# School Leadership and Principal Certification Preparation, M.A.

The hybrid, dual-track M.A. in School Leadership is for emerging public and independent school leaders across Texas and the United States. This 30-hour program will annually equip and connect up to 30 teachers and administrators to lead for flourishing. Grounded in Baylor's unambiguously Christian mission, leaders will attend to their own spiritual, mental, emotional, relational, professional, and physical well-being so that they will lead humbly, do justice, and catalyze growth in colleagues and students. All students will complete six core classes. Three classes are track-specific and will meet the needs of those seeking Texas principal certification, and those who do not require that certification because they are serving in independent schools or other states. The program will consist of three on-campus intensive courses, six virtual job-embedded courses, and a leadership internship that will allow leaders to remain in their current professional roles while completing this degree in 18 months. Students seeking Texas principal certification will submit all materials for certification throughout the course of the program. The degree will culminate in a capstone research course that will require leaders to apply improvement science tools to address adaptive problems of practice in the leaders' current school contexts.

## **Program Distinctives**

Grounded in Christ: The Baylor program is grounded in Christ, theory, and practice. As Christians, our work is animated by our faith, and we bring that mission to everything we do. We teach and lead for human flourishing because we believe our students and colleagues are made in the image of God. Our role as school leaders is to walk alongside others as we help them become all that God created them to be. Sound educational theory informs our inquiry and practice as we seek to serve others well and holistically.

**Diverse Schools:** M.A. students will learn about all school contexts as public and independent school leaders work alongside one another on common problems of practice. The diverse school contexts in which M.A.

<sup>&</sup>lt;sup>1</sup> Or equivalent completed graduate statistics course.

students serve will enrich the experience of the cohort model as we learn from the adaptive challenges and opportunities of particular contexts.

**Hybrid Classes:** The M.A. is structured to offer a hybrid form of learning that maximizes connection and convenience. Face-to-face on-campus intensives will build relationships that will flourish as we also work virtually from our own school contexts. The program will launch with a nine-day intensive residential experience. This will support the virtual collaboration that will occur through weekly synchronous online sessions and asynchronous work.

Capstone Research: The culminating experience for MA students will be a capstone research project. Students will conduct focused research on solving a problem of practice at their school. Using improvement science, leaders will identify problems of practice in their school context, identify possible solutions, and through an iterative process will execute, evaluate, and present the results of their solutions.

### Requirements

To be considered for the program candidates must

- submit official transcript(s) of all prior undergraduate and graduate coursework,
- have at least two years of service in public or independent schools, and for Texas certification, you must hold a valid teaching certificate and have two years of teaching experience,
- submit a letter of intent, no longer than three pages, describing why you want to pursue a degree in school leadership and believe you are a good fit for Baylor's MA in School Leadership,
- submit two letters of recommendation from individuals who know you and can speak to your educational or professional experience, and
- 5. submit a current resume.

For Texas principal certification: Candidates will need to pass the TEXES Principal (268) and complete the Performance Assessment for School Leaders (PASL) to obtain a standard principal certification.

### Courses

Code	Title	Hours
EDL 5345	Fundamentals of School Leadership	3
EDL 5301	Christian Faith and P-12 Educational Leadership	3
EDL 5300	Research Applications in Educational Leadership	3
EDL 5302	Instructional Leadership	3
EDL 5363	Administrative Theory and Educational Leadership	3
EDL 5353	The Principalship	3
EDL 5V64	Internship in School Administration	3
EDL 5359	School Law and Governance	3
EDL 5344	School Business Management and Finance	3
EDL 5303	Capstone in Educational Leadership	3
Total Hours		30

### **Transfer Credits**

A maximum of six credit hours may be transferred from an accredited institution toward the M.A. in School Leadership. Credit for graduate

course work transferred from other universities is subject to the following provisions:

- the work must be equivalent to Baylor graduate-level courses and must have been completed while a student was enrolled in good standing as a graduate student;
- 2. the work must have been done within five years prior to matriculation into the master's degree program;
- the school from which the credits are transferred must be accredited by a regional accreditation agency;
- 4. the student must have earned a letter grade of "B" or above—audited courses or courses taken for "pass/fail" credit will not transfer;
- none of the transfer course work consists of extension or workshop courses; and
- petition for transfer of credit occurs after enrollment in the Graduate School.

Courses taken at Baylor as a "transfer of credit," post baccalaureate, or non-degree graduate student may be petitioned as transfer credit toward a graduate degree only after admission to a Baylor graduate program.

# Higher Education & Student Affairs (HESA), M.S.Ed.

The Higher Education & Student Affairs program curriculum places emphasis on developing student affairs educators who are able to apply theories of college student development, organization, and administration to higher education environments. In addition, because of Baylor's unique position as a Christian research university, students explore the role of faith-based colleges and universities in U.S. higher education.

Each fall cohorts of approximately ten full-time (and a small number of part-time students) are typically enrolled. Students come from various large public universities, small liberal arts colleges, and private institutions within the United States and occasionally from abroad. Graduates serve at institutions across the country and work in a variety of higher education positions such as student affairs, enrollment management, academic advising, and academic support programs.

The application deadline for fall admission each year is January 1. Applications by December 1 are encouraged when possible. A completed application consists of:

- an application to the Baylor University Graduate School and application fee;
- 2. official transcripts from any institution of higher education attended;
- 3. official Graduate Record Exam (GRE) scores;
- 4. three letters of recommendation; and
- 5. a statement of interest and resume.

Each element of the application packet is considered. Although there are no minimum requirements for admission, the faculty recommends a minimum undergraduate grade point average of 3.0, a GRE combined score of at least 300, and a GRE analytical score of at least 4.0. Full-time students are required to have a graduate apprenticeship that extends the classroom experience to day-to-day practice.

Courses in the program include the following:

Code	Title	Hours
EDL 5100	Professional Seminar in Higher Education and Student Affairs	1
EDL 5379	Foundations & History of Higher Education Leadership	3
EDL 5370	Psychosocial Development in College Students	3
EDL 5371	Cognitive-Structural Development in College Students	3
EDL 5372	Culture and Organization of Higher Education	3
EDL 5394	Planning, Budgeting, & Human Resources in Higher Education	3
EDL 5273	Person-Environment Theories	2
EDL 5300	Research Applications in Educational Leadership	3
EDL 5336	Qualitative Research in Higher Education	3
EDL 5329	Philosophical and Cultural Contexts of Education	3
EDL 5391	Cultural Issues in Higher Education	3
EDL 5374	Moral and Faith Development in College Students	3
EDL 5392	Higher Education & the Law	3
EDL 5399	Faith-Based Higher Education	3
EDL 5378	Capstone Course: Special Problems in Student Services Leadership	3
EDL 5V99	Thesis	3
Total Hours		45

### Transfer

A maximum of six semester hours may be transferred from an accredited institution toward a master's degree. Credit for graduate course work transferred from other universities is subject to the following provisions:

- the work must be equivalent to Baylor graduate-level courses and must have been completed while a student was enrolled in good standing as a graduate student;
- the work must have been done within five years prior to matriculation into the master's degree program;
- 3. the school from which the credits are transferred must be accredited by a regional accreditation agency;
- 4. the student must have earned a letter grade of "B" or above—audited courses or courses taken for "pass/fail" credit will not transfer;
- none of the transfer course work consists of extension or workshop courses; and
- petition for transfer of credit occurs after enrollment in the Graduate School.

Courses taken at Baylor as a "transfer of credit," post baccalaureate, or non-degree graduate student may be petitioned as a transfer credit toward a graduate degree only after admission to a Baylor graduate program.

### **Capstone Case Study or Thesis**

Every HESA master's student must partake in a culminating experience, whether in the form of taking the capstone course and assigned case study analysis or in the form of a thesis project. The case study analysis

is incorporated into the capstone course, while the thesis project is conducted in lieu of taking the capstone course.

The thesis is designed to provide students with a deep and meaningful research experience. Students must apply and receive permission from the faculty program director of the HESA program before beginning thesis work. HESA theses involve completed research resulting in a journal article or its equivalent. This paper is regarded as a master's thesis. Students can select from one of two options for their thesis. Although both options result in a journal article, one option involves joining a faculty research project, while the other option involves proposing an independent research project.

# Combined Baylor Masters/Ph.D. Student Pathway

Title

Course

Baylor students who complete the Higher Education and Student Affairs program are eligible to apply for a special 2-3 program that allows them to obtain their Higher Education Studies and Leadership Ph.D. in three years by transferring one year of credit from their master's program. The first and second years, the student will then take the following courses. In the third and final year, the student will complete their dissertation.

Hours

Course	litle	Hours
Fall Semester 1 or	r 2	
EDL 6305	Ethics and Values in Educational Leadership	3
EDL 6385	Higher EducationBusiness and Finance	3
EDL 6302	Teaching and Learning in Higher Education	3
Research Elective	(2 courses)	6
General Elective (	1 course)	3
	Hours	18
Spring Semester	1 or 2	
EDC 6345	Christian Faith and Education	3
EDL 6335	Research Practicum in Education	3
EDL 5375	Sociology of Higher Education	3
Research Elective		3
Select one of the to Courses <sup>2</sup> :	following Independent Study <sup>1</sup> or Internship	1-9
EDL 5V95 or EDL 6V95	Special Problems in Education or Special Problems in Educational Leadership	
EDL 6V64	Internship in Educational Leadership	
	Hours	13-21
Summer 1a and 2	a	
EDP 5334	Statistical Methods	3
EDL 6363	Advanced Studies in Educational Leadership	3
	Hours	6
Summer 1b		
EDL 6306	Student Success in Higher Education	3
	Hours	3
Summer 2b		
EDL 6V95	Special Problems in Educational Leadership	2
	Hours	2

Year 3 Fall-Spring-Summer Semester

In the third and dissertation:	final year, the student will complete their	7
EDL 6V99	Dissertation <sup>3</sup>	
	Hours	7
	Total Hours	49-57

The student will work with a professor to produce a publishable journal article or professional presentation.

# Sport Management (SPM), M.S.Ed.

This graduate program trains professionals for service in all sectors of the sports enterprise by teaching specific management skills with unique sport applications in the areas of finance, personnel management, legal issues, marketing, public relations and facility or event management. The program curriculum and faculty seek to combine current research in this field with practical professional setting applications with an emphasis upon sport in the interscholastic and intercollegiate setting.

Tracing back a strong history and tradition to a founding in 1985, the Baylor Sport Management Graduate Program boasts a strong alumni base and network, and a curriculum that is focused upon ethical decision making. This 36 credit hour, master's degree program provides an oncampus delivery model with small classes taught by leading scholars and professional practitioners. All students are trained to engage in research and creative inquiry within the sport setting, with active participation in national and international level conferences by students highly encouraged. This program culminates with six credit hours of field work through supervised work experience via internships or practica or through supervised research experience via completion of a thesis.

### **Program Application**

Application to the program is made online through the Baylor Graduate School, and includes:

- completion of the application forms and submission of any required application fees;
- 2. the submission of official transcripts from all undergraduate institutions with a benchmark GPA of 3.0 or above on a 4 point scale;
- the submission of official GRE or GMAT results with a benchmark score of the 50th percentile or above on the verbal and quantitative areas;
- three letters of recommendation from academic or professional sources;
- a personal written statement indicating the rationale for pursuing the degree; and
- 6. a resume summarizing educational, professional and service experience.

Admission decisions are made on a rolling basis, with application materials reviewed in a holistic manner by the admissions committee. While the majority of students begin the program in the fall term, admission for the spring or summer terms is possible. Applications for the fall term should be submitted prior to March 1, spring term

applications should be made by October 1, and summer applications by January 1.

A limited number of graduate assistantships is available that can provide tuition remission and stipend support within this program. The application for these graduate assistantships within the program and/or partnering agencies can be obtained online from the program website.

### **Comprehensive Examinations**

A written comprehensive examination has been established as an evaluation measure for all degree seeking students in the program for both internal assessment and for reporting to external agencies. This examination is completed typically either during the final semester of fieldwork after the completion of the non-field work program of study, or during the final semester of academic coursework prior to the completion of field work portion of the curriculum. The examination includes content from the Research and Ethics Core courses and from the general core courses. Students not passing their initial attempt of the comprehensive examination will be eligible to participate a second time in during a subsequent semester, but may not move on to complete (defend) a thesis or culminating field work until after the comprehensive examination is passed. Before retaking the comprehensive examination, students should consult with their program advisor, who may require the completion of additional coursework or other additional study. Students who fail the comprehensive examination the second time will be dropped from candidacy for the degree.

### **Sport Management**

Code	Title	Hours
Required Courses		
Research and Ethics	Core	
EDP 5335	Research in Education	3
EDP 5334	Statistical Methods	3
or STA 5300	Statistical Methods	
SPM 5398	Contemporary Ethical Issues in Sport	3
Field Experience Core	9	
Select 6 semester h	ours from the following:	6
SPM 5V90	Internship in Sports Mgt.	
SPM 5V94	Practicum in Sports Mgt.	
EDL 5V99	Thesis	
General Core		
Select 21 semester	hours from the following:	21
SPM 5327	Financial Management in Sport	
SPM 5328	Athletic Fundraising and Development	
SPM 5336	Sport Marketing	
SPM 5338	Public Relations in Sport	
SPM 5341	NCAA Policies & Procedures	
SPM 5372	Legal Issues in Sport	
SPM 5373	Sport Management	
SPM 5374	Sport in the Social Context	
SPM 5375	Governance in Sport	
SPM 5376	Facility and Event Management	
HP 5370	Sport Psychology	

The student works with an administrative unit to gain practical experience in a particular area.

HP 5377	Issues and Trends in Human Performance
	and Sport Management

**Total Hours** 

# K-12 Educational Leadership, Ed.D.

The Doctor of Education (Ed.D.) Degree in K-12 Educational Leadership is a cohort-based practitioner-oriented doctoral program that builds upon Baylor's historic mission to educate men and women for worldwide leadership and service. Designed for the dedicated working education professional, the program prepares highly qualified practitioners in cohort settings to lead K-12 education institutions, while refining skills for executive positions in public, Christian, and private educational systems or agencies. The curriculum provides current and future educational leaders with authentic learning experiences, appropriate advanced knowledge and skills, opportunities for reflection and progressive mentoring to enable success in challenging leadership K-12 educational leadership positions. In particular, the program's design focuses on preparing educational leaders to

- a. lead change through confronting complex organizational problems,
- b. systemically identify and propose high-potential solutions, and
- c. organize appropriate actions to achieve such solutions.

Academic rigor and practical clinical experiences are balanced with challenging courses to address contextual problems of practice. Support for students is based on competent mentorship, camaraderie and collegial relationships.

The program integrates coursework and clinical practice addressing organizational structure, best practices, and data informed decision-making in educational settings. Specific learning outcomes are integrated throughout the curriculum and clinical experiences. A total of 65 credit hours of graduate work above the Master's Degree are required for the degree. The degree plan may exceed 65 hours if students choose to complete additional courses, or undertake optional 12 credit hour program specialties/cognates (e.g. curriculum and instruction or educational psychology).

### **Admission**

Admission to the Ed.D. Degree program in K-12 Educational Leadership is selective, based upon student vocational aspirations and a variety of backgrounds, skill sets/aptitudes, and dispositional factors that project potential for successful completion of the program and subsequent success as a transformational K-12 leader. Applicants are sought who are already addressing educational/professional issues or who are motivated to gain the skills and knowledge required to address the complex issues and problems confronting leaders. Therefore, candidates with leadership experience and the demonstrated motivation to serve and lead will receive priority consideration for admission.

All applicants must submit a letter of application, certified university transcripts documenting all degrees conferred, three targeted professional reference letters, current professional resume, and other evidentiary documents. Finally, upon receipt of the above documentation, selected qualified applicants will be invited to participate in two activities at the University:

 a structured interview with an admissions committee (composed of faculty and practitioners) and the controlled-situation production of a professional writing sample of 1000-1500 words.

### **Degree Plan**

Program component coursework and related experiences involve:

# Block I: Educational Leadership-Management Core (33 Hours)

Students will engage in studies of advanced educational law; politics, policy and governance; school finance; trends in educational leadership; advanced studies for school executives; curriculum management and evaluation; conflict management and resolution; visioning, planning, and acquisitions of 21st century school facilities; ethics and values in educational leadership; and state, national, and international education systems.

Code	Title	Hours
EDL 6V95	Special Problems in Educational Leadership (Conflict Management and Resolution)	3
EDL 5305	International and Comparative Education	3
EDL 5344	School Business Management and Finance	3
EDL 5355	Transforming Learning Environments: School Facility Planning	3
EDL 6303	Seminar: Curriculum Management and Evaluation	3
EDL 6304	Seminar: Politics, Policy and Governance of Education	3
EDL 6305	Ethics and Values in Educational Leadership	3
EDL 6310	Organizational Behavior and Leadership	3
EDL 6350	Seminar. School Leadership	3
EDL 6352	Trends in Educational Thought	3
EDL 6359	Advanced Studies in Education Law	3
Total Hours		33

#### **Block II: Disciplined Inquiry (18 Hours)**

Learning to carefully frame complex problems facing school leadership, be savvy consumers of research in support of problem analyses and data informed decision-making, use data visualization strategies that help clarify and persuasively pose high-potential solutions is the essence of student experiences for disciplined inquiry, qualitative methods: case study analysis, and examination of writing methods and methodology.

Code	Title	Hours
EDP 5320	Survey of Quantitative Methods	3
EDL 6312	Systemic Inquiry through Data Analytics	3
EDL 6380	Technology in Educational Leadership	3
EDL 6309	Framing K-12 Problems for Inquiry	3
EDL 6V95	Special Problems in Educational Leadership (01 Examination of Methods and Methodology (39716))	3
EDL 6V95	Special Problems in Educational Leadership (02 Qualitative Methods – Case Study Analysis (38230))	3

Total Hours 18

#### **Block III: Persuasive Communications (3 Hours)**

Competences in effective oral and written persuasive communications are necessary skills for successful leaders.

· CSS 5320 Leadership and Persuasion

### **Block IV: Clinical Experience (5 Hours)**

Students will have structured program-keyed clinical experiences learning to frame and address complex problems in educational settings that include working 1-1 with prominent educational leaders as mentors across much of the program. This clinical experience will generally serve as a basis for the dissertation.

• EDL 6V20 Clinical Experiences for Educational Leaders

#### **Block V: Dissertation (6 Hours)**

Candidates complete a capstone experience/dissertation-in-practice documenting their efforts to address real-life complex problems of practice, analyze values, persuasively present data-based solution options to a superintendent of schools and policy body/board or agency head, and develop a plan for appropriate implementation.

· EDL 6V99 Dissertation

**Total Number of Hours in the Program:** 65 hours (54 hours of coursework + 5 hours of clinical experience + 6 hours of dissertation). The degree plan may be modified during advisement on an individual basis to meet each student's needs.

Students are admitted as a candidate for the Doctor of Education degree only after they have passed the program Milestones 1, 2, 3 and have passed the Dissertation Proposal.

- · Milestone 1: Qualifying Paper, Summer of Year 2
- · Milestone 2: Chapter 1 of the Dissertation in Practice, Fall of Year 2
- Milestone 3: Proposal Chapters 1, 2, 3 of the Dissertation in Practice and approval of Proposal, Summer of Year 3
- Milestone 4: Completion of the Dissertation in Practice and successful defense, Spring of Year 3

No foreign language requirement

# Higher Education Studies & Leadership, Ph.D.

The Doctor of Philosophy in Higher Education Studies & Leadership educates scholars and scholar-practitioners who desire to have meaningful, lasting influence on higher education. The program is uniquely balanced between research, academic rigor, and hands-on professional experience. Students entering the program can expect to be professionally challenged through their apprenticeships and academically challenged throughout the course sequence. The program is small and built on the idea that a great doctoral education stems from great mentorship. The program provides support, camaraderie, and debate as students come together from across the nation, representing a great diversity of regional and cultural world views.

Higher Education is a sophisticated enterprise, and the future scholars and leaders of higher education must be able to integrate research methodologies, complex critical thinking, and administrative responsibilities to foster meaningful change. Therefore, the Ph.D. in Higher Education Studies & Leadership has extensive learning outcomes

woven throughout the curriculum. The degree requires 72 semester hours of graduate work arranged in eight blocks of courses. The degree plan may exceed 72 hours if students choose to complete additional courses.

### **Admission**

Admission to the Ph.D. program in Higher Education Studies & Leadership is selective. Admission is based upon student vocational goals as well as a variety of background, skill sets/aptitudes, and dispositional factors that indicate potential success in the program. A hallmark of this program is the integration of Christian faith and learning, and students are expected to model this outcome.

All applicants must submit scores from the General Test of the GRE taken within the last five years, official transcripts of baccalaureate and master's degrees from regionally accredited institutions, a curriculum vita/resume, a professional goals statement, three letters of recommendation, and a writing sample.

### **Degree Plan**

### **Block I: Higher Education Core (15 Hours)**

Code	Title	Hours
EDL 5379	Foundations & History of Higher Education Leadership	3
EDL 5374	Moral and Faith Development in College Students	3
or EDL 6305	Ethics and Values in Educational Leadership	
EDL 6302	Teaching and Learning in Higher Education	3
EDC 6345	Christian Faith and Education	3
EDL 5375	Sociology of Higher Education	3
Total Hours		15

# Block II: Studies and Leadership in Higher Education (21 Hours)

Code	Title	Hours
EDL 5372	Culture and Organization of Higher Education	3
EDL 5392	Higher Education & the Law	3
EDL 5399	Faith-Based Higher Education	3
EDL 6385	Higher EducationBusiness and Finance	3
EDL 6363	Advanced Studies in Educational Leadership	3
EDL 6306	Student Success in Higher Education	3
Elective		3
Total Hours		21

### **Block III: Research and Statistics (15 Hours)**

Code	Title	Hours
EDL 5300	Research Applications in Educational Leadership (required only for students who have not already taken a similar course)	3
EDP 5334	Statistical Methods (If the student has already taken a master's level statistics course, they will be required to take either EDP 6360 Experimental Design I or EDP 6362 Applied Multiple Regression/Correlation Analysis in Education.)	3

EDL 5336	Qualitative Research in Higher Education (required)	3
EDL 6335	Research Practicum in Education (required)	3
	ve required R&S courses, students will	3-6

In addition to the above required R&S courses, students will choose 3 to 6 hours (depending on whetherthe student needs to take EDP 5334) from the following (in consultation with his or her advisor). The courses chosen should assist with the publication of the dissertation. In addition, students can use their cognate or elective hours to take additional research courses:

EDP 5340	Measurement and Evaluation
EDP 6360	Experimental Design I
EDP 6361	Experimental Design II
EDP 6362	Applied Multiple Regression/Correlation Analysis in Education
EDP 6337	Psychometric Theory and Test Construction
EDL 6370	Seminar in American Educational Thought
EDC 6339	Ethnographic Research Methods in Education

Total Hours 15-18

### **Block IV: Electives/Cognate (9 Hours)**

Students may take nine hours of their choice from within the department or across the university. We particularly encourage taking courses outside the School of Education that may expose students to other fields within the university. For instance, students may wish to take additional courses in management from the business school, particular methods courses from a particular discipline (e.g. history or sociology), or courses about education found in other disciplines (e.g., sociology of education, philosophy of education).

# Block V: Professional Independent Study or Internship (3 Hours)

Code	Title	Hours
Select one of the following:		3
EDL 6V64	Internship in Educational Leadership	
EDL 5V95	Special Problems in Education	
EDL 6V95	Special Problems in Educational Leadership	
Total Hours		3

#### **Block VI: Comprehensive Exam (2 Hours)**

• EDL 6V95 Special Problems in Educational Leadership

#### **Block VII: Dissertation (7 Hours)**

· EDL 6V99 Dissertation

Total Number of Hours in the Program: 72 hours (65 hours of course work + 7 dissertation hours). The degree plan may be modified during advisement on an individual basis to meet each student's needs.

# **Educational Psychology Department of Educational Psychology**

Chairperson: Todd Kettler

The Department of Educational Psychology offers graduate courses leading to:

#### I. Master of Science in Education (M.S.Ed.)

A minimum of thirty-six semester hours of graduate work, twentyone of which must be in Educational Psychology, and eighteen of which must be 5000 level or above. A specialization in gifted and talented, is available with this degree. More information regarding course requirements are included in the program description.

# II. Master of Science in Education (M.S.Ed.) with Concentration in Applied Behavior Analysis

A minimum of thirty-six hours of graduate work, twenty-one of which include coursework in applied behavior analysis. All coursework must be 5000 level or above.

#### III. Master of Arts (M.A.)

Thirty semester hours of graduate courses including three hours of thesis and completion of a satisfactory defense. A quantitative specialization is available with this degree. Other requirements must be met as specified for all other master's degrees.

- IV. Master of Arts (M.A.) with Concentration in Applied Behavior Analysis A minimum of thirty-six hours of graduate work, including three hours of thesis and completion of a satisfactory defense. This program includes twenty-one hours of coursework in applied behavior analysis. All coursework must be 5000 level or above.
- V. Master of Arts (M.A.) with Concentration in Twice-Exceptionalities A minimum of thirty hours of graduate work, including three hours of thesis and completion of a satisfactory defense. This program includes eighteen hours of required coursework and twelve hours of elective courses.
- VI. Education Specialist (Ed.S.) in School Psychology

The Education Specialist degree requires a minimum of sixty graduate hours and prepares students for practice as a school psychologist (or Licensed Specialist in School Psychology in Texas). More information regarding admission and other course requirements are included in the degree program description.

#### VII. Doctor of Philosophy (Ph.D.) in Educational Psychology

The Doctor of Philosophy in Educational Psychology requires a minimum of seventy-two graduate hours. Students take 39 hours in required core courses and 33 hours in one or more specialization areas: applied behavior analysis, gifted and talented, special education, or quantitative methods. More information regarding admission and other course requirements are included in the program description.

#### VIII. Doctor of Philosophy (Ph.D.) in School Psychology

The Doctor of Philosophy in School Psychology requires a minimum of 101 hours of academic course work, practica, and research. It typically consists of four full years of graduate study on campus followed by a culminating internship.

#### IX. Graduate Minor in Educational Psychology

The graduate minor in educational psychology focuses on Research Methods and Data Analysis. It is available for students enrolled in any master's or doctoral program. Students must complete twelve semester hours of graduate courses (including any prerequisite courses), which must include EDP 6360 Experimental Design I and EDP 6362 Applied Multiple Regression/Correlation Analysis in Education. Two additional courses are selected with the approval of the Graduate Program Director in the Department of Educational Psychology.

Please note the following important information regarding application for admission:

- 1. Contact the Graduate School to begin the application process.
- All aspects of the application must be completed by the deadline. If everything is not submitted, the application file is not complete and will not be considered.
- Applicants submitting their materials by the admission deadline may be contacted for an interview. Following the interview, applications will be considered and applicants will be notified of the results.
- 4. Prospective students who wish to begin in summer or fall are encouraged to apply by February 1 to increase their chances of obtaining scholarships or an assistantship; students who wish to begin a program in the spring are encouraged to complete an application by Oct. 1.
- · Master of Arts in Educational Psychology, M.A. (p. 101)
- Master of Science in Education, M.S.Ed. (p. 102)
- · Master of Science in School Psychology, M.S. (p. 103)
- · Education Specialist in School Psychology, Ed.S. (p. 104)
- · Doctor of Philosophy in Educational Psychology, Ph.D. (p. 105)
- · Doctor of Philosophy in School Psychology, Ph.D. (p. 107)

# Master of Arts in Educational Psychology, M.A.

# Terminal Master of Arts in Educational Psychology (M.A.)

The Master of Arts in Educational Psychology requires thirty semester hours of graduate course work including three hours of thesis. The student must present a satisfactory defense of the thesis. Other requirements must be met as specified for all other master's degrees.

# Terminal M.A. in Educational Psychology with a Concentration in Applied Behavior Analysis

The terminal Master of Arts in Educational Psychology with a concentration in Applied Behavior Analysis is designed for students who are interested in the research and practice of behavior analysis with children and adults with intellectual and developmental disabilities. Students who complete this program will be able to

- a. describe the principles and concepts of applied behavior analysis,
- b. implement behavioral assessments and interventions,
- c. experimentally evaluate behavioral interventions, and
- d. describe and abide by ethical expectations of the profession.

# Non-terminal M.A. in Educational Psychology with Concentration in Applied Behavior Analysis

Students admitted to the Ph.D. program with an interest in applied behavior analysis are encouraged to earn, with the approval of the faculty, a non-terminal M.A. in Educational Psychology with a concentration in Applied Behavior Analysis. The non-terminal M.A. option is available only to students who are initially admitted to the Ph.D. program.

# Terminal M.A. in Educational Psychology with Concentration in Twice-Exceptionalities

The terminal Master of Arts in Educational Psychology with a concentration in Twice-Exceptionalities is designed for students who are interested in the research and practice of working with individuals with disabilities as well as gifts and talents. Students completing this program will be able to understand and work with students who have a high academic aptitude along with a second exceptionality (e.g., learning disability, attention-deficit/hyperactivity disorder, autism spectrum disorder).

# Non-terminal M.A. in Educational Psychology with Concentration in Twice-Exceptionalities

Students admitted to the Ph.D. program with an interest in twice exceptionalities are encouraged to earn, with the approval of the faculty, a non-terminal M.A. in Educational Psychology with a concentration in Twice-Exceptionalities. The non-terminal M.A. option is available only to students who are initially admitted to the Ph.D. program.

# Terminal M.A. in Educational Psychology with a Concentration in Applied Behavior Analysis Requirements

The M.A. in Educational Psychology with a concentration in Applied Behavior Analysis requires thirty-six semester hours of graduate work, including three hours of thesis. The student must present a satisfactory defense of the thesis. Twenty-one of the required 36 hours consist of the following applied behavior analysis courses:

Code	Title	Hours
Required Courses		
Applied Behavior Ana	lysis Courses	
EDP 5302	Concepts and Principles of Applied Behavior Analysis	3
EDP 5354	Ethics in Applied Behavior Analysis	3
EDP 5357	Single-Subject Research Design	3
EDP 5358	Teaching Individuals with Autism and Developmental Disabilities	3
EDP 5301	Philosophy in Applied Behavior Analysis	3
EDP 5361	Challenging Behavior and Developmental Disabilities	3
EDP 5374	Managing Behavior Change Programs	3
Thesis		
Thesis Coursework		3
Graduate Level Cours	es	
The remaining twelve hours may include 5000-level, or above, Educational Psychology courses		12
Total Hours		36

# Non-terminal M.A. in Educational Psychology with Concentration in Applied Behavior Analysis Requirements

Students may earn a non-terminal M.A. in Educational Psychology with a concentration in Applied Behavior Analysis by completing thirty-six semester hours of graduate work. Twenty-one of the required 36 hours consist of the following applied behavior analysis courses:

Code	Title	Hours
<b>Required Courses</b>		
Applied Behavior And	alysis Courses	
EDP 5302	Concepts and Principles of Applied Behavior Analysis	3
EDP 5354	Ethics in Applied Behavior Analysis	3
EDP 5357	Single-Subject Research Design	3
EDP 5358	Teaching Individuals with Autism and Developmental Disabilities	3
EDP 5301	Philosophy in Applied Behavior Analysis	3
EDP 5361	Challenging Behavior and Developmental Disabilities	3
EDP 5374	Managing Behavior Change Programs	3
Thesis		
Thesis Coursework		3
Graduate Level Cour	ses	
The remaining twelve hours may include 5000-level, or above, Educational Psychology courses		12
Total Hours		36

# Terminal M.A. in Educational Psychology with Concentration in Twice-Exceptionalities Requirements

The M.A. in Educational Psychology with a concentration in Twice-Exceptionalities requires thirty semester hours of graduate work including three hours of thesis. The student must present a satisfactory defense of the thesis. Eighteen of the 30 hours consist of the following EDP courses:

Code	Title	Hours
<b>Required Courses</b>		
EDP 4350	Introduction to Gifted Education	3
EDP 5366	Psychology of Exceptional Children	3
EDP 5376	Practicum with Exceptional Children	3
EDP 5V99	Thesis	3
Select two new three	e-hour courses	6
Graduate Level Cours	es	
The remaining twelve hours of coursework include graduate level courses electives from the EDP and C&I departments.		12
Total Hours		30

# Non-terminal M.A. in Educational Psychology with Concentration in Twice-Exceptionalities Requirements

The M.A. in Educational Psychology with a concentration in Twice-Exceptionalities requires thirty semester hours of graduate work including three hours of thesis. The student must present a satisfactory defense of the thesis. Eighteen of the 30 hours consist of the following EDP courses:

Code	Title	Hours
Required Courses		
EDP 4350	Introduction to Gifted Education	3
EDP 5366	Psychology of Exceptional Children	3
EDP 5376	Practicum with Exceptional Children	3
EDP 5V99	Thesis	3
Select two new three-	hour courses	6
Graduate Level Courses		
The remaining twelve hours of coursework include graduate level courses electives from the EDP and C&I departments.		12
Total Hours		30

# Master of Science in Education, M.S.Ed.

**Director:** Janet Bagby

The department offers both terminal and non-terminal M.S.Ed. and M.A. degrees in educational psychology.

# Terminal M.S.Ed. in Educational Psychology

The terminal Master of Science in Educational Psychology is designed for students who are interested in individual differences. It is particularly suited for those students who will work with children or adults in educational settings. Students who complete this program will be able to describe

- a. the foundations of educational psychology,
- b. individual differences in learning and development,
- c. research methodologies in education,
- d. issues and trends in educational psychology, and
- e. relationships between measurement, exceptionalities, and multicultural issues.

# Terminal M.S.Ed. in Educational Psychology with a Concentration in Applied Behavior Analysis

The terminal Master of Science in Educational Psychology with a concentration in Applied Behavior Analysis is designed for students who are interested in the application of behavior analysis with children and adults with intellectual and developmental disabilities. Students who complete this program will be able to

- a. describe the principles and concepts of applied behavior analysis,
- b. implement behavioral assessments and interventions,

- c. experimentally evaluate behavioral interventions, and
- d. describe and abide by ethical expectations of the profession.

Graduation requirements include successful completion of a comprehensive exam.

# Non-Terminal M.S.Ed. in Educational Psychology

Students admitted to the Ph.D. program are encouraged to earn, with the approval of the faculty, a non-terminal M.S.Ed. degree. The non-terminal M.S.Ed. option is available only to students who are initially admitted to the Ph.D. degree program. Students may earn a non-terminal M.S.Ed. degree in educational psychology by:

- · Completing 36 hours of core and specialization courses, and
- · Successfully completing a written comprehensive exam

M.S.Ed. requirements are usually completed by the second or third year of study.

# Terminal M.S.Ed. in Educational Psychology Requirements

Twenty-one of the required 36 hours consist of a core curriculum in educational psychology that includes one course in each of the following areas:

Code	Title	Hours
Required Courses		
EDP 5333	Psychology of Learning, Cognition, and Affect	3
EDP 5332	Human Growth and Development	3
EDP 5340	Measurement and Evaluation	3
EDP 5334	Statistical Methods	3
EDP 5366	Psychology of Exceptional Children	3
EDP 5393	Cultural Issues with Children and Families	3
EDP 5335	Research in Education	3
One additional EDP	5000-level course of the student's choosing	3
The remaining hours may include graduate level courses from specializations, gifted and talented, applied behavior analysis, or courses that match student interests and career goals		12
Total Hours		36

Graduation requirements include successful completion of a written comprehensive exam.

# Terminal M.S.Ed. in Educational Psychology with a Concentration in Applied Behavior Analysis Requirements

Eighteen of the required 36 hours consist of the following applied behavior analysis courses:

Code	Title	Hours
<b>Required Courses</b>		
EDP 5302	Concepts and Principles of Applied Behavior Analysis	3
EDP 5354	Ethics in Applied Behavior Analysis	3

Total Hours		36
The remaining fifteen hours may include 5000-level, or above, Educational Psychology courses		15
EDP 5374	Managing Behavior Change Programs	3
EDP 5361	Challenging Behavior and Developmental Disabilities	3
EDP 5301	Philosophy in Applied Behavior Analysis	3
EDP 5358	Teaching Individuals with Autism and Developmental Disabilities	3
EDP 5357	Single-Subject Research Design	3

### **Recommended Sequence of Coursework**

Code	Title	Hours
Summer Semester		
EDP 5358	Teaching Individuals with Autism and Developmental Disabilities	3
EDP 5356	Psychological Interventions with Children and Adolescents I: Behavior	3
Fall Semester		
EDP 5335	Research in Education	3
EDP 5346	Therapeutic Intervention	3
EDP 5332	Human Growth and Development	3
EDP 5V98	Practicum in Applied Behavior Analysis	2
EDP 5V95	Special Problems in Education	1
Spring Semester		
EDP 5333	Psychology of Learning, Cognition, and Affect	3
EDP 5357	Single-Subject Research Design	3
EDP 5V98	Practicum in Applied Behavior Analysis	2
EDP 5V95	Special Problems in Education	1
Summer Semester		
EDP 5393	Cultural Issues with Children and Families	3
EDP 5361	Challenging Behavior and Developmental Disabilities	3
EDP 5V98	Practicum in Applied Behavior Analysis	2
EDP 5V95	Special Problems in Education	1
Total Hours		36

# Master of Science in School Psychology, M.S.

### Non-terminal M.S. in School Psychology

Students pursuing the Doctor of Philosophy in School Psychology degree are encouraged to apply for the non-terminal M.S. The non-terminal M.S. option is available only to students pursuing the Doctor of Philosophy in School Psychology degree.

The non-terminal M.S. degree requires completion of 45 graduate-level credit hours, including all the following courses:

Code	Title	Hours
Required Courses		
EDP 5327	Educational Evaluation	3
EDP 5328	Psychological Assessment of Children and Adolescents I: Cognitive	3

Total Hours		45
EDP 6366	Item Response Theory	
EDP 6365	Latent Variable Models in Education	
EDP 6362	Applied Multiple Regression/Correlation Analysis in Education	
EDP 6360	Experimental Design I	
Select 6 hours from th	e following research and statitics courses	6
EDP 5V78	Practicum in School Psychology	3
EDP 5394	Psychological Assessment of Children and Adolescents III: Social-Emotional	3
EDP 5393	Cultural Issues with Children and Families	3
EDP 5370	Consultation, Collaboration, and Family- School Partnerships	3
EDP 5367	Developmental Psychopathology	3
EDP 5362	Psychological Interventions with Children and Adolescents III: Academic	3
EDP 5360	Psychological Interventions with Children and Adolescents II: Counseling	3
EDP 5356	Psychological Interventions with Children and Adolescents I: Behavior	3
EDP 5341	Professional Practice, Law, and Ethics for School Psychologists	3
EDP 5340	Measurement and Evaluation	3
EDP 5337	Psychological Assessment of Children and Adolescents II: Psychoeducational	3

# **Education Specialist in School Psychology, Ed.S.**

Director: Dr. Kelsey Ragan

The Educational Specialist (Ed.S.) degree program is designed for individuals who are interested in practicing psychology in school-based settings. The program consists of two full years of graduate study followed by a third year of internship. The program is fully accredited by the National Association of School Psychologists (NASP) and is designed to comply with the Licensed Specialist in School Psychology standards set by the Texas States Board of Examiners of Psychologists. The Ed.S. degree program policies and operating procedures are detailed in a handbook that is provided to each student upon enrollment. This program does not require a foreign language.

# **Recommended Sequence of Coursework**

Elective course must be approved by advisor.

Course	Title	Hours
First Year		
Fall Semester		
EDP 5328	Psychological Assessment of Children and Adolescents I: Cognitive	3
EDP 5340	Measurement and Evaluation	3
EDP 5341	Professional Practice, Law, and Ethics for School Psychologists	3
EDP 5366	Psychology of Exceptional Children	3
EDP 5V78	Practicum in School Psychology	3
	Hours	15

Spring Semester		
EDP 5333	Psychology of Learning, Cognition, and Affect	3
EDP 5337	Psychological Assessment of Children and Adolescents II: Psychoeducational	3
EDP 5360	Psychological Interventions with Children and Adolescents II: Counseling	3
EDP 5367	Developmental Psychopathology	3
EDP 5V78	Practicum in School Psychology	3
	Hours	15
Summer Semeste	er	
EDP 5393	Cultural Issues with Children and Families	3
EDP 5356	Psychological Interventions with Children and Adolescents I: Behavior	3
	Hours	6
Second Year		
Fall Semester		
EDP 5362	Psychological Interventions with Children and Adolescents III: Academic	3
EDP 5394	Psychological Assessment of Children and Adolescents III: Social-Emotional	3
EDP 5V78	Practicum in School Psychology	3
EDP 5V95	Special Problems in Education	1
	Hours	10
Spring Semester		
EDP 5327	Educational Evaluation	3
EDP 5364	Psychological Interventions with Children and Adolescents IV: Cognitive Behavioral Therapy	3
EDP 5370	Consultation, Collaboration, and Family- School Partnerships	3
EDP 5V78	Practicum in School Psychology	3
	Hours	12
Third Year Fall Semester		
EDP 5182	Specialist Internship in School Psychology	1
	Hours	1
Spring Semester		
EDP 5183	Internship in School Psychology II	1
	Hours	1

\*Elective course must be approved by advisor.

### **Comprehensive Examination**

Candidates for the Ed.S. degree are required to take the Praxis Series® School Psychologist examination and earn a passing score, which is determined by the Texas State Board of Examiners of Psychologists. Additional information about the examination is provided in the school psychology student handbook.

The Ed.S. degree program accepts applicants for the fall semester only. Prospective students should have their completed application to the Baylor Graduate School by February 1. Admission decisions are made by

consensus of the School Psychology faculty based on multiple factors including:

- a. GRE scores (less than 5 years old);
- b. letters of recommendation;
- potential match between the applicant's goals and program objectives;
- d. relevant work or clinical experience; and
- e. undergraduate courses and grades.

The Test of English as a Foreign Language (TOEFL), International English Language Testing System (IELTS), or Duolingo exam is required for applicants whose native language is not English. Additional information about the Ed.S. degree program in school psychology is on the Internet at: www.baylor.edu/soe/edp/schoolpsychology (http://www.baylor.edu/soe/edp/schoolpsychology/).

# Doctor of Philosophy in Educational Psychology, Ph.D.

Director: Tonya Davis

The Doctor of Philosophy degree has specializations in applied behavior analysis, gifted and talented, special education, and quantitative methods. In some cases, students may complete courses from multiple specializations to total the required 33 hours of strand coursework. Specializations allow students to select courses based on their interests and future goals. The program focuses on developing reflective teachers of adult learners and competent researchers who will generate new information in their fields of study. The goals of this program are to

- a. develop researchers with a balance between disciplinary and multidisciplinary perspectives;
- improve the quality of instruction and research in higher education institutions;
- c. develop teachers who are scholars and encourage inquiry-based learning and creative production; and
- d. develop researchers in exceptionalities, learning and development, and/or quantitative methods.

Graduates from this program may expect to be hired as professors in departments of educational psychology and related disciplines; teachers in medical schools, church-related institutions, and community colleges; directors of development and research centers; coordinators of field-based and adult-based education programs; evaluators for public or private schools; and research and development in business, government, and other agencies. The majority of all course work toward the completion of the Ph.D. must be taken at Baylor. The number of credits to be transferred will be determined by the faculty in the department upon petition approval by the Graduate School.

### **Admission to Doctoral Program**

Admission to the Graduate School of Baylor University and the Ph.D. program in Educational Psychology is conducted by formal application. Students must be admitted to the Ph.D. program.

This program admits a very select number of students with strong academic credentials who are interested in working with faculty in research and development projects. Admission to the doctoral program

takes into consideration the following critical factors deemed important for success in graduate studies:

- 1. A bachelor's degree from an accredited institution.
- 2. A completed Graduate School application form.
- 3. Transcripts from all higher education institutions attended.
- 4. A written statement outlining the goals the applicant hopes to accomplish by completing the degree.
- Scores on the Graduate Record Examination (GRE) that are predictive of success in this program.
- 6. A minimum overall GPA of 3.0 in the major field of undergraduate study or an overall GPA of 3.5 at the master's level.
- 7. Three letters of recommendation.
- 8. International students are expected to secure either a minimum of 550 (PBT) or 80 (iBT) on the Test of English as a Foreign Language (TOEFL), 6.5 on the International English Language Testing System (IELTS), or attain an overall score of 125 on the Duolingo exam.

Once these preliminary admission requirements are met, the applicant may be asked to submit a writing sample and a professional resume. Upon review of all of the information, the Graduate faculty teaching in the Ph.D. program may require a personal interview. This interview will be of sufficient length to allow the applicant as well as the faculty to make an informed decision.

In addition to the listed criteria, the committee may consider the applicant's related work and academic experience, publications, presentations to professional organizations, leadership roles, teaching excellence, awards, career focus, and other professional activities that might provide evidence of potential success in a doctoral program.

Applications must be submitted by December 1 for summer and fall semesters. Applicants for spring semesters should contact Dr. Tonya Davis regarding application deadlines. For more information, contact Dr. Davis. Telephone 254-710-6166; e-mail Tonya\_Davis@baylor.edu.

Code	Title	Hours
Required Core Cours	es	
General/Applied		
EDP 6302	Doctoral Seminar Part 1	3
EDP 6303	(EDP 6303::Doctoral Seminar Part 2)	3
EDP 6304	(EDP 6304:: Doctoral Seminar Part 3)	3
EDP 6340	Teaching in Higher Education	3
EDP 6338	Grant Writing	3
Dissertation		
EDP 6V99	Dissertation	9
Research Methods		
EDP 6360	Experimental Design I	3
EDP 6362	Applied Multiple Regression/Correlation Analysis in Education	3
Select three courses	from the following:	9
EDC 6359	Mixed Methods Research Design and Analysis	
EDP 5340	Measurement and Evaluation	
EDP 5357	Single-Subject Research Design	
EDP 6336	Qualitative Research and Data Analysis	
EDP 6337	Psychometric Theory and Test Construction	

EDD 6254	Advanced Cingle Coop Design		EDD 6000	Advanced Ctudy of Human Laruning
EDP 6354	Advanced Single Case Design		EDP 6333	Advanced Study of Human Learning
EDP 6365	Latent Variable Models in Education		EDP 6335	Research Practicum in Education
EDP 6361	Experimental Design II		EDP 6350	History and Systems of Psychology and
EDP 6366	Item Response Theory		EDD COEO	Educational Applications
Strand Courses			EDP 6353	Creativity and Problem Solving
	e a minimum of 24 hours within or across	33	EDP 6354	Advanced Single Case Design
	nclude 12 hours of electives that match the Students should consult with the catalog and		EDP 6367	Individual Differences
	nts with regard to any prerequisites.		EDP 6370	Case Study Research Methods and Analysis in Education
Strand 1. Applied Beh			EDP 6390	Seminar. Education
EDP 5301	Philosophy in Applied Behavior Analysis		PSY 5311	
EDP 5302	Concepts and Principles of Applied			Seminar in Memory and Cognition
LDI 0002	Behavior Analysis		Strand 3. Special Edu	
EDP 5332	Human Growth and Development		EDP 5332	Human Growth and Development
EDP 5333	Psychology of Learning, Cognition, and		EDP 5329	Counseling Theories and Techniques
	Affect		EDP 5333	Psychology of Learning, Cognition, and Affect
EDP 5354	Ethics in Applied Behavior Analysis		EDP 5357	Single-Subject Research Design
EDP 5358	Teaching Individuals with Autism and Developmental Disabilities		EDP 5358	Teaching Individuals with Autism and Developmental Disabilities
EDP 5361	Challenging Behavior and Developmental Disabilities		EDP 5361	Challenging Behavior and Developmental Disabilities
EDP 5393	Cultural Issues with Children and Families		EDP 5367	Developmental Psychopathology
EDP 5V98	Practicum in Applied Behavior Analysis		EDP 6320	Concepts and Foundations of Behavioral
EDP 6320	Concepts and Foundations of Behavioral Assessment		EDP 6325	Assessment Positive Behavior Interventions and
EDP 6325	Positive Behavior Interventions and Supports			Supports
EDP 6332	Advanced Human Growth and Development		EDP 6354	Advanced Single Case Design
EDP 6335	Research Practicum in Education		EDP 6380	Community Experience in Developmental Disability Services
EDP 6343	Consultation and Supervision in Applied		EDU 5354	Curriculum Differentiation
	Behavior Analysis		PSY 5311	Seminar in Memory and Cognition
EDP 6354	Advanced Single Case Design		PSY 5323	Biological Foundations of Behavior
EDP 6355	Advanced Concepts in Applied Behavior		Strand 4. Quantitative	e Methods
EDD 6363	Analysis Verbal Behavior		ECO 5347	Econometric Theory and Methods
EDP 6363			ECO 5V98	Special Studies in Economics
EDP 6380	Community Experience in Developmental Disability Services		EDP 5337	Psychological Assessment of Children and Adolescents II: Psychoeducational
EDP 6385	Internship in Applied Behavior Analysis		EDP 6365	Latent Variable Models in Education
Strand 2. Gifted and 1			EDP 6366	Item Response Theory
EDC 5310	Principles and Strategies for Effective		EDP 6367	Individual Differences
EDC 5311	Discipline and Classroom Management Introduction to Qualitative and Quantitative		MIS 6325	Quantitative Methods: Survey Research
	Research		DUDU FOOT	Using PLS Analysis
EDP 4350	Introduction to Gifted Education		PUBH 5337	Public Health Concepts in Epidemiology
EDP 5333	Psychology of Learning, Cognition, and		PSY 5305	Advanced Experimental Design
	Affect		SOC 6307	Statistical Methods for Survey Research
EDP 5351	Social/Emotional Needs of the Gifted		SOC 6314	Advanced Quantitative Analysis for Sociology
EDP 5357	Single-Subject Research Design		SOC 6318	Sampling Techniques
EDP 5366	Psychology of Exceptional Children		STA 4385	Mathematical Statistics I
EDP 5367	Developmental Psychopathology		STA 4385 STA 5384	Multivariate Statistical Methods
EDP 5376	Practicum with Exceptional Children			Mathematical Statistics II
EDP 5393	Cultural Issues with Children and Families		STA 4386	
EDP 5V54	Practicum with Gifted Students		STA 6360	Bayesian Methods for Data Analysis
EDP 6332	Advanced Human Growth and Development		STA 6375	Computational Statistics I

STA 6384 Analysis of Categorical Responses

**Total Hours** 

Previous course work and grades

72

# Doctor of Philosophy in School Psychology, Ph.D.

Program Director: Nicholas F. Benson, Ph.D.

The School Psychology Ph.D. program is offered in the Department of Educational Psychology located in the School of Education. The program is accredited, on contingency, by the American Psychological Association. School Psychology is a general practice and health service provider specialty of professional psychology that is concerned with the science and practice of psychology with children, youth, families; learners of all ages; and the schooling process. The basic education and training of school psychologists prepares them to provide a range of psychological assessment, intervention, prevention, health promotion, and program development and evaluation services with a special focus on the developmental processes of children and youth within the context of schools, families, and other systems. School psychologists are prepared to intervene at the individual and system level, and develop, implement, and evaluate preventive programs. In these efforts, they conduct ecologically valid assessments and intervene to promote positive learning environments within which children and youth from diverse backgrounds have equal access to effective educational and psychological services to promote healthy development. The overall aim of the School Psychology Ph.D. program is to prepare highly skilled and competent scientist-practitioners. Earning a degree from this program requires mastery of a coherent body of knowledge and skills. Doctoral students must acquire substantial competence in the discipline of psychology as specified in the Standards of Accreditation and must be able to relate appropriately to clients/patients, fellow students, faculty and staff members, and other health care professionals.

### **Admissions**

The admissions process for the SP Ph.D. program conforms to the general admissions requirements for the BU Graduate School, the SOE, and the EDP department. Prospective students are encouraged to access the admissions information available on the Graduate School's website. The application is available online at https://www.baylor.edu/graduate/gobaylor (https://www.baylor.edu/graduate/gobaylor/) or can a printed version can be obtained by telephoning the BU Graduate School at 254-710-3588 or by writing them at:

One Bear Place #97264 Waco, TX 76798-7264

Students are admitted for the fall semester only and the application deadline is February 15.The BU school psychology faculty desire to admit qualified applicants from a diversity of backgrounds. Students do not have to have an undergraduate degree in psychology, but should have taken courses in general psychology, introductory statistics, research design, and child/adolescent development. Admission decisions are made by consensus of the BU school psychology faculty based on multiple factors including:

- · GRE scores
- · Letters of recommendation
- · Potential match between the applicant's goals and the program goals

**Required Courses and Typical Course Sequence** 

· Relevant work, clinical experience, research experience

Course	Title	Hours
First Year		
Fall Semester		
EDP 5328	Psychological Assessment of Children and Adolescents I: Cognitive	3
EDP 5340	Measurement and Evaluation	3
EDP 5341	Professional Practice, Law, and Ethics for School Psychologists	3
EDP 6360	Experimental Design I	3
EDP 5366	Psychology of Exceptional Children	3
	Hours	15
Spring Semester		
EDP 5337	Psychological Assessment of Children and Adolescents II: Psychoeducational	3
EDP 5360	Psychological Interventions with Children and Adolescents II: Counseling	3
EDP 5367	Developmental Psychopathology	3
EDP 6362	Applied Multiple Regression/Correlation Analysis in Education	3
	Hours	12
Summer Semeste	er	
EDP 5393	Cultural Issues with Children and Families	3
EDP 5356	Psychological Interventions with Children and Adolescents I: Behavior	3
Qualifying Exam		
	Hours	6
Second Year		
Fall Semester		
Fall Semester EDP 5362	Psychological Interventions with Children and Adolescents III: Academic	3
	, ,	3
EDP 5362	and Adolescents III: Academic Psychological Assessment of Children and	
EDP 5362 EDP 5394	and Adolescents III: Academic Psychological Assessment of Children and Adolescents III: Social-Emotional History and Systems of Psychology and	3
EDP 5362 EDP 5394 EDP 6350	and Adolescents III: Academic Psychological Assessment of Children and Adolescents III: Social-Emotional History and Systems of Psychology and Educational Applications	3
EDP 5362  EDP 5394  EDP 6350  EDP 6365	and Adolescents III: Academic Psychological Assessment of Children and Adolescents III: Social-Emotional History and Systems of Psychology and Educational Applications Latent Variable Models in Education	3
EDP 5362  EDP 5394  EDP 6350  EDP 6365	and Adolescents III: Academic Psychological Assessment of Children and Adolescents III: Social-Emotional History and Systems of Psychology and Educational Applications Latent Variable Models in Education Practicum in School Psychology	3 3 3 3
EDP 5362  EDP 5394  EDP 6350  EDP 6365  EDP 5V78	and Adolescents III: Academic Psychological Assessment of Children and Adolescents III: Social-Emotional History and Systems of Psychology and Educational Applications Latent Variable Models in Education Practicum in School Psychology	3 3 3 3
EDP 5362  EDP 5394  EDP 6350  EDP 6365  EDP 5V78  Spring Semester	and Adolescents III: Academic Psychological Assessment of Children and Adolescents III: Social-Emotional History and Systems of Psychology and Educational Applications Latent Variable Models in Education Practicum in School Psychology  Hours	3 3 3 15
EDP 5362  EDP 5394  EDP 6350  EDP 6365  EDP 5V78  Spring Semester  EDP 5327	and Adolescents III: Academic Psychological Assessment of Children and Adolescents III: Social-Emotional History and Systems of Psychology and Educational Applications Latent Variable Models in Education Practicum in School Psychology Hours  Educational Evaluation Consultation, Collaboration, and Family-	3 3 3 15
EDP 5362  EDP 5394  EDP 6350  EDP 6365  EDP 5V78  Spring Semester  EDP 5327  EDP 5370	and Adolescents III: Academic Psychological Assessment of Children and Adolescents III: Social-Emotional History and Systems of Psychology and Educational Applications Latent Variable Models in Education Practicum in School Psychology  Hours  Educational Evaluation Consultation, Collaboration, and Family-School Partnerships	3 3 3 15
EDP 5362  EDP 5394  EDP 6350  EDP 6365  EDP 5V78  Spring Semester  EDP 5327  EDP 5370  EDP 6340	and Adolescents III: Academic Psychological Assessment of Children and Adolescents III: Social-Emotional History and Systems of Psychology and Educational Applications Latent Variable Models in Education Practicum in School Psychology Hours  Educational Evaluation Consultation, Collaboration, and Family-School Partnerships Teaching in Higher Education	3 3 3 15 3 3
EDP 5362  EDP 5394  EDP 6350  EDP 6365  EDP 5V78  Spring Semester  EDP 5327  EDP 5370  EDP 6340  EDP 6332	and Adolescents III: Academic Psychological Assessment of Children and Adolescents III: Social-Emotional History and Systems of Psychology and Educational Applications Latent Variable Models in Education Practicum in School Psychology  Hours  Educational Evaluation Consultation, Collaboration, and Family-School Partnerships Teaching in Higher Education Advanced Human Growth and Development	3 3 3 15 3 3 3 3 3 3
EDP 5362  EDP 5394  EDP 6350  EDP 6365  EDP 5V78  Spring Semester  EDP 5327  EDP 5370  EDP 6340  EDP 6332	and Adolescents III: Academic Psychological Assessment of Children and Adolescents III: Social-Emotional History and Systems of Psychology and Educational Applications Latent Variable Models in Education Practicum in School Psychology  Hours  Educational Evaluation Consultation, Collaboration, and Family-School Partnerships Teaching in Higher Education Advanced Human Growth and Development Practicum in School Psychology  Hours	3 3 3 15 3 3 3 3

EDP 5V78	Practicum in School Psychology	3
	Hours	6
Third Year		
Fall Semester		
EDP 6366	Item Response Theory	3
EDP 6V78	Advanced Practicum in School Psychology	3
PSY 5323	Biological Foundations of Behavior	3
	Hours	9
<b>Spring Semester</b>		
EDP 5333	Psychology of Learning, Cognition, and Affect	3
EDP 5363	Teaching Associate Special Education	3
EDP 6V78	Advanced Practicum in School Psychology	3
	Hours	9
Summer Semeste	er	
EDP 6356	Doctoral Seminar in School Psychology	3
	Hours	3
Fourth Year		
Fall Semester		
EDP 6V78	Advanced Practicum in School Psychology	3
EDP 6V99	Dissertation	2
	Hours	5
Spring Semester		
EDP 6V99	Dissertation	3
	Hours	3
Summer Semeste	er	
EDP 6182		1
	Hours	1
Fifth Year		
Fall Semester		
EDP 6182		1
	Hours	1
<b>Spring Semester</b>		
EDP 6182		1
EDP 6182	Hours	1

# **School of Engineering and Computer Science**

The School comprises three departments, which offer five masters and three doctoral degrees. The Department of Computer Science offers a Master of Science in Computer Science, an Online Master of Science in Computer Science, and a Doctor of Philosophy. The Department of Electrical and Computer Engineering offers a Master of Science in Electrical and Computer Engineering and a Doctor of Philosophy. The Department of Mechanical Engineering offers a Master of Science in Mechanical Engineering and a Doctor of Philosophy. The School of Engineering and Computer Science also offers additional graduate engineering degrees, which are described below in the Interdisciplinary Degrees section and are administered jointly between the engineering departments. These degrees include a Master of Science in Biomedical Engineering, a Master of Engineering, joint undergraduate/graduate

degrees, and a joint Master of Business Administration/Master of Engineering.

- Computer Science (p. 108)
  - Computer Science, M.S. (p. 108)
  - · Computer Science, M.S. (Online) (p. 110)
  - · Computer Science, Ph.D. (p. 111)
- Electrical and Computer Engineering (p. 112)
  - Electrical and Computer Engineering, M.S.E.C.E. (p. 112)
  - Electrical and Computer Engineering, Ph.D. (p. 113)
- · Mechanical Engineering (p. 113)
  - Mechanical Engineering, M.S.M.E. (p. 113)
  - · Mechanical Engineering, Ph.D. (p. 114)
- · Interdisciplinary Degrees (p. 115)
  - Biomedical Engineering, M.S.B.M.E. (p. 115)
  - · Master of Engineering, M.E. (p. 115)
- Engineering Joint Degree Programs (p. 116)
  - Joint Master of Business Administration/Master of Engineering (p. 116)

# **Computer Science Department of Computer Science**

Chairperson: Erich J. Baker

Graduate Program Director: G. Michael Poor

- · Computer Science, M.S. (p. 108)
- · Computer Science, M.S. (Online) (p. 110)
- · Computer Science, Ph.D. (p. 111)

# **Computer Science, M.S.**

A bachelor's degree equivalent to the B.S. in computer science at Baylor or the B.A. in computer science at Baylor with calculus II and linear algebra is the standard requirement for admission. The submission of GRE score is required for admission. For those applying with less than the standard preparation, the quality and adequacy of the admissions record will be evaluated by the Graduate Committee of the Department of Computer Science after reviewing the application for admission. Requirements which must be met before admission will be determined by that committee. These requirements will be in addition to requirements for the M.S. degree.

At least fifteen semester hours are required at the 5000 level excluding CSI 5V92 Master's Research, CSI 5V96 Master's Project, and CSI 5V99 Thesis. All work presented to meet the requirements for this degree must be approved by the student's Advisory Committee or thesis Committee.

The Graduate Committee will appoint a graduate Advisory Committee for each student to monitor the progress of the student. The Master of Science program in computer science has two options, a thesis option and a project option.

### **Thesis Option**

The thesis option is designed for students who are interested in eventually obtaining a Ph.D. in computer science or for well-qualified students who wish to complete a master's degree in the shortest time possible.

9

Code	Title	Hours
<b>Required Courses</b>		
CSI 5010	Graduate Seminar (2 semesters)	0
CSI 5V92	Master's Research	3
CSI 5V99	Thesis	3
Area Courses		

Area course requirements are designed to provide students with sufficient breadth of knowledge for a Master of Science degree. It is expected for students to take courses of interest for their research as part of this requirement. Students must take at least two theory courses, one software engineering course, two system courses and two application courses. A student may petition for a course taught for graduate credit within the Computer Science department but not listed to count as a course towards a specific area requirement. One course may not be counted towards more than one area.

Theor	v Courses	

CSI 5310	Introduction to Computation Theory	3
CSI 5350	Advanced Algorithms	3
Software Engineering (	Courses	
CSI 5324	Software Engineering	3
or CSI 5342	Software Verification and Validation	
Systems Courses		
Select at least two co	urses from the following:	6
CSI 5321	Advanced Data Communications	
CSI 5335	Advanced Database	
CSI 5337	Advanced Operating Systems	
CSI 5338	Advanced Computer Organization	
CSI 5345	Parallel Systems	
CSI 5346	Design Automation	
Application Courses		
Select at least two co	urses from the following:	6
CSI 4341	Computer Graphics	
CSI 4352	Introduction to Data Mining	
CSI 5325	Introduction to Machine Learning	
CSI 5330	Advanced Computational Biology	
CSI 5360	Information Retrieval & Natural Language	
001 5000	Processing	
CSI 5388	Advanced Topics in Human-Computer Interaction	

#### **Electives**

A total of 9 semester hours of electives are required.

A student's undergraduate preparation wilnormally include courses in Data Communications and Operating Systems. For students without prior course work in these areas, one of the following two courses may be taken for graduate credit, but only one of these courses may count toward the master's degree requirements:

CSI 4321 Data Communications or CSI 4337 Introduction to Operating Systems

With the approval of the advisory committee, the student may take one 5000-level course from outside the department. No more than one course from outside the department may count toward the master's degree requirements.

Except as mentioned above, any CSI course that is offered for graduate credit may be taken as an elective.

Total Hours 36

### **Project Option**

The project option is designed for students interested in a terminal master's degree. It is also appropriate for students who continue to work while obtaining the degree. This option is designed for a fall entry. The program is intended to be completed in two years by a full-time student, but it is structured so that additional time may be taken to complete the degree.

degree.		
Code	Title	Hours
Required Courses		
CSI 5010	Graduate Seminar (2 semesters)	0
CSI 5V92	Master's Research	3
CSI 5V96	Master's Project	3
Area Courses		
Area courses  Area course requirements are designed to provide students with sufficient breadth of knowledge for a Master of Science degree. It is expected for students to take courses of interest for their research as part of this requirement. Students must take at least two theory courses, one software engineering course, two system courses and two application courses. A student may petition for a course taught for graduate credit within the Computer Science department but not listed to count as a course towards a specific area requirement. One course may not be counted towards more		

## than one area. Theory Courses

Theory Courses		
CSI 5310	Introduction to Computation Theory	3
CSI 5350	Advanced Algorithms	3
Software Engineering	Courses	
CSI 5324	Software Engineering	3
or CSI 5342	Software Verification and Validation	
Systems Courses		
Select at least two co	ourses from the following:	6
CSI 5321	Advanced Data Communications	
CSI 5335	Advanced Database	
CSI 5337	Advanced Operating Systems	
CSI 5338	Advanced Computer Organization	
CSI 5345	Parallel Systems	
CSI 5346	Design Automation	
Application Courses		
Select at least two co	ourses from the following:	6
CSI 4341	Computer Graphics	
CSI 4352	Introduction to Data Mining	
CSI 5325	Introduction to Machine Learning	
CSI 5330	Advanced Computational Biology	
CSI 5360	Information Retrieval & Natural Language Processing	
CSI 5388	Advanced Topics in Human-Computer	

#### **Electives**

9

A total of 9 semester hours of electives are required.

Interaction

A student's undergraduate preparation will normally include courses in Data Communications and Operating Systems. For students without prior course work in these areas, one of the following two courses may be taken for graduate credit, but only one of these courses may count toward the master's degree requirements:

CSI 4321 **Data Communications** 

or CSI 4337 Introduction to Operating Systems

With the approval of the advisory committee, the student may take one 5000-level course from outside the department. No more than one course from outside the department may count toward the master's degree requirements.

Except as mentioned above, any CSI course that is offered for graduate credit may be taken as an elective.

36 **Total Hours** 

An oral examination will be required of every student in either option. There is no foreign language requirement for graduation.

## **Computer Science, M.S. (Online)**

Successful applicants typically have a bachelor's degree in computer science or a closely related field from a regionally accredited institution. Successful completion of calculus II and linear algebra is a standard requirement for admission. Applicants with a bachelor's degree in a computational STEM discipline, defined as a degree in computer science, math, physics, engineering, chemistry, or statistics, must have maintained a minimum 3.0 major GPA. Applicants with a bachelor's degree in a non-computational STEM discipline must have maintained a minimum 3.0 GPA in computational STEM courses, defined as courses in computer science, math, physics, engineering, chemistry, and statistics. Applicants should have knowledge of algorithms, database, and operating systems. Students must be proficient in a high-level, objectoriented programming language such as Python, C, C++, C#, or Java. For applicants without a bachelor's degree in computer science, a passing grade on a programming exam administered by the program may be required. Applicants must submit three letters of recommendation and a resume. For those applying with less than the standard preparation, the quality and adequacy of the admissions record will be evaluated by the Graduate Committee of the Department of Computer Science or their designee after reviewing the application for admission. Leveling requirements which must be met before admission will be determined by that committee or their designee. These requirements will be in addition to requirements for the M.S. degree. Leveling requirements (i.e. foundation courses) award Credit or No Credit upon completion and do not affect grade point average. In order to receive Credit for a foundation course, students must receive an 80% or higher. Applications will be accepted on a year-round rolling basis. Admission is selective, and meeting the above criteria does not guarantee admittance.

Courses are fifteen weeks with fall, spring, and summer intakes. The program is a total of 30 hours if no prerequisites are needed, or 45 hours with all foundation courses. The core consists of 18 hours, 5 courses chosen from CSI 5310, CSI 5350, CSI 5321, CSI 5324, CSI 5325, and CSI 5335, and the last course may be one additional core course or one course from CSI 5361, CSI 5355, CSI 5357, or CSI 5352. For students without prior undergraduate coursework in Data Communications or Operating Systems, CSI 5304 or CSI 5305 may be taken. All students must take CSI 5310 and CSI 5350; they may not be waived.

Students advised to take CSI 5305, Foundations of Operating Systems, by default, will (1) take the course to satisfy their 6th core class requirement (2) be graded on the standard grading mode, and (3) acknowledge that they have consulted with their Student Success Advisor about the impact it may have on their degree plan, academic standing, and funding eligibility. Students need to receive an 80% or higher for the course to satisfy their 6th core class requirement. Implications and more language are available in the student orientation course. Students will not be able to change the grade mode back to Credit/No Credit or select another course for this opportunity (if applicable). It is the student's responsibility to notify the program of a decision to opt out of this opportunity. They must email their Student Success Advisor, in writing, no later than the add deadline (usually the 5th day of class). Failure to properly notify the program may result in the student taking CSI 5305 as part of their core requirements, regardless of their decision. Alternately, students who are advised to take CSI 5304 and want to use that course as part of their core requirements must opt in by notifying their Student Success Advisor before the 5th class day, and agree, in writing, to similar language.

## **Requirements for Master of Science** (Online)

Code Title		Hour
Foundation Course	es (Prerequisite Track)	3-18
CSI 5301	Foundations of Algorithms	
CSI 5302	Foundations of Database	
CSI 5303	Foundations of Software Engineering	
CSI 5304	Foundations of Data Communications	
CSI 5305	Foundations of Operating Systems	
CSI 5306	Foundations of Mathematics for Computer Science	
Core Courses		18
Select two courses	s from the following:	
CSI 5310	Introduction to Computation Theory	
CSI 5350	Advanced Algorithms	
Select three course	es from the following:	
CSI 5321	Advanced Data Communications	
CSI 5324	Software Engineering	
CSI 5325	Introduction to Machine Learning	
CSI 5335	Advanced Database	
Select one course	from the following:	
CSI 5361	Cybersecurity Concepts	
CSI 5355	Data Mining and Analysis	
CSI 5357	Cloud Computing	
CSI 5352	Advanced Object-Oriented Development	
Select one core co	urse not selected from the list above	
CSI 5304	Foundations of Data Communications (for students enrolled in Foundation courses)	
CSI 5305	Foundations of Operating Systems (for students enrolled in Foundation courses)	
Tracks		1:
•	k a specialization from the two tracks: data are engineering. Each track consists of four 2 hours.	

Data Science (DASC)	
CSI 5351	Data Visualization

CSI 5355	Data Mining and Analysis
CSI 5357	Cloud Computing
CSI 5358	(CSI 5358::Applied Data Science)
Software Engineering	(COSE)
CSI 5342	Software Verification and Validation
CSI 5347	Distributed Systems
CSI 5352	Advanced Object-Oriented Development
CSI 5354	Advanced Software Engineering

## Computer Science, Ph.D.

The Doctor of Philosophy in Computer Science (Ph.D.) is intended for students who want to have careers that require in-depth research experience in areas related to theoretical or applied computer science. Successful candidates are prepared to solve significant research problems in the academy, industry, government (e.g. national laboratories), or non-profits.

#### Admission

All students in the Computer Science (CSI) doctoral program must have a Bachelor of Science or Master of Science degree in computer science or a closely related field. The submission of GRE score is required for admission. While prior research experience is valued highly, each application package will be evaluated holistically by the Graduate Committee of the Department of Computer Science.

## **Course Requirements**

The course requirements for the doctoral degree include:

Code	Title	Hours
Required Courses		
All course requireme Science degree, excl	nts for a Master of Science in Computer uding:	30
CSI 5V92	Master's Research	
CSI 5V96	Master's Project	
CSI 5V99	Thesis	
18 additional hours of	of 5000 or 6000-level course work	18
24 additional hours of 12 hours must be:	of 6000-level course work, of which at least	24
CSI 6V99	Dissertation	
Total Hours		72

A total of 72 hours post-Bachelor's degree are required, including dissertation hours.

A student entering the program with graduate-level work or a master's degree in computer science or a closely related field may apply up to thirty (30) semester hours of approved courses toward the Ph.D.

## **Qualifying Breadth Examinations**

The qualifying exams will consist of two distinct portions: a Breadth Exam and a Depth Exam. It is intended to test the mastery of a number of related fields as well as the student's capacity for synthesis and critical analysis.

**Timing:** At the end of the third full semester (summer semesters not counted), the student should prepare to take their qualifying exams. The student must be enrolled and in good standing during the semester.

To start the qualifying exam process either before or after the fourth semester due to transfer credits, requiring of leveling courses, etc., the student must obtain approval from their advisor and the Graduate Program Director (GPD) by the 2<sup>nd</sup> Friday of their fourth full semester.

#### **Breadth Exam**

A student must demonstrate breadth of knowledge in computer science in one of two ways: (1) Superior Course Performance (defined below) or (2) Area Examinations. As long as a student is able to complete one of these paths, they are eligible to proceed with the Depth Exam. If a student is not able to complete one of these paths, there is no alternative to move forward in the process.

Superior Course Performance: The first option for demonstrating breadth of knowledge is by obtaining superior grades in four graduate courses, two of which must include Analysis of Algorithms and Theory of Computing. The other two courses can be selected from any of the following areas (only one course may be selected per area): Systems and Networks, Security, Machine Learning and Artificial Intelligence, Software Engineering, Databases, and Visual Computing. The grades obtained in the four selected courses must meet the following requirements: 1) Students must obtain a grade of A- or better in at least three of the four courses, and 2) In the fourth course, students must obtain a grade of B or better.

Area Examinations: Alternatively, the prospective candidate can opt to take four written area examinations, one of which must be a combined Algorithms and Theory of Computation exam. To begin the process, the student must inform the GPD of their preferred areas of examination. It is the responsibility of the GPD to select the faculty who will be administering each exam and determining pass/fail for that particular area's examination. All examinations will be administered during a single morning where the student is given four hours to complete all of the required material. The faculty who prepare the examinations will have one week to grade and inform the student and department of the results of the exam (Pass/Fail).

#### **Depth Exam**

The Depth Exam will be broken into two subsequent parts: a Written Examination followed by an Oral Examination. A student must pass both to be considered "Passed" for the qualifying examination. In preparing for this portion of the exam, the student will first select a committee of three members. Two of the members must be in the student's research area and the third must be outside the research area. To begin the process, the student, the advisor, and the rest of the committee must complete and submit the Qualifying Exam Application Form, found on the Degree Requirements page on the Baylor ECS website, to the GPD at least two weeks before the exam. Once the application has been approved by the GPD and the department chair, the written portion of the depth exam can begin.

Written Examination: The committee members and any other graduate faculty will select 5-7 papers related to the student's research interests and outline 2-3 basic research questions which need to be explored in the written document. The student will be given two weeks to create a written report on the assigned readings which must involve an in-depth study and critical analysis. While the report should summarize the articles, it is expected that the report will demonstrate the student's ability for critical analysis and synthesis of fundamental knowledge. The student's written submission will be evaluated by the committee and each member will determine whether the student has passed or failed the written portion of the exam. If two or more members give a grade of "fail", then the student

does not pass the written exam. The results of the exam will be returned to the students within two weeks of final submission.

Oral Examination: The oral exam will be offered twice a year, once during the fall semester and once during the spring semester. Students become eligible to register for the oral exam once they have received a passing grade for the written portion of the depth exam and have successfully completed one of the two paths to the breadth exam. The oral exam must take place in the presence of the committee but is open to any graduate faculty who wish to attend. During the exam itself, committee members or any attendees may ask questions from a wide range of topics (not constrained to the specific contents of the student's written report). However, the questions should have some relevance to the topic.

In preparing for the oral part of the exam, the student should be prepared to give oral explanations and/or presentations of various aspects, and possible extensions, of the written part of the exam. However, the degree to which aspects of the written part of the examination are reiterated and/or expanded upon during the oral part of the examination is per the discretion of the committee and can cover any aspect of a computer science education that the committee deems appropriate to the examination. The oral portion of the exam should be no less than one hour and no more than four hours in duration. As with the written exam, if two or more members give a grade of "Fail", then the student does not pass. Once complete, the committee will convene and determine the results of the oral portion within 24 hours of the end of the exam. If the committee, in either the written or the oral examinations, gives a grade of "Fail," the student will be required to start the process over with a new depth examination. Students are allowed only one failure. If a second failure is given, the student will no longer be eligible to continue as a Ph.D. student in the Computer Science program.

#### **Appeals Process**

If the student is unable to pass either of the options for the breadth exam or if they have failed the written and oral examination twice, then they may appeal the decision to the chair of the department within 6 months of receiving the final decision. If the student believes that the issue has still not been resolved, they may have a final appeal to the Dean of the Graduate School.

### **Student's Dissertation Committee**

The Dissertation Committee for a Ph.D. candidate shall follow the guidelines given in the Dissertation Examining Committee Composition section of the Baylor Graduate Catalog.

## **Dissertation Proposal**

A student must pass a dissertation proposal and preliminary exams before being admitted to candidacy and allowed to enroll in CSI 6V99 Dissertation. The student is expected to write a proposal formatted as a federal funding application (e.g. to NSF or NIH) and make a presentation to the committee about the proposed research. The student will not be allowed to register for CSI 6V99 Dissertation until the Graduate School has approved the Result of the Preliminary Examination form and Admission to Doctoral Candidacy form.

### **Dissertation**

Candidates for the Ph.D. in computer science degree must complete an acceptable dissertation on a research topic in the computer science discipline or a closely related field. The dissertation must show evidence that the candidate has made a significant scholarly contribution to the field. At the completion of the dissertation research, the candidate defends the dissertation before the dissertation committee.

## **Foreign Language Requirement**

The CSI doctoral program does not have a foreign language requirement.

# Electrical and Computer Engineering Department of Electrical and Computer Engineering

Chairperson: Kwang Y. Lee

Graduate Program Director: Keith Schubert

- Electrical and Computer Engineering, M.S.E.C.E. (p. 112)
- · Electrical and Computer Engineering, Ph.D. (p. 113)

## **Electrical and Computer Engineering,** M.S.E.C.E.

The Department of Electrical and Computer Engineering offers a Master of Science in Electrical and Computer Engineering (M.S.E.C.E.). This program is designed for students who are interested in engineering careers that require education beyond the baccalaureate degree. Examples of those include engineers performing industrial research and development or students who plan to pursue a doctoral degree.

## **Admission and Financial Aid**

Admission is based on undergraduate academic record, the Graduate Record Examination (GRE), and letters of recommendation for the candidate. Tuition waivers and stipends are available on a competitive basis.

## Requirements

### **Thesis Option Requirements**

A discovery-oriented thesis is required in accordance with the criteria listed in the graduate catalog general requirements.

Code	Title	Hours
Course Work		24
ELC 5V99	Master's Thesis	6
Total Hours		30

#### **Non-Thesis Option Requirements**

A 3 credit MS-level project to be completed under the supervision of a ECE graduate faculty member that results in a project report submitted to the Department of Electrical and Computer Engineering.

Code	Title	Hours
Course Work		27
ELC 5397	Special Projects in Engineering (MS Project)	3
Total Hours		30

Courses will be selected in consultation with the student's advisor. Courses in the departments of Mechanical Engineering, Mathematics, Statistics, Physics, Chemistry, Biology, or Environmental Science may be included in this total with consent of the advisor.

## **Electrical and Computer Engineering, Ph.D.**

All applicants accepted into the Electrical and Computer Engineering (ECE) doctoral program must have received a Bachelor of Science or Master of Science degree in electrical or computer engineering, or closely related fields. The GRE exam is required of all applicants.

The program requirements include a minimum of sixty (60) semester hours of approved course work and research hours beyond the bachelor's degree. The sixty (60) semester hours must meet the following minimums or maximums:

- 1. Thirty-six (36) semester hours of coursework including:
- · Minimum of fifteen (15) semester hours of ECE course work,
- · Maximum of six (6) semester hours of 4000 level ECE,
- Minimum of six (6) semester hours outside ECE (see note 1 below), and
- Minimum of twelve (12) semester hours of course work taken at Baylor.
- Twenty-four (24) semester hours of dissertation (ELC 6V99 Dissertation).

Note 1: Engineering is inherently cross-disciplinary; students may select courses from non-ECE disciplines to broaden their understanding of particular application or knowledge domains. Supportive graduate course hours outside of ECE can be selected from mechanical or biomedical engineering, computer science, mathematics, statistics, the physical sciences, the social sciences, education or business. Engineering is also a value-based discipline that benefits from Christian world view and faith perspectives; students can also select supportive courses from religion, theology or philosophy. Course selection is broadly specified to provide flexibility and to accommodate a wide-range of student interest. The selection of specific courses must be approved by the student's graduate committee.

The minimal requirements may be expanded based on the student's background, research area and recommendations from the student's graduate committee. Students entering the program with graduate-level work or a master's degree in electrical or computer engineering, or a closely related field may apply up to twenty-nine (29) semester hours of approved courses toward the Ph.D. A break-down of the course requirements for non-ECE MS degree students is detailed as follows:

- a maximum of 30 semester credit hours of approved Master's level course work with at most 6 hours of 4000 level courses,
- a minimum of 12 semester hours of approved advanced level ECE course work, and
- a minimum of 6 approved non-ECE courses (See Note 1 above).

## **Doctoral Candidates with Master's Degree Backgrounds**

Students with a master's degree in a field other than electrical or computer engineering (or an equivalent) will be able to enter the ECE doctoral program. Each such student will be required to pass preliminary

exams in appropriate areas or sub-disciplines of electrical or computer engineering and one sub-discipline or area of their background field.

#### **Student's Graduate Committee**

The Graduate Committee for a Ph.D. candidate shall consist of at least four graduate faculty members, at least three from ECE and at least one from outside of ECE. The chairperson of the Committee must be a tenured/tenure-track ECE graduate faculty. If deemed appropriate, a graduate faculty member outside of ECE can supervise and mentor the student, in the capacity of a co-chair of the Committee. The Committee's activities and structure will otherwise be governed by the appropriate sections of the Graduate Catalog.

## Foreign Language Requirement

The ECE doctoral program does not have a foreign language requirement; however, competency in the use of technical tools and techniques such as computer programming, Matlab, Mathematica, VHDL, Verilog and CST is strongly encouraged.

## Preliminary Examination and Research Proposal

Students must pass a preliminary examination to be admitted to candidacy. The written and oral preliminary exam will cover three of the principle sub-disciplines of ECE such as signals and systems, digital systems, linear systems and controls, electronics and circuits, electromagnetics, and communications systems. An exam in a sub-discipline of the student's background may be substituted for one of the required ECE sub-disciplines for students with non-ECE backgrounds. The preliminary exams are normally not administered until after a student has completed at least 36 hours of graduate course work beyond the bachelor's degree, with at least one year of work at Baylor. The student is further expected to present a research proposal to the ECE faculty, as approved by their graduate (dissertation) committee, within one year of passing the preliminary exam.

### **Dissertation**

Candidates for the Ph.D. in electrical and computer engineering degree must complete an acceptable dissertation on a research topic in the ECE discipline or closely related field. The dissertation must give evidence that the candidate has pursued a program of research, the results of which reveal scholarly competence and a significant contribution to knowledge.

# Mechanical Engineering Department of Mechanical Engineering

Chairperson: Paul I. Ro

Graduate Program Director: Stephen T. McClain

- Mechanical Engineering, M.S.M.E. (p. 113)
- Mechanical Engineering, Ph.D. (p. 114)

## Mechanical Engineering, M.S.M.E.

The Master of Science in Mechanical Engineering (M.S.M.E.) is designed for students who are interested in engineering careers that require education beyond the baccalaureate degree. Examples of those include

engineers performing industrial research and development or students who plan to pursue a doctoral degree.

#### **Admission and Financial Aid**

Admission is based on undergraduate academic record, the Graduate Record Examination (GRE), and letters of recommendation for the candidate. Tuition waivers and stipends are available on a competitive basis.

## **Course Requirements for Master of Science**

#### **Thesis Option Requirements**

A discovery-oriented thesis is required in accordance with the criteria listed in the graduate catalog general requirements.

Code	Title	Hours
Course Work		24
ME 5V99	Master's Thesis	6
Total Hours		30

#### **Non-Thesis Option Requirements**

A 3 credit MS-level project to be completed under the supervision of a ME graduate faculty member that results in a project report submitted to the Department of Mechanical Engineering.

Total Hours		30
EGR 5V98	Master's Project	3
Course Work		27
Code	Title	Hours

Course work will be selected in consultation with the student's advisor. Courses in the departments of Electrical and Computer Engineering, Mathematics, Statistics, Physics, Chemistry, Biology, or Environmental Science may be included in this total with consent of the advisor.

## Mechanical Engineering, Ph.D.

The Doctor of Philosophy in mechanical engineering (Ph.D.) is designed for students who are interested in engineering careers that require education beyond the Master of Science degree. Examples of those include engineers performing industrial research, research at national laboratories, or careers in engineering academics.

## **Admission and Financial Aid**

All applicants accepted into the Mechanical Engineering (ME) doctoral program must have received a Bachelor of Science degree in mechanical engineering or closely related fields. The GRE exam is required of all applicants.

#### **Credit Hours**

The program requirements include a minimum of seventy-two (72) semester hours of approved course work and research hours. A maximum of thirty (30) semester hours of approved graduate coursework from a master's in Mechanical Engineering or closely related field may be transferred to the Ph.D. program. Broad latitude is granted in the selection of courses, but all courses must be approved by the student's

graduate committee. The semester hours for the Ph.D. must meet the following criteria:

#### At least forty-two (42) semester hours of coursework, subject to the following criteria:

Requirement	Hours
A minimum of twenty-four (24) semester hours of 5000 or 6000 graduate level course work within ME	24
A minimum of six (6) semester hours of 5000 or 6000 graduate level course work outside of ME <sup>1</sup>	6
A maximum of six (6) semester hours of 4000 level course work	6
A minimum of three (3) semester hours of course work in Ethics, Religion, Philosophy, or related area <sup>2</sup>	3

#### 2. At least twenty-four (24) hours of Doctoral Research:

Requirement	Hours
A minimum of twelve (12) semester hours of ME Doctoral Research ME 6V99 taken after the preliminary exam	12
A maximum of twelve (12) semester hours of Engineering Research ME 6V97 taken prior to the preliminary exam	12

- Engineering is inherently cross-disciplinary, and oftentimes students may benefit from courses in non-ME disciplines to broaden their understanding of particular applications or knowledge domains. Supportive graduate course hours outside of ME can be selected from areas that include, but are not limited to: electrical and computer engineering, biomedical engineering, computer science, mathematics, statistics, the physical sciences, the social sciences, education or business.
- <sup>2</sup> Engineering is a values-based discipline that benefits from Christian worldview and faith perspectives. Therefore, students are required to take select supportive course in areas that touch on these perspectives. Among the courses accepted for this requirement are one-credit-hour seminars taught by ME faculty on Research Ethics, or on Technology and Society.

## Foreign Language Requirement

The ME doctoral program does not have a foreign language requirement. However, competency in a collateral field will be cultivated in students through the requirement of course work outside of ME.

### **Student's Graduate Committee**

The Graduate Committee for a Ph.D. candidate shall consist of at least five members of the Baylor graduate faculty, at least three members from within ME, and at least one member from outside of ME. A researcher from outside of Baylor may serve as a committee member if approved by the ME graduate director and the Baylor members of the committee. The committee chair must be a tenured or tenure-track member of the ME faculty and a member of the Graduate Faculty.

If deemed appropriate, a graduate faculty member outside of ME may supervise and mentor the student, in the capacity of a co-chair of the

committee. The committee's activities and structure will otherwise be governed by the appropriate sections of the Graduate Catalog.

## **Qualifying Examination**

Students must pass a qualifying exam that covers course work in three subject areas selected by the student's graduate committee from among those offered by the ME department. The qualifying exam format will be at the discretion of the ME graduate faculty. A student may petition the graduate faculty to retake one or more failed subject areas of the qualifying exam, but must pass all three subject areas within six months of the date when the first exam was taken.

## **Preliminary Examination**

Students must pass a preliminary exam (Ph.D. proposal) to be admitted to candidacy, and to enroll in Dissertation Research 6V99.

The preliminary exam must be submitted in a semester following the semester during which the qualifying exam was passed. The preliminary exam format will be at the discretion of the student's graduate committee, but may typically include a formal written proposal along with a formal presentation providing the committee an opportunity to ask questions about the scope and nature of the proposed research.

#### **Dissertation**

Candidates for the Ph.D. in mechanical engineering degree must complete an acceptable dissertation on a research topic in the ME discipline or closely related field. The dissertation must provide evidence that the candidate has pursued a program of research, the results of which reveal scholarly competence and a significant contribution to knowledge.

## **Teaching Opportunities**

Doctoral students considering an academic career may benefit from serving as undergraduate course instructors with a title of Teaching Fellow. To be eligible to serve as a Teaching Fellow a student must have passed the qualifying exam, be approved by the ME department chair, and have completed training through the Graduate School. A Baylor ME faculty member will be assigned to supervise and guide each Teaching Fellow.

## **Interdisciplinary Degrees**

Graduate Directors in Engineering: Ian Gravagne and Stephen T. McClain

The Department of Electrical and Computer Engineering and the Department of Mechanical Engineering jointly administer degrees that are interdisciplinary in nature.

- · Biomedical Engineering, M.S.B.M.E. (p. 115)
- · Master of Engineering, M.E. (p. 115)

## Biomedical Engineering, M.S.B.M.E.

The Master of Science in Biomedical Engineering (M.S.B.M.E.) is designed for students who are interested in engineering careers at the intersection of engineering, biology, and medicine.

### **Admission and Financial Aid**

Admission is based on undergraduate academic record, the Graduate Record Examination (GRE), and letters of recommendation for the

candidate. Tuition waivers and stipends are available on a competitive basis.

## **Course Requirements for Master of Science**

#### **Thesis Option Requirements**

A discovery-oriented thesis is required in accordance with the criteria listed in the graduate catalog general requirements.

Code	Title	Hours
Course Work		24
BME 5V99	Master's Thesis	6
Total Hours		30

#### **Non-Thesis Option Requirements**

A 3 credit MS-level project to be completed under the supervision of a ME graduate faculty member that results in a project report submitted to the Department of Mechanical Engineering.

Code	Title	Hours
Course Work		27
EGR 5V98	Master's Project	3
Total Hours		30

Course work will be selected in consultation with the student's advisor. Courses in the departments of Electrical and Computer Engineering, Mechanical Engineering, Mathematics, Statistics, Physics, Chemistry, Biology, or Environmental Science may be included in this total with consent of the advisor.

## Master of Engineering, M.E.

The Master of Engineering (M.E.) is offered for students who are more practice oriented. This program is ideal for students who have an interest in engineering consulting, product development, or appropriate technology for developing countries.

### Admission and Financial Aid

Admission is based on undergraduate academic record, the Graduate Record Examination (GRE), and letters of recommendation for the candidate.

## Requirements

Requirement	Hours
Course Work <sup>1</sup>	30

<sup>&</sup>lt;sup>1</sup> 3 hours may be EGR 5V98 Master's Project course with engineering applications

Courses will be selected in consultation with the student's advisor. Oral examination is not required. Master of Engineering students may take up to 12 hours outside the Department of Engineering in the Master of Business Administration (MBA) program or the departments of Mathematics, Statistics, Biology, Chemistry, or Physics with consent of the advisor.

## **Engineering Joint Degree Programs**

Students who are near completion of their undergraduate engineering degree at Baylor University may enter one of the joint programs in which, by proper planning, up to six semester hours of graduate credit may be applied toward the degree requirements of both the bachelor's and master's degrees. Students will select whether to pursue a Master of Science in one of the engineering disciplines or a Master of Engineering. Both diplomas are awarded at the completion of both degree programs. The eight joint degree programs are:

- Electrical and Computer Engineering Joint Program, B.S.E.C.E./ M.S.E.C.E.
- Electrical and Computer Engineering/Biomedical Engineering, B.S.E.C.E/M.S.B.M.E.
- Electrical and Computer Engineering/Master of Engineering, B.S.E.C.E./M.E.
- · Mechanical Engineering Joint Program, B.S.M.E./M.S.M.E.
- Mechanical Engineering/Biomedical Engineering, B.S.M.E./ M.S.B.M.F.
- Mechanical Engineering/Master of Engineering, B.S.M.E./M.E.
- Engineering/Biomedical Engineering, B.S.E./M.S.B.M.E.
- · Engineering/Master of Engineering, B.S.E./M.E.

#### **Admission and Financial Aid**

Admission is based on undergraduate academic record, the Graduate Record Examination (GRE), and letters of recommendation for the candidate. For Master of Science programs, tuition waivers and stipends are available on a competitive basis.

## **Course Requirements for Master of Science**

#### **Thesis Option Requirements**

A discovery-oriented thesis is required in accordance with the criteria listed in the graduate catalog general requirements.

Code	Title	Hours
Course Work		24
ME 5V99	Master's Thesis	6
or ELC 5V99	Master's Thesis	
Total Hours		30

#### **Non-Thesis Option Requirements**

A 3 credit MS-level project to be completed under the supervision of a ME graduate faculty member that results in a project report submitted to the Department of Mechanical Engineering.

Code	Title	Hours
Course Work		27
MS Project - Se	3	
EGR 5V98	Master's Project	3
Total Hours		33

Course work will be selected in consultation with the student's advisor. Courses in the departments of Electrical and Computer Engineering, Mathematics, Statistics, Physics, Chemistry, Biology, or Environmental Science may be included in this total with consent of the advisor.

## **Course Requirements for Master of Engineering**

Requirement	Hours
Course Work <sup>1</sup>	30

<sup>&</sup>lt;sup>1</sup> 3 hours may be EGR 5V98 Master's Project project course with engineering applications

Courses will be selected in consultation with the student's advisor. Master of Engineering students may take up to 15 hours outside the Department of Engineering in the Master of Business Administration (MBA) program or the departments of Mathematics, Statistics, Biology, Chemistry, or Physics with consent of the advisor.

### **Program**

 Joint Master of Business Administration/Master of Engineering (p. 116)

## Joint Master of Business Administration/Master of Engineering

Associate Dean for Graduate Business Programs: Tim Kayworth Graduate Directors in Engineering: Ian Gravagne and Stephen T. McClain

Students interested in a career requiring complementary skills in both business and engineering may complete the Master of Engineering and MBA degrees concurrently. By proper selection of courses, students can save up to 21 hours in the joint degree compared to the individual requirements of the two separate degrees. Students should consult with advisors in both engineering and business to determine the best sequence of courses.

Master of Engineering students from industry may, with approval of their advisor, select a project that is relevant to their work responsibilities.

### **Admission**

Students must apply and be accepted separately into both programs. The MBA degree requires either the GMAT or GRE exams.

## Requirements

Candidates for the joint Master of Engineering/MBA degree must complete 37 hours for MBA and 15 core engineering hours. In addition, the student must complete an additional 15 hours of electives. By proper selection of electives it may be possible to reduce the requirements of the joint degree by up to 21 hours compared to the normal requirements of the two degrees completed separately. This efficiency is achieved by proper selection of business electives for the 15 business course credits allowed for the Master of Engineering program and by a six-credit reduction of the MBA elective requirements reflecting recognition of the additional graduate work in completing the Master of Engineering. Since both degrees are awarded simultaneously, all requirements in both programs must be completed in order to receive either degree. Students are encouraged to contact appropriate advisors in each program for further details.

Code	litle	Hours
Required Frame	ework Courses	
BUS 5401	Business Frameworks	4

#### **Required MBA Core Courses** ACC 5300 Accounting Tools for Management

7.00 0000	Decision Making	Ü
BUS 5101	Focus Firm I	1
BUS 5111	Professional Career Development for First Semester Graduate Students	1
BUS 5112	Professional Career Development for Second Semester Graduate Students	1
BUS 5390	Management Communication	3
ECO 5340	Economic Tools for Management Decision Making	3
FIN 5360	Seminar in Corporate Finance	3
MGT 5310	Management of Organizational Behavior	3
MGT 5320	Manufacturing and Service Operations	3
MGT 5325	International Management	3
MGT 5385	Strategic Management and Business Policy	3
MKT 5310	Seminar in Marketing Strategy	3
QBA 5330	Business Analytics for Decision Making	3
	have an undergraduate degree in Business quired to take the following:	
BL 5104	Business Foundations - Business Law	(1)
MIS Requirement		

BL 5104	Bu	siness	Foundations	- Business I	_aw	(1)
MIS Requirement						

Select one course	from the following:	3
MIS 5342	Business Intelligence	
MIS 5345	Decision Making Using Excel	
MIS 5346	Data Warehousing	
MIS 5355	Management of Information Systems	

	eering

Select 15 semester hours	15
Required ME Electives	
Select 15 semester hours	15

**Total Hours** 

## **English Department of English**

Chairperson: Kevin J. Gardner

Graduate Program Director: Richard R. Russell

The undergraduate requirements for admission to graduate study in English normally include eighteen semester hours of English beyond the sophomore level. However, if a candidate's background in English is deemed inadequate, the graduate faculty of the department has the prerogative to require additional, designated courses as prerequisites for graduate work. Suitable undergraduate GPAs, both in English and overall, and scores on the Graduate Record Examination General Test (GRE) predictive of success in this program are significant criteria in admissions decisions in the English Department (all applicants must submit GRE General Test scores).

For admission into the doctoral program one ordinarily must have a master's degree from an accredited university. However, exceptionally well-qualified students with the B.A. degree who have high GRE scores and a high GPA both in English and overall, as approved by the department, may enter the Ph.D. program. Also, students who enter the M.A. program may petition to enter the Ph.D. program after successfully completing fifteen hours with a GPA of 3.5, without completing the

M.A. thesis. The Graduate Program Director appoints a committee of three graduate faculty, usually instructors of the candidate, to study the student's petition and the student's performance. The committee may recommend to the graduate faculty either that the student proceed toward the Ph.D. or complete the M.A.

All graduate students are responsible for securing the supplementary departmental requirements for their respective degrees from the English office at the time of initial enrollment. The deadline for applying to the M.A. or Ph.D. program is January 31; however, it is clearly advantageous to the applicant who wishes to receive an assistantship to have all components of the application in by January 15. The English graduate program has three types of assistantships available to both M.A. and Ph.D. students. These assistantships carry stipends and tuition coverage that are highly competitive with those offered by other universities. Also, health insurance premiums are paid for Ph.D. students who are Teaching Assistants. Inquiries should be made of the Graduate Program Director.

- English, M.A. (p. 117)
- English, Ph.D. (p. 117)

## **English, M.A.**

The total number of semester hours required for the Master of Arts degree (thesis track) is thirty, which includes six hours to be credited for the thesis; the total number of hours required for the non-thesis track is thirty-three. An oral examination, which is a defense of the thesis, is required for thesis track students; an oral examination concentrating on course work is required for non-thesis track students. A minor, consisting of six hours of graduate credit, may be taken within the department or in another closely related field. Candidates for the M.A. degree are required to demonstrate intermediate proficiency in a foreign language. To determine the means of satisfying the foreign language requirement, students should consult the statement appearing under "Specific Degree Requirements" in this catalog. The preferred foreign languages for programs in the Department of English are French and German, but students may select any modern foreign language or classical language provided that it is necessary for the thesis and is approved by the Graduate Program Director.

## English, Ph.D.

The general requirements for the Doctor of Philosophy degree in English follow those outlined under general requirements for the Ph.D. degree in this catalog. Completion of forty-two semester hours of graduate credit beyond the M.A. degree constitutes the minimum requirement for the Doctor of Philosophy degree. Ten classes are required beyond the M.A. degree. Twelve hours of the forty-two total must be allocated for the dissertation. If one enters directly from the B.A. degree, then sixtysix hours of graduate credit beyond the B.A. constitutes the minimum requirement (with twelve hours of this total for the dissertation). Eighteen graduate classes are required beyond the B.A. degree. In addition, the English Department requires of all Ph.D. students, during the undergraduate, master's, or doctoral periods of study, one course in Old English Language, one course in introduction to graduate studies (ordinarily a course in bibliography and research), and one upper-level course in linguistics or critical theory or rhetoric and composition. The candidate for the Ph.D. degree is required to take one course in each of four categories and four courses in an area of concentration. Normally, the student will concentrate her/his seminars in one of the categories of English and American literature that she/he has chosen as a concentration. A seminar may be repeated if the content is on a

different topic. Students are expected to take the available seminars in the area of their special research. Although a minor is not required, one is possible. Both the major and minor may be and usually are taken within the department in the areas of either English or American literature. Minor courses and any other courses outside of the department may be taken up to 12 hours of graduate credit; these courses must be directly relevant to the student's area of major study. Candidates will be examined on one area from those listed under "Specific Course Requirements" (see "General Requirements for the Doctoral Degree" provided by the English Department), on one historical area contiguous with the major area and another historical area, and on one open area (e.g., a genre, a major author, critical theory, rhetoric, linguistics, etc.). All Ph.D. students must demonstrate intermediate-level proficiency in two foreign languages. To determine the means of satisfying the foreign language requirement, students should consult the statement appearing under "Specific Degree Requirements" in this catalog. The preferred foreign languages for programs in the Department of English are French and German, but students may select any modern foreign languages or classical languages, provided that they are necessary for the dissertation and are approved by the Graduate Program Director.

# **Environmental Science Department of Environmental Science**

Chairperson: George P. Cobb Graduate Program Director: Erica D. Bruce

The Department of Environmental Science offers three degree options:

- Master of Science in environmental science for students with a Bachelor of Science degree
- 2. Master of Environmental Studies for students with a Bachelor of Arts degree
- 3. Master of Environmental Studies, non-thesis option for students with a Bachelor of Arts degree
- 4. Doctor of Philosophy in environmental science

Bachelor of Arts majors in a science discipline may petition for the Master of Science in environmental science.

The Environmental Science department welcomes graduate student candidates with diverse academic backgrounds. Students from majors such as anthropology, aviation science, biology, chemistry, engineering, geography, science education, and policy are encouraged to apply. The department has developed a graduate core course sequence open to students with graduate standing in all environmental fields.

Code	Title	Hours
ENV 5342	Ecological Risk Assessment	3
ENV 5303	<b>Environmental Chemical Analysis</b>	3
ENV 5368	Integrated Energy Resource Systems	3
ENV 5379	Ecosystem Management	3

The program offers advanced courses in specialized areas such as water resources, natural resource management, environmental toxicology, and environmental chemistry. Under the direction of a major advisor, graduate students may either focus their course work in a specific area, such as water quality, or they may pursue courses that provide a broad background in environmental issues. Graduate students may also take courses offered in other departments, such as Biology, Chemistry, and

Geology, if the courses are appropriate to environmental science or studies and the graduate student's professional goals.

Financial assistance is available for departmental graduate students in the form of teaching assistantships, research assistantships, and scholarships. Loans and other types of aid are available through the Student Financial Aid Office.

Students selecting a thesis option may conduct research in the Waco area, outside the region or internationally. Environmental Science graduate students have conducted research in Asia, Europe, and Central America. Departmental laboratory facilities provide instrumentation and computer support in geographic information systems, computer modeling, water quality analysis, air quality monitoring, and biofuels production. The program engages in field research in a variety of ecosystems, including riparian corridors, reservoirs, grasslands, wetlands, temperate forests, tropical forests, and coastal barrier islands. Current faculty research interests include the social impacts of ecotourism, human dimensions of climate change, wastewater management, water quality, ecotoxicology, improved production of biofuels, conservation of biodiversity, and the ethics of natural resource communities.

Thesis options are appropriate for students interested in research and academic careers, research interest, those pursuing a terminal degree, or those planning careers that require extensive preparation of environmental documentation or plans. A non-thesis option with a required practicum is available for the Master of Environmental Studies (M.E.S.) degree. The semester-long practicum may be either paid or volunteer and must be under a professional supervisor. The non-thesis option is appropriate for students seeking employment in K-12 education, management in environmental organizations, or similar fields. The non-thesis option is not recommended for students planning to pursue a terminal degree, such as a Ph.D.

#### **Objective**

The objective of all four degree programs is to train technically competent individuals to assess problems involving environmental issues, to design workable plans, to undertake or direct planned actions toward environmental problem solving, and to work in interdisciplinary teams.

#### Admission

For admission to the graduate program, candidates must:

- 1. Meet the general requirements set forth by the Graduate School.
- Demonstrate an academic background that is adequate to undertake the course of study that has been defined as the candidate's major area of interest.
- Present a GPA from undergraduate disciplines that is predictive of success in this program and that supports the candidate's graduate area of interest.
- Environmental Science, M.S. (p. 119)
- · Master of Environmental Studies, M.E.S. (p. 119)
- · Environmental Science, Ph.D. (p. 119)

## **Environmental Science, M.S.**

## Requirements

- Candidates must complete thirty semester hours of graduate courses including six semester hours of research and thesis (5V99). At least twelve semester hours will be 5000-level courses (excluding 5V99).
- Candidates will present a proposal to their thesis committee that defines the area of environmental interest including the identification of a major problem in the area.
- When the course work is completed and the thesis is accepted, the candidates must pass an oral examination over the thesis.
- 4. There is no foreign language requirement.
- 5. Admission in the Master of Science program requires a Bachelor of Science or Bachelor of Engineering, at least 8 semester hours of chemistry and an additional 40 semester hours of previous course work in sciences, engineering, and mathematics. Note: The 40 science hours plus 8 hours in chemistry will meet the standards for admission into the Master of Science program for applicants with a Bachelor of Arts degree.

## Master of Environmental Studies, M.E.S.

## Master of Environmental Studies (M.E.S.) Thesis Option Requirements

- Candidates must complete thirty semester hours of graduate courses including six semester hours of research and thesis (5V99). At least twelve semester hours will be 5000-level courses (excluding 5V99).
- Candidates will present a proposal to their thesis committee that defines the area of environmental interest including the identification of a major problem in the area.
- 3. When the course work is completed and the thesis is accepted, the candidates must pass an oral examination over the thesis.
- 4. There is no foreign language requirement.

## Master of Environmental Studies (M.E.S.) Practicum Option Requirements

- Candidates must complete thirty-six hours of graduate courses. At least twelve semester hours will be 5000-level courses (excluding 5V99 and 5V52). No hours of 5V99 may be counted toward the practicum.
- 2. Candidates must complete a graduate practicum 5V90 for three credits, present an example of their written professional work to the department's graduate faculty for evaluation, and pass a comprehensive oral examination over the work of the program.
- 3. There is no foreign language requirement.

The following research is supported by the facilities of the Department of Environmental Science:

- 1. Specie and Habitat Management
- 2. Water Quality and Pollution Mitigation
- 3. Biomass Processing and Renewable Energy
- 4. Human Dimensions of Resource Management
- 5. Environment and Development
- 6. Ecotourism

- 7. Environmental Ethics
- 8. Ecotoxicology
- 9. Air Quality

# **Environmental Science, Ph.D. Requirements**

General requirements of the Doctor of Philosophy degree are given in the general requirements section of this catalog. It is not necessary that students with the B.S. degree obtain an M.S. degree before pursuing the doctorate.

The Ph.D. in environmental science will require a total of 78 semester hours beyond the requirements of a Bachelor's degree.

Specific requirements include:

Requirement	Hours
Semester hours of coursework	24
Seminar hours	3
Research hours	6
Dissertation hours	12

Remaining credit hours to include research, 33 laboratory techniques or classroom offerings

Exact degree plans will be specified by the student's advisory committee no later than their third semester (excluding summers) within the doctoral program.

Our curriculum includes a core of 4 classes. Each student will be required to complete at least three semester hours at the graduate level in four of the five areas consisting of: Environmental Toxicology, Environmental Chemistry, Environmental Risk Assessment, and Statistics and Ecological and Environmental Systems.

# Film and Digital Media Department of Film and Digital Media

Chairperson: Chris Hansen

Graduate Program Director: Daniel M. Shafer

• Film and Digital Media, M.A. (p. 119)

## Film and Digital Media, M.A.

The goal of the MA in Film and Digital Media program is to train students in the creation and production of film, audio, video and new communication technologies and their impact on culture and individuals. Film and digital media are powerful forces in our minds, lives, societies and cultures. Graduate students in this program are encouraged to become ethical, articulate, creative and innovative leaders in professional and academic fields related to film and digital media. Graduates are poised for successful careers in various media industries including film, television/video, audio, new media, screenwriting, media studies, and more. Students may focus on any of four different aspects of media—production, media studies, media management and technology, and uses and effects research. All approaches are designed to deepen students' understanding of storytelling. Students have the opportunity to take courses and craft projects across multiple domains.

### **Admission**

The majority of students begin the program in the fall when teaching assistantships and scholarships are competitively awarded. To be considered for funding, applications should be received on or before February 1. The final application deadline for fall enrollment is May 1. Occasionally, students begin the program in the spring. The application deadline for spring enrollment is October 1. Applications for admission are completed online through the Graduate School and should include: a personal statement, writing sample, production portfolio, three letters of recommendation, and official transcripts of all college/university work. International students are required to submit either TOEFL, IELTS, or Duolingo scores unless they have received a degree from a U.S. accredited institution of higher education.

## **Degree Path Options**

There are three paths or options, a thesis option and two non-thesis options (internship or project), to completing the MA in Film and Digital Media:

#### 1. Thesis

Students completing a scholarly thesis will craft an original research project that demonstrates abilities to synthesize research literature, gather and analyze original data or texts, and make explanatory arguments for the findings and interpretations of that analysis. Students who write a scholarly thesis may aspire to doctoral studies or other research-oriented careers. Alternatively, students may complete a production thesis which entails crafting an original creative work (e.g., film). Successful completion of this requirement should demonstrate familiarity with the aesthetic tradition in which the project is based as well as technical competence in and creative use of the medium. An extensive written analysis of the creative work is also required. Students anticipating a career in film, television, interactive multimedia production, technological research and development, and/or a media management career should consider a production thesis. Successful completion of the thesis, scholarly or production, requires an oral examination where students present their work for review and approval by a faculty committee.

#### 2. Professional Project

The nature of professional projects vary based on students goals and interests, but each project must include a scholarly writing component and involve submission to an external outlet or audience (outside the university) for consumption or use – for example, a conference or festival. Students who pursue this option undergo an oral exam where they present their work for review and approval by a faculty committee.

#### 3. Internship

The internship requires securing and successfully completing an approved professional media-related internship and preparing an extensive final report. This option is intended for students seeking careers that are not academic or research-oriented in nature and does not require an oral exam process with a faculty committee.

### Curriculum

Hour and course requirements vary based on the degree path option:

#### **Thesis Option Degree Plan**

Code	Title	Hours	
Required Coursework			
FDM 5V99	Thesis	6	

Total Hours		30
Up to 3 hours of !	5000-level coursework outside of FDM	
FDM 5303	Internship in Film & Digital Media (up to 3 hours)	
FDM 5V35	Problems in Film and Digital Media (up to 6 hours)	
FDM 5366	Graduate Production Workshop (up to 6 hours)	
•	4000-level FDM courses (approved for not previously taken for BA credit)	
Select nine semeste	r hours from the following:	9
Electives		
Additional 5000-leve	el FDM courses 1	12
FDM 5376	Contemporary Film Theory	3

<sup>1</sup> Excluding FDM 5V35 Problems in Film and Digital Media

#### **Non-Thesis Option Degree Plan**

Code	Title	Hours
<b>Required Coursework</b>	C C	
FDM 5V90	Professional Paper or Project in Film & Digital Media	3
or FDM 5303	Internship in Film & Digital Media	
FDM 5376	Contemporary Film Theory	3
Additional 5000-level	FDM courses <sup>1</sup>	12
Electives		
Select 18 semester h	ours from the following:	18
•	000-level FDM courses (approved for or o	
FDM 5366	Graduate Production Workshop (up to 6 hours)	
FDM 5V35	Problems in Film and Digital Media (up to 6 hours)	
FDM 5303	Internship in Film & Digital Media (Professional Project option only - up to 3 hours)	
Up to 3 hours of 5	000-level coursework outside of FDM	

36

### Geosciences

**Total Hours** 

Chairperson: Joe Yelderman

Graduate Program Director: Daniel J. Peppe

The Department of Geosciences offers graduate work leading to the Master of Science in geology and the Doctor of Philosophy in geology.

Opportunities for research and specialization include theses and dissertations in:

- engineering geology;
- 2. environmental geology and urban geology;
- 3. geoarcheology;
- 4. geochemistry;

<sup>1</sup> Excluding FDM 5V35 Problems in Film and Digital Media

- 5. geochronology and paleomagnetism;
- 6. geodesy;
- 7. geodynamics;
- 8. hydrogeology and hydrology;
- 9. human-environment interactions;
- 10. igneous petrology and volcanology;
- 11. multiphase, multicomponent flow and transport modeling in the subsurface;
- 12. organic geochemistry and biogeochemistry;
- 13. paleoclimatology;
- paleontology, paleobotany, invertebrate paleontology, and paleoecology;
- 15. pedology, soil genesis, and paleopedology;
- 16. petroleum geosciences;
- 17. planetary sciences;
- 18. quantitative geomorphology and Quaternary environments;
- 19. renewable energy and biofuels;
- 20. seismology;
- 21. solid earth and applied geophysics;
- 22. stable isotope geochemistry;
- stratigraphy, sedimentology, sedimentary petrology, and sedimentary geochemistry;
- 24. structural geology; and
- 25. tectonics.

#### **Facilities**

The majority of offices, laboratory, and lecture facilities used by the Department of Geosciences are housed in the Baylor Sciences Building. Additionally, many specialized laboratories are located in the Carlile Geology Research Center, which is adjacent to the Baylor Sciences Building, including laboratories for rock crushing, sawing, and thinsection preparation, as well as for environmental geology, hydrogeology, geophysics, and petrology.

The department has a variety of analytical facilities and equipment used for research and teaching. Geophysical equipment is available for work in applied seismology, gravity, magnetic, and electrical methods. Equipment includes gravity meters, a magnetometer, a conductivity meter, a resistivity meter, a 12-node multi-channel seismic system equipped with 4.5 Hz geophones, and 25 broadband seismic stations, including Nanometrics Trillium Compact sensors and Reftek 130 digitizer/recorders. The department's Scintrex CG-6 gravity meter detects accelerations on the order of 10<sup>-8</sup> m/s<sup>-2</sup>, and a mounting tripod allows for the measurement of vertical gradients in Earth's gravity field.

Heavy equipment available includes a trailer mounted drill rig with mud rotary, auger, and coring capabilities, a vibracoring system, and a subbottom acoustic profiling system. A Cesium 137 analyzer is available for age-dating sediments and soils. Students interested in the engineering/hydrogeology aspects of geology have at their disposal digital data loggers and transducers to instrument aquifers, watersheds, and slopes. These data collection systems allow for monitoring remote sites and permit downloading of information directly to laptop computers or tablets. A Time Domain Reflectometry (TDR) volumetric moisture probe allows for rapid in situ characterization of volumetric soil moisture, integral to water infiltration and recharge studies. A Guelph permeameter is available for characterization of in situ permeability. A Percival E-35VL growth chamber, a Thermoscientific RS485, and a VWR 89511-428 Forced

Air Microbiological Incubator are available for algae growth experiments for biofuel research.

The department has a variety of microscopes used in advanced labs and research projects. A Leica M-420 polarizing macroscope and universal stage microscope with digital camera are available for structural petrofabric analysis. An Olympus BX51 research microscope equipped with a high-resolution digital camera and UV fluorescence is also available for thin section work. In the paleobotany laboratory a Nikon SMZ 1500 zoom stereo microscope with a Nikon DS-Fi1 5-megapixel digital camera, a Beseler CS digital photo/video copy stand with lights, a Nikon stereoscope, and a sample preparation area with air handling system are available for sample analysis and curation.

Geochemistry and petrology laboratories include a capillary electrophoresis unit for quantifying the concentration of common solutes in water, an automated Rigaku X-ray fluorescence (XRF) spectrometer for major and trace element analysis of soils, sediments and rocks, a Siemens D5000 X-ray diffractometer (XRD) instrument for mineral identification, an automated New Wave micro-sampling device, a CHNS Elemental Analyzer with a liquid and solid autosampler, a Malvern laser particle size analyzer, and two Thermo-Electron Delta V Advantage isotope ratio mass spectrometers, one with a gas chromatograph/ combustion interface for compound-specific isotope analysis and the other with the following peripherals: Gas Bench II, combustion EA, TCEA, and a dual inlet. The Organic Geochemistry Laboratory has an Agilent 6890 gas chromatograph with 5973 Quadrupole mass spectrometer and equipment available for organic matter and "biomarker" extractions and/or petroleum sample preparation including soxhlet 132 extractors, Dionex 200 accelerated solvent extractor ASE), rotary evaporator, turbo evaporator, and a freeze dryer (lyophilizer). The Microbial Biogeochemistry Laboratory is equipped with incubators and associated equipment for cell cultures and chemical extractions as well as a Thermo Scientific LTQ XL Linear Ion Trap mass spectrometer/Dionex Ultimate 3000 HPLC system with diode array and fluorescence detectors for analyzing pigments, polar lipids, and metabolites. The Paul Marchand nuclear magnetic resonance (NMR) facility includes a solid-state 300 MHz Bruker standard-bore spectrometer equipped with two (4mm and 7mm) broad-band double resonance sample probes for multidimensional and cross polarization experiments. The High Temperature Petrology lab houses a Nicolet iN10 Fourier Transform Infrared (FTIR) Spectrometer and a DXR Raman microscope with a 532 nm laser. The FTIR and Raman spectrometers are used to identify minerals and measure volatile contents in minerals and glasses.

The Geoluminescence Dating Research Laboratory utilizes a variety of luminescence technology including three automated Risø Reader systems for age-dating Quaternary deposits using optically stimulated luminescence (OSL). The readers have capabilities for thermoluminescence, infrared, blue, and UV stimulation, as well as linear modulation applications. The two automated Risg TL/OSL readers (Bøtter-Jensen 1997) are used for the single aliquot measurements. One Risø TL/OSL reader is dedicated to single grain analysis. Blue light excitation (470 ± 30 nm) is from an array of 30 light-emitting diodes that delivers approximately 25 mW/cm<sup>2</sup> to the sample position at 90% power. A Thorn EMI 9235 QA photomultiplier tube coupled with three 3-mmthick Hoya U-340 detection filters that transmit between 290 and 370 nm will be used to measure photon emissions. Laboratory irradiations used a calibrated <sup>90</sup>Sr/<sup>90</sup>Y beta source coupled with the Risø reader and the experimental sequences were executed using Risø TL/OSL software for MS-Windows. In addition to mounted and calibrated beta source (<sup>90</sup>Sr) on Risø Reader, the laboratory maintains four independent calibrated, automated alpha and beta irradiators that provide beta or

alpha radiation exposure, for up to 20 samples sequentially, at individually prescribed periods ranging from seconds to hours. The laboratory is illuminated by the indirect and diffuse light from sodium-vapor bulbs (590 nm). This facility is equipped with ultrasonic baths; digital scales and precision preheat plates, IEC 2000 centrifuge, and automated grinders for the preparation of a variety of geological materials for luminescence analysis. A portable Na-I gamma spectrometer is also available for field measurements. Support labs include a soil-testing lab, microscope, and sample preparation facilities.

The Thomas T. Goforth Paleomagnetism Laboratory includes instruments useful for rock magnetism, paleomagnetism, and environmental magnetism studies. The laboratory includes a 2G cryogenic DC-SQuID magnetometer with an automated sample-changing device capable of performing three-axis measurements on a series of samples successively between computer inputs, a static alternating-field (AF) device, inline rock-magnetic devices including an ASC IM-10 impulse magnetizer for measuring isothermal remanence magnetization (IRM) and a Bartington MS2B susceptibility sensor and MS2 susceptibility meter, and an ASC controlled atmosphere thermal demagnetizer. All of the instruments are housed within a 14' by 10' two-layer magnetostatic shielded room. Outside of the shielded room, the laboratory also has a Bartington MS3 susceptibility meter, a Bartington MS2 temperature-susceptibility temperature system, a MS2C core logging sensor with a manual core track, and a Princeton Measurements Vibrating Sample Magnetometer (VSM) available for rock and environmental magnetism studies.

The Department of Geosciences maintains state-of-the-art computational facilities in the Baylor Science Building and has access to massively-parallel computing platforms that reside in the Information Technology Services server facility. The Remote Sensing and GIS laboratory contains Windows workstations, associated servers and peripheral devices. The Beaver-Brown Applied Petroleum Studies laboratory maintains high-performance Windows workstations with dual screens and industry-grade software for analyzing subsurface well log and seismic data. The Geophysics Research Laboratory maintains a cluster of high-performance Linux and Mac workstations for geophysical data processing and analysis. Additionally, four computer laboratories are available for student use. One contains dual-boot Windows and Linux workstations with software for special applications. An extensive geology research library is housed in the Jesse Jones Science Library with a smaller reference collection located in the Baylor Sciences Building.

- · Geosciences, M.S. (p. 122)
- · Geosciences, Ph.D. (p. 122)
- · Earth Science, M.A. (p. 122)

## Geosciences, M.S.

To be qualified for admission to graduate study with a major in geology, students must have completed an undergraduate degree in geology or a related field. A proficiency in the other sciences and mathematics, equivalent to that required for the bachelor's degree in geology (Calculus I and II, two semesters of chemistry, and two semesters of physics) is expected of graduate students in geology.

Candidates must complete thirty semester hours of graduate courses including six semester hours of thesis. For the M.S. degree, at least twelve semester hours of the 24 graded course hours of credit must be earned from 5000-level courses, excluding 5V99, as part of the graduate program. No more than six semester hours of credit may be earned in special problems, 5V90. GEO 5050 Geology Technical Sessions is

required for four semesters during residency. A thesis (GEO 5V99 Thesis for six semester hours) is required of all students. An oral examination is required.

## Geosciences, Ph.D.

All students accepted into the doctoral program must have received a bachelor's or a master's degree in geology or a related field prior to enrolling and must complete a minimum of sixty semester hours beyond the bachelor's degree (including twelve hours of dissertation) for the Ph.D. degree. For the Ph.D. degree, at least 30 semester hours of the 60 graded course hours of credit must be earned from 5000-level courses, excluding GEO 6V99 Dissertation, as part of the graduate program. The student's Advisory Committee shall consider his/her past course work and determine the courses needed for this degree. There is no foreign language requirement. All students are required to pass a preliminary examination during their second semester of residence. The dissertation must be completed with a minimum of two first-authored papers published in refereed journals approved by the student's committee. All students must enroll in GEO 5050 Geology Technical Sessions each semester that he/she is in residence, and must enroll in the GEO 5222 Grant Writing for Physical and Biological Sciences during the first fall semester of their residence. For further details, see the section on doctoral degrees in the General Information section of this catalog. The student may not take more than 10 hours of GEO 5V90 Special Problems in Geology except with approval of their dissertation committee.

## **Funding Opportunities**

Funding opportunities for graduate students include Graduate Assistantships, either as a Graduate Teaching Assistant or a Graduate Research Assistant, Applied Petroleum Studies Fellowships (M.S.) and the Geology Alumni Graduate Scholarship (M.S.), the Glorietta Scholarship, and Wendlandt Scholarships.

## **Earth Science, M.A.**

Students are not admitted directly into the Master of Arts program. However, students admitted to the Ph.D. program may, with the approval of the faculty, pursue a Master of Arts degree. This option is only available to students who are admitted to the Ph.D. degree program. The M.A. in Earth Sciences can be a non-terminal or a terminal degree. The non-terminal degree is for students continuing in the doctoral program. The terminal degree is for students that are admitted to the doctoral program but leave before completing all the work required for a Ph.D. in Geology.

### Non-terminal M.A. in Earth Science

The non-terminal degree is for students who are continuing in the doctoral program. Students can earn their M.A. in Earth Science by completing the following requirements: 33 hours of graduate courses, with no more than 12 hours at 4000-level courses, completion of Grant Writing course (GEO 5222 Grant Writing for Physical and Biological Sciences), completion of Geology Technical Session (GEO 5050 Geology Technical Sessions) for all semesters in residence, with a minimum of 4 semesters, and passage of an oral examination or a dissertation proposal defense. M.A. requirements are usually completed by the second or third year of study.

#### **Terminal M.A. in Earth Science**

The terminal degree is for circumstances when a student who is admitted to the doctoral program leaves before completing all the work required for a Ph.D. in Geology. In these cases, students may be given the opportunity to complete a terminal M.A. in Earth Science. The terminal M.A. requires 33 hours of graduate courses, with no more than 12 hours at 4000-level courses, completion of Grant Writing course (GEO 5222 Grant Writing for Physical and Biological Sciences), completion of Geology Technical Session (GEO 5050 Geology Technical Sessions) for all semesters in residence, with a minimum of 4 semesters, and may or may not require the completion and defense of an oral examination or a dissertation proposal defense depending on the approval of the Geosciences faculty and the graduate program director.

## Health, Human Performance and Recreation

## Department of Health, Human Performance and Recreation

**Chairperson:** Dale Connally **Graduate Program Director.** Jaeho Shim

Students seeking admission into the Master of Science program within the Department of Health, Human Performance and Recreation (HHPR), must meet the admission requirements of the Graduate School for full or probationary status. In addition, applicants must meet specific HHPR program requirements within their selected major. Candidates who do not meet specific HHPR program admission requirements will be required to complete undergraduate course work to meet identified deficiencies. Previously completed course work will be evaluated on an individual basis to determine if any deficiencies exist in foundation courses for the discipline. Requirements vary within the majors and are noted in the HHPR Graduate Departmental Handbook. Identified courses may be completed concurrently with graduate work, but must be completed before the student is admitted to candidacy for the degree. Students should contact the HHPR Graduate Program Director if they have specific questions regarding this process.

Students must successfully complete requirements for a culminating experience by taking a written comprehensive examination. Dependent upon the degree option selected, students must complete the requirements for a thesis, research project, internship, or practicum. After completing the selected requirement/option, the student must make a professional presentation of this experience to a select examination committee.

#### **Comprehensive Examination**

Candidates for the master's degree in the HHPR department are required to take a written comprehensive exam over their program of study. The comprehensive exam is waived for those who select the thesis option. Each semester an examination period is scheduled by the HHPR Graduate Program Director which is in accordance with Baylor University Graduate School deadlines. Students interested in taking the comprehensive exam in a particular semester must notify the HHPR Graduate Program Director in writing of their intent to sit for the exam early in the enrollment period (usually by the end of the second week). The date of the exam is announced (usually by the end of the third week) by the HHPR Graduate Program Director. Only one comprehensive exam will be given during the summer and that exam date will usually be

scheduled between the first and the second summer session. Students must pass the exam within the five-year time limit for completion of degree requirements. Students will not be permitted to take the comprehensive exam unless at least a "B" average has been earned on all graduate work completed and unless admission to candidacy has been approved.

The examination shall be prepared and graded by the comprehensive examination committee selected from HHPR faculty and other faculty members from specific areas of specialization. The comprehensive exam will consist of four content areas in exercise physiology and sport pedagogy, and six content areas in athletic training. Prior to the deadline established by the Graduate School for each enrollment period, the Graduate School will be notified in writing when students have passed or failed the examination. If the student fails the written portion of the comprehensive exam, the student must participate in a follow-up examination process that will be scheduled within 1-2 weeks after the written exam. Students failing the written and oral exams may repeat the process at a time approved by the comprehensive examination committee but no earlier than 4 months. Before taking the exam again. students should consult with the comprehensive examination committee which may require the completion of additional course work or other additional study. Students who fail the comprehensive examination the second time will be dropped from candidacy for the degree.

#### **Thesis**

A thesis is optional for the majors of Exercise Physiology and Sport Pedagogy. When elected, the thesis will carry a total of six semester hours. It is imperative that students selecting the thesis option contact their respective Program Director to begin this process. Once students have enrolled for thesis credit, they must maintain continuous enrollment for one semester hour of thesis during each regular semester, including at least one summer term each year, until the thesis has been accepted by the Graduate Dean. Departmental assistance is required for enrollment. Credit is awarded only upon completion and approval of the thesis. No letter grade is given for completing the thesis.

Students will not be permitted to enroll for thesis hours until they have completed a minimum of 15 hours in the Exercise Physiology Program and 18 hours in the Sport Pedagogy Program with at least a B average (GPA=3.0). Included in these hours, students must have completed their requirements in Research Methods and Statistics. Also, students must have satisfactorily passed the thesis prospectus review before enrolling in thesis credits.

Guidelines for Preparing the Dissertation and Thesis is the official handbook for all theses presented to the Baylor University Graduate School. The "Guidelines" handbook leads students through the administrative steps for completing the thesis and attempts to ensure that all theses completed at Baylor University present similar appearance and meets all the standards of the Graduate School. The thesis must meet the Graduate School standards for format and appearance as outlined in the Baylor University Guidelines for Preparing the Dissertation and Thesis.

#### Internship/Practicum

If the thesis or research project option is not selected, an internship or practicum experience must be selected by working closely with the HHPR graduate internship coordinator. Exercise Physiology students choosing a practicum will also select from one additional course from Exercise Physiology or Restricted Electives to complete their capstone experience. The primary purpose of the Internship experience is to bridge the gap between the academic present and the professional future. The

internship carries a maximum of six semester hours while the practicum carries a maximum of three semester hours. To enroll in this capstone experience, students must have maintained at least a "B" average, completed the HHPR core courses for all majors (HP 5379 Research Methods in Health, Human Performance, and Recreation or EDP 5334 Statistical Methods or STA 5300 Statistical Methods) and completed at least 24 hours of graduate course work within the selected academic major.

#### **Academic Majors**

The Department of Health, Human Performance, and Recreation offers two master's degrees: a Master of Science degree and a Master of Athletic Training. For the Master of Science degree, students may choose one of the majors listed in a subsequent section. A six hour core curriculum is required in research design and statistics for the Master of Science degree. Please visit the HHPR departmental website at www.baylor.edu/HHPR/ (https://www.baylor.edu/HHPR/) for additional information.

#### **Core Courses Required For All Majors**

Code	Title	Hours
Core		
HP 5379	Research Methods in Health, Human Performance, and Recreation	3
EDP 5334	Statistical Methods	3
or STA 5300	Statistical Methods	
Total Hours		6

- · Exercise Physiology, M.S. (p. 124)
- · Sport Pedagogy, M.S. (p. 124)
- Medical Science, M.S. (https://catalog.baylor.edu/graduate-school/ curriculum-departments-institutes-instruction/health-humanperformance-recreation/medical-science-ms/)
- · Master of Athletic Training, MATR (p. 124)
- · Joint Bachelor of Science/Master of Athletic Training (p. 125)
- Joint Bachelor of Science in Education/Master of Science in Sport Pedagogy (p. 125)
- · Exercise and Nutrition Sciences, Ph.D. (p. 126)

## **Exercise Physiology, M.S.**

Code	litle	Hours
Required Courses	3	
Core Courses Requ	uired for All Majors	
Complete core co	urses required for all majors	6
Core Courses		
HP 5328	Physiology of Exercise I: Neuromuscular Aspects	3
HP 5330	Physiology of Exercise II - Cardiovascular Aspects	3
HP 5340	Biochemistry in Exercise Science	3
Exercise Physiolog	gy Electives	
Select two course	es from the following:	6
HP 5333	Exercise Testing and Prescription	
HP 5352	Principles of Exercise and Sport Nutrition	
HP 5354	Methods of Strength and Conditioning	

Total Hours		30
•	ship practicum and one 3-hr course from gy Electives or Restricted Electives.	
Option 1 - Research writing practicum and one 3-hr course from Exercise Physiology Electives or Restricted Electives.		
Practicum Option	s:	
HP 5V99	Thesis	
HP 5V94	Practicum in HHPR	
HP 5V90	Internship	
Select one of the fol	lowing:	6
Capstone Experience	1	
Select three semeste	er hours of restricted electives	3
Restricted Electives 1		
HP 5357	Exercise Programming for Individuals with Chronic Diseases and Disabilities	

<sup>&</sup>lt;sup>1</sup> Requires Exercise Physiology Program Director approval.

## Sport Pedagogy, M.S.

Code	Title	Hours
Required Courses		
Emphasis Core		
Select 18 hours for n track from the follow	on-teacher track or 21 hours for teacher ring:	
HP 5368	Motor Skill Learning and Performance	3
HP 5335	Sport Pedagogy	3
Select one course fro	om the following:	3
HP 5355	Power Speed Agility Quickness Training (non-teacher track)	
HP 5334	Pedagogy & Physical Education (teacher track)	
HP 5370	Sport Psychology	3
HP 5377	Issues and Trends in Human Performance and Sport Management	3
HP 5384	Biomechanics of Human Movement	3
HP 5V70	Special Topics in Health, Human Performance, and Recreation (Technical Skills of Teaching/Coaching - for teacher track only)	3
Electives		
Select 6 hours for no must be approved by	on-teacher track or 3 hours for teacher track - v advisor	3-6
Other Requirements		
HP 5V90	Internship	6
or HP 5V99	Thesis	
Total Hours		30-33

# Master of Athletic Training, MATR Admissions

Students have two avenues to pursue the MAT degree. Students who received a bachelor's degree from another institution can apply as a traditional graduate student or students can enter the joint degree

program (discussed below). Regardless of which track chosen, to apply to the program students must:

- · Have a cumulative GPA of 3.0 or higher
- · Complete the following prerequisite coursework:
  - · Human Anatomy (class and lab) at least 4 credit hours
  - · Human Physiology (class and lab) at least 4 credit hours
  - · Statistics 3 credit hours
  - · Nutrition 3 credit hours
  - · Medical Terminology 3 credit hours
  - · Physics (class and lab) at least 4 credit hours
  - · Psychology 3 credit hours
  - · Biology (class and lab) at least 4 credit hours
  - · Chemistry (class and lab) at least 4 credit hours
- Receive a "C" (2.0) or better in all prerequisite coursework
- Complete at least 100 observations hours under a licensed and/or certified Athletic Trainer.
- Sign a copy of the written technical standards to verify they can meet the standards requirements of the major
- · Current CPR/AED certification for the professional rescuer

## **Degree Fulfillment Requirements**

Students can only receive one grade of "C" or lower. A student receiving a second grade of "C" or lower will be dismissed from the program. Students must complete a research Student can choose to complete a thesis and complete 6 hours of HP 5V99 Thesis. Students also have the option of completing a research project by completing 6 hours of HP 5306 Research Project in Athletic Training. Based on the option selected, students will complete and successfully defend a thesis or research project that is approved by the Athletic Training faculty. Additionally, students are required to pass three separate oral comprehensive exams to fulfill the degree's comprehensive exam requirement.

Code	Title	Hours
Required Coursewo	rk	
HP 5110	Clinical Education	1
HP 5201	Administrative Topics in Athletic Training	2
HP 5301	Introduction to Patient Care	3
HP 5302	Evaluation and Diagnosis in Athletic Training I	3
HP 5303	Therapeutic Interventions I	3
HP 5304	Concepts in Injury Management	3
HP 5305	Advanced Patient Care	3
HP 5307	Interdisciplinary Approach to Healthcare	3
HP 5308	Professional Preparation and Current Topics in AT	3
HP 5379	Research Methods in Health, Human Performance, and Recreation	3
HP 5401	Evaluation and Diagnosis in Athletic Training II	4
HP 5402	Evaluation and Diagnosis in Athletic Training III	4
HP 5403	Therapeutic Interventions II	4
STA 5300	Statistical Methods	3
or EDP 5334	Statistical Methods	

<b>Required Culmina</b>	ating Experience	
Select one course	e from the following:	6
HP 5306	Research Project in Athletic Training <sup>1</sup>	
HP 5V99	Thesis <sup>1</sup>	
Total Hours		48

<sup>&</sup>lt;sup>1</sup> Requires departmental approval

## Joint Bachelor of Science/Master of Athletic Training

The B.S./MAT joint program is a 5-year program of study. This joint degree will allow qualifed students the opportunity to obtain a B.S. in Health Science Studies (110 credit hours) and a Master of Athletic Training (52 credit hours) in a minimum of five years of full-time study. All requirements for both the B.S. and MAT must be met and the degrees awarded concurrently.

#### **Admission**

Undergraduate students in the Health Science Studies (HSS) program can apply for the B.S./MAT joint program at the beginning of the sixth semester. Applicants must be majoring in HSS, have 3.0 or higher GPA in the major, and have completed 89 credit hours prior to applying for the program. The B.S. in HSS degree will be awarded with the MAT upon completion of all degree requirements. Students who decide to withdraw from the joint degree program or who do not maintain a 3.0 will be required to change into another HSS tract and will not be allowed to reenter the joint degree program at a later time. Pre-AT students who are not admitted to the MAT program will be required to select another major, as the Pre-AT tract does not lead to completion of a degree.

## **Joint Degree Requirements**

A maximum of 15 credits of course work will count toward both degrees. Students enrolled in the joint degree program will receive dual credit from the completion of five graduate classes:

Code	Title	Hours
HP 5301	Introduction to Patient Care	3
HP 5302	Evaluation and Diagnosis in Athletic Training I	3.000
HP 5303	Therapeutic Interventions I	3
HP 5304	Concepts in Injury Management	3
HP 5305	Advanced Patient Care	3
Total Hours		15

These classes are specifically related to the development of AT skills.

## Joint Bachelor of Science in Education/Master of Science in Sport Pedagogy

The BSEd/MS joint program is a 5-year program of study. This joint degree program will allow qualified students in the All-Level Physical Education (ALPE) program the opportunity to obtain a Bachelor of Science in Education (BSEd, 124 credit hours) and a Master of Science in Sport Pedagogy (MS, 36 credit hours) and Texas Teaching Certification in

five years of full-time study. All requirements for both the BSEd and MS must be met and the degrees awarded concurrently.

#### **Admission**

Undergraduate students in the ALPE program can officially apply for the BSEd/MS joint program at the end of their junior year. Applicants must be ALPE majors and have a GPA of 2.75 or higher in both total hours and in the major prior to applying for the program and have satisfactorily completed additional teacher certification efolio requirements prior to applying for the teacher certification. Applicants must obtain approval of the undergraduate ALPE advisor and program director approval from the graduate Sport Pedagogy director, and they will be admitted when they have completed at least one semester of graduate work and have maintained at least a 3.0 GPA. At the end of the junior year, candidates with 90 or more undergraduate hours and a 3.0 GPA or better may continue the joint degree program. Those who do not have a 3.0 or better and those who choose to withdraw from the join degree program will be allowed to finish the BSEd in ALPE if they meet undergraduate requirements for teacher certification. The BSEd degree will be awarded with the MS upon completion of all degree requirements.

## Requirements

To obtain a BSEd/MS in the joint degree program, a student must complete all hours in both the undergraduate ALPE program and the Master of Science in Sport Pedagogy program. ALPE candidates with 90 undergraduate hours and a 3.0 GPA will be eligible to apply for the MS in Sport Pedagogy. Upon acceptance into the MS Sport Pedagogy program students will be eligible to take the graduate level courses. Students who are admitted into the MS Sport Pedagogy program will be allowed to count 15 graduate credit hours towards both degrees.

## Exercise and Nutrition Sciences, Ph.D.

Ph.D students are required to take a minimum of sixty (60) hours for the degree including 3 hours of professional development and professional ethics, and a minimum of 12 hours in research methods and statistics courses. To form their 12 hour EXNS core, students will be required to take two courses each in:

- 1. exercise physiology and
- 2. nutrition.

In addition to these 27 hours of course work, students must complete 12 hours of directed research (generally 3 hours per semester) and 12 hours of dissertation. The remaining 9 hours of course work will consist of electives approved by the Advisor.

## **General Admission Requirement**

Students wishing to pursue the Doctor of Philosophy degree in Exercise and Nutrition Sciences must apply and meet all general requirements for admission to the Graduate School of Baylor University. Qualified students will be admitted regardless of race, color, national or ethnic origin, gender, age, or disability. The applicant's packet will be considered complete when all application materials have been received.

## **Department Admission Requirements**

The following are the specific requirements from the Department of Health, Human Performance, and Recreation for admission to the Doctor of Philosophy degree in Exercise and Nutrition Sciences:

- An equivalent of a master's degree in a related area of exercise physiology, nutrition, health, sports medicine, physical therapy, athletic training, nursing, allied health, or medicine or appropriate undergraduate degree work that would suggest that the student could be successful in the program.
- Completion of a departmental doctoral program application form describing academic preparation, degrees earned, interests in the doctoral program, professional goals, research skills, and teaching/ work experience.
- Letter of intent and samples of writing such as copies of representative publications, articles abstracts or other samples of the applicant's technical writing.
- Three letters of reference from mentors who have insight regarding potential for success in the doctoral program.
- An appropriate and acceptable score on the verbal and quantitative portions of the GRE.
- A minimum of a 3.50 overall GPA on graduate work and/ or undergraduate work if applicant is applying with only an undergraduate degree completed at an accredited college or university.
- Willingness of an applicant-identified mentor to supervise the applicant's doctoral training.

## **Departmental Supervision**

Potential students will need to identify a mentor upon application to the program. Students will not be admitted unless there is a faculty mentor willing to serve as their mentor. The mentor will serve as the student's academic advisor throughout the program and will serve as their dissertation chair. In rare cases, students may elect to change mentors, but only with the current mentor, prospective mentor, and graduate program director's approval.

### **Prerequisite Courses**

Although most applicants will have backgrounds in appropriately-related fields, the possession of degrees in these fields is not required for admission. It should be recognized, however, that applicants with deficiencies in academic backgrounds will be determined by the student's mentor and remedial course work prescribed. In general, such remedial course work cannot be counted toward the credit hours required for the degree.

## **Period of Study**

- · 2 to 3 years academic study
- 1 year dissertation

## **Program Course Sequence**

The program is designed to consist of two to three years (fall, spring, and summer sessions) of course work and one year of dissertation research. During the first year, students will take a core of statistics and research methods courses designed to provide a strong multidisciplinary background in conducting kinesiology, exercise nutrition, and health promotion research. During the second and third years, under the guidance of their mentor, students will take emphasis area course

work and electives to provide research specialization. During both the first and second years, with consultation and/or guidance from their mentor, students will take directed research hours. For these research hours, students will be required to have collected data from an independently-led or collaborative research project resulting in manuscript submission to a peer-reviewed journal and presentation at a national/international conference before being allowed to take preliminary exams and progressing to doctoral candidacy. The final year is dedicated to dissertation research. Students must be registered for at least one semester hour of graduate credit during the semester of intended graduation. The maximum time limit for the doctoral degree is described in the Baylor University Graduate Catalog under General Degree Requirements.

## **Preliminary Examination**

Students will take a preliminary examination upon completing all course work or within 6 hours of completing their course work. With the consultation of the student's mentor, the student will form an advisory committee that will serve to administer the preliminary exam and consult on the dissertation research (see dissertation supervision section below). At least four faculty members will serve on the advisory committee, the composition of which will be approved by the Graduate Program Director and include at least three members within the HHPR Department graduate faculty and one graduate faculty member outside the department. The preliminary examination consists of written and oral testing by the student's advisory committee. The primary purpose of the preliminary examination is to assess the student's understanding of the broad body of knowledge in a field of study. The examination also affords the advisory committee an opportunity to review the student's understanding of research methods and literature in the chosen field. The student will schedule separate written examinations with each advisory committee member. Each written examination will be evaluated by the committee member who provided the questions and graded as pass, pass with stipulation, pass with distinction, or failure. Committee members will convey the student's results to the mentor and, together with the mentor, determine if the student is prepared to take the oral portion of the preliminary exam. The oral portion of the preliminary examination should be conducted within two to four weeks after the successful completion of the written examinations. Each member of the advisory committee will vote to determine if the student has passed the exam. This determination will be based on the overall performance on both the written and oral portions of the exam. The student becomes a candidate for the doctoral degree on successful completion of both the written and oral portions of the preliminary examination. If the preliminary examination reveals deficiencies in any of these areas, the advisory committee may recommend remedial work or re-examination. Two or more votes to "fail" a student will constitute failure of the exam. Students who fail this examination may re-take their examinations no sooner than four months after, and within one year of the initial written preliminary examinations. After two failures of the exam, either in its whole or part form, the student will not be allowed to continue in the doctoral program.

## **Admission to Candidacy**

Students are recognized as candidates for the doctoral degree only after they have passed the preliminary examination, completed all departmental requirements (except the dissertation), and received approval by the Graduate School of their formal application for admission to candidacy. An application for admission to candidacy must be filed with the Office of the Graduate School upon successful completion of the above requirements. This form should be filed no later than five months

prior to the date on which the degree is conferred, and prior to a student registering for dissertation hours.

## **Dissertation Supervision**

The dissertation advisory committee is determined by the student and mentor under general guidelines. The committee will be composed of the following members:

- Two committee members including Dissertation chair, will be HHPR graduate faculty.
- Third committee member will be a Baylor graduate faculty who is outside the HHPR graduate faculty.
- The fourth member can be inside or outside HHPR graduate faculty, including non-Baylor graduate faculty with approval of the GPD.
- At least one of the committee members will be HHPR Graduate Faculty with primary faculty appointment in HHPR Dept.

**Note:** The committee may consist of 3 HHPR grad faculty + 1 outside HHPR grad faculty within Baylor **or** 2 HHPR grad faculty + 1 outside HHPR grad faculty within Baylor + 1 non-Baylor grad faculty. The committee may include additional members beyond the required minimum of four.

#### Dissertation

A dissertation is required of all candidates for the degree of doctor of philosophy. The dissertation must give evidence that the candidate has pursued a program of research, the results of which reveal scholarly competence and a significant contribution to knowledge. The candidate conducts the research and prepares the dissertation under the direction of the mentor and in consultation with the dissertation advisory committee.

The candidate will develop a dissertation proposal for approval by the dissertation advisory committee. The candidate will conduct the dissertation work and prepare and submit a dissertation draft for committee approval. The candidate will arrange for a final oral examination, a defense of their dissertation work, on committee approval of the dissertation draft. The candidate will make any final revisions to the dissertation, according to the directions of the dissertation advisory committee, and complete all remaining Graduate School requirements to successfully complete their doctoral studies.

Candidates should acquire the guidelines for preparing the dissertation and thesis and other necessary forms and materials for graduation under the "Student Resources" tab on the Baylor Graduate School webpage (http://www.baylor.edu/graduate/). The "Student Resources" tab includes semester calendar and deadlines, directions for completing the dissertation, and an explanation of fees associated with the dissertation and graduation process. Additional degree completion materials not available on the Graduate School webpage are provided to students when they file for graduation.

### **Required Coursework**

Code	Title	Hours
Research Seminar		
HP 6000	Doctoral Research Seminar (required every semester)	0
Professional Developm	nent and Ethics	
HP 6397	Christianity, Ethics and Research with Human Participants	3

#### **Research Methods**

Total Hours		32-45
Select nine semester mentor)	hours of electives (must be approved by	9
Electives		
NUTR 5386	Nutrition for Sport and Fitness	
NUTR 5355	Macronutrients and Metabolism	
Nutrition		
HP 5330	Physiology of Exercise II - Cardiovascular Aspects	
HP 5328	Physiology of Exercise I: Neuromuscular Aspects	
Exercise Physiology		
Six semester hours e	ach in the two areas below:	6
EXNS Core		
HP 6V99	Dissertation	1-9
Dissertation Research	h	
HP 6V70	Directed Research in Kinesiology, Exercise Nutrition and Health Promotion	1-6
Directed Research		
	aken in Educational Psychology, Statistics, rtments upon mentor's approval.	9
Statistics		
HP 6300	Research Methods in Exercise and Nutrition Sciences	3

## History

## **Department of History**

Chairperson: Barry G. Hankins

Graduate Program Director: Andrea L. Turpin

- · History, M.A. (p. 128)
- · History, Ph.D. (p. 128)

## History, M.A.

## Requirements for a Master of Arts Degree in History

#### **Admissions Requirements**

- 1. GPA and GRE scores predictive of success in the program.
- An undergraduate major in history, or at least eighteen semester hours of history at the undergraduate level with a degree in the humanities and social sciences or twenty-one semester hours with other degrees.
- 3. Three letters of recommendation
- 4. Personal statement outlining area of historical interest
- 5. Writing Sample
- 6. Transcripts

## **Degree Requirements**

 Thirty hours of history, including HIS 5369 The Historian's Craft and HIS 5370 Advanced Graduate Research and Writing and a six-hour thesis.

- 2. At least eighteen hours, exclusive of thesis, must be 5000-level courses, and students must take at least one course in each of the three areas–American, European, and global (i.e. non-western or Latin America).
- Students may choose to take up to six hours of their coursework from one of the following departments: English, Museum Studies, Music, Philosophy, Political Science, Religion, Psychology, Social Work (6000-level only), and Sociology.
- 4. Demonstrated intermediate proficiency in one modern foreign language by one of the methods listed in the Specific Degree Requirements for the Doctor of Philosophy degree in the General Information section of this Catalog.
- 5. Satisfactory oral defense of the thesis.

## History, Ph.D.

## Requirements for a Doctor of Philosophy Degree in History

#### **Minimum Admissions Requirements**

- 1. GPA and GRE predictive of success in the program
- 2. Three Letters of Recommendation
- Personal Statement outlining why the student wants to study in the Ph.D. program, what research and teaching interests the student intends to pursue, and which faculty he or she intends to have as a mentor and eventual dissertation advisor.
- 4. Brief writing sample—undergraduate or master's-level paper at least fifteen pages in length.
- 5. Transcripts
- Interview with proposed major professor before admissions deadline is recommended.

These minimum requirements do not ensure that an applicant will be accepted into the program. The graduate committee will consider each applicant individually in light of several factors including the student's academic preparation, proposed area of interest and suitable faculty mentor willing to take that student, the applicant's recommendation letters, university funding and availability of financial support, and the quality of the applicant pool in a given year.

## **Degree Requirements**

- 1. Three years residence (minimum on-campus time)
- 2. Course Work
  - A. Students entering with a bachelor's degree 54 hours of course work. For these students, the M.A. thesis will be waived, and the student will be granted an M.A. degree after successfully completing course work and written examinations over their preliminary examinations reading lists (see #4 below).
  - B. Students entering with a master's degree 39 hours of course work
  - C. All entering M.A. and Ph.D. students will be required to take HIS 5369 The Historian's Craft and HIS 5370 Advanced Graduate Research and Writing, the historical research and writing/ historiography course, during their first semester.
  - D. All students must take at least one American, one European, and one Global (i.e. non-western) course.
  - E. Ph.D. students may take up to 6 hours in the following departments: English, Museum Studies, Music, Philosophy,

Political Science, Religion, Psychology, Social Work (6000-level only), and Sociology.

#### 3. Languages

Demonstrated intermediate proficiency in one modern foreign language by one of the methods listed in the Specific Degree Requirements for the Doctor of Philosophy degree in the General Information section of this Catalog.

4. Preliminary Examination Readings (6 hours) Following course work, students will enroll in 6 hours of HIS 6V85 Preliminary Readings. Students will develop three prelim reading lists of roughly 50-100 books and major articles for each list. It is expected that the reading list for the student's dissertation field will

be longer than the other lists (see dissertation field below). Each list will be developed in consultation with a professor on the student's reading list committee. The lists should comprise the following fields:

- A. Major field
- B. Minor field (must be on continent other than student's major)
- Dissertation field (field within the major field in which the student anticipates his or dissertation work)
- 5. Dissertation (12 hours)

The capstone of the Ph.D. degree is the dissertation. Students will enroll in a total of 12 hours of HIS 6V99 Dissertation as they write the dissertation. The dissertation must make an original scholarly contribution to the student's chosen area of study. The student will be required to orally defend the written dissertation to a dissertation committee composed in accordance with Graduate School regulations.

Teaching experience for students
 All Ph.D. students will be required to complete a teaching mentor program.

# Human Sciences and Design Department of Human Sciences and Design

Chairperson: Sheri L. Dragoo

Graduate Program Director: Maria L. Boccia

· Nutrition Sciences, M.S. (p. 129)

## **Nutrition Sciences, M.S.**

The Master of Science in nutrition sciences degree is offered to students who have earned a bachelor's degree from an accredited university or college in a relevant program and have met admission requirements.

The program provides two degree tracks:

## **Thesis Option**

Thirty semester hours of approved graduate courses.

Code	Title	Hours
<b>Nutrition Courses</b>		
NUTR 5370	Research Methods in Nutrition Sciences	3
NUTR 5355	Macronutrients and Metabolism	3
Select 12 semester h	ours of additional NUTR courses	12
Thesis		
HSD 5V99		6

#### **Graduate Applied Statistics**

Select at least three semester hours from the following:		3
STA 5300	Statistical Methods	
STA 5351	Introduction to Theory of Statistics	
STA 5380	Methods in Statistics I	
Electives		
An additional 3 hours will be from GPD/mentor-approved electives		3
Total Hours		30

#### Sample Curriculum Plan (Thesis Option)

Sample Curi	riculum Plan (Thesis Option)	
Course	Title	Hours
Year 1		
Fall		
Select one coul	rse from the following:	3
STA 5300	Statistical Methods	
STA 5351	Introduction to Theory of Statistics	
STA 5380	Methods in Statistics I	
NUTR 5370	Research Methods in Nutrition Sciences	3
NUTR 5355	Macronutrients and Metabolism	3
	Hours	9
Spring		
NUTR 5354	Nutrition in Public Health	3
NUTR 5356	Micronutrients and Phytochemicals	3
Elective <sup>1</sup>		3
	Hours	9
Year 2		
Fall		
NUTR 5357	Global Aspects of Food and Nutrition	3
HSD 5V99	2	3
	Hours	6
Spring		
HSD 5V99	2	3
NUTR 5358	Emerging Issues in Food and Nutrition	3
	Hours	6
	Total Hours	30

Electives can be from Nutrition, Exercise Physiology, Statistics or from another discipline with permission from your Faculty Mentor.

### **Non-Thesis Option**

Thirty-six semester hours of approved graduate courses.

Code	Title	Hours	
<b>Nutrition Courses</b>			
NUTR 5370	Research Methods in Nutrition Sciences	3	
NUTR 5355	Macronutrients and Metabolism	3	
Select 18 semester h	ours of additional NUTR courses	18	
Graduate Applied Statistics			
Select at least three semester hours from the following:		3	
STA 5300	Statistical Methods		
STA 5351	Introduction to Theory of Statistics		

 $<sup>^{\</sup>rm 2}\,$  A total of 6 credit hours of HSD 5V99 are required over 2 semesters.

STA 5380	Methods in Statistics I	
Electives		
An additional 9 electives	hours will be from GPD/mentor-approved	9
<b>Total Hours</b>		36
Sample Curi	riculum Plan (Non-Thesis Option)	
Course	Title	Hours
Year 1		
Fall		
Select one cour	rse from the following:	3
STA 5300	Statistical Methods	
STA 5351	Introduction to Theory of Statistics	
STA 5380	Methods in Statistics I	
NUTR 5370	Research Methods in Nutrition Sciences	3
NUTR 5355	Macronutrients and Metabolism	3
	Hours	9
Spring		
NUTR 5354	Nutrition in Public Health	3
NUTR 5356	Micronutrients and Phytochemicals	3
Elective <sup>1</sup>		3
	Hours	9
Year 2		
Fall		
NUTR 5357	Global Aspects of Food and Nutrition	3
NUTR 5359	Advanced Medical Nutrition Therapy	3
Elective <sup>1</sup>		3
	Hours	9
Spring		
Elective <sup>1</sup>		3
NUTR 5386	Nutrition for Sport and Fitness	3
NUTR 5358	Emerging Issues in Food and Nutrition	3
	Hours	9
	Total Hours	36

Electives can be from Nutrition, Exercise Physiology, Statistics or from another discipline with permission from your Faculty Mentor.

## Journalism, Public Relations and New Media

## Department of Journalism, Public Relations and New Media

Chairperson: Mia N. Moody-Ramirez Graduate Program Director: Marlene S. Neill

- · Journalism, M.A. (p. 130)
- · Journalism, M.A. (Online) (p. 131)
- · Master of International Journalism, M.I.J. (p. 132)

# Journalism, M.A. Admission

The entering candidate must meet minimum requirements established by the Graduate School, and hold a bachelor's degree in journalism, public relations, new media, print, broadcast journalism or in any other discipline. In the last case, the student must either take nine hours of leveling courses, determined by the department or pass placement examinations meeting department requirements.

### Requirements

The Master of Arts degree in journalism requires thirty-six hours, thirty-three of which are course work and three of which are thesis or a major project. Available areas of degree concentration are public relations, news-editorial advertising, or critical studies. The maximum course load for journalism majors is 12 hours per semester, with approval of the Graduate Program Director.

Code	Title	Hours
Course Requirements	5	
Journalism Core		
JOU 5310	Research Methods in Mass Communication	3
JOU 5320	Theory of Mass Communication	3
JOU 5350	Seminar in Mass Communication (any topic)	3
JOU 5V99	Master's Thesis	3
or JOU 5388	Master's Project	
Measurement or Statis	stics	
Select three semeste	r hours from the following:	3
PSY 5302	Measurement in Psychology	
SOC 5303	Social Measurement and Causal Modeling	
EDP 5334	Statistical Methods	
Outside Graduate-Leve	el Research	
Select three semeste	r hours from the following:	3
HIS 5370	Advanced Graduate Research and Writing	
HIS 5367	Seminar in Oral History	
PSC 5323	Research Design and Research Methods	
Journalism Electives		
Select 12 hours of gradvisement, from the	aduate journalism courses, taken under following:	12
JOU 4315	Strategic Communications Research	
JOU 4320	Advertising Management	
JOU 4325	Advanced Editing	
JOU 4350	Mass Media and Popular Culture	
JOU 4340	Writing and Editing for On-Line Media	
JOU 4359	History of Photography	
JOU 4371	Public Relations Media Programming	
JOU 4368	Advanced Public Relations	
JOU 4398	Public Affairs Reporting	
JOU 4380	Law and Ethics of Journalism (if not taken as an undergrad)	
JOU 4390	Advertising and Public Relations Leadership	
JOU 4V80	Radford Seminar (limit twice for total 6 hrs)	

Total Hours		36
Critical Studies	3	
Advertising Co	ncentration	
News Ed Conc	entration	
Public Relation	ns Concentration	
Select one of the	following concentrations:	6
Minor Concentration	on	
JOU 5V90	Independent Study in Mass Communication	
JOU 5389	Practicum in Journalism	
JOU 5385	Data Analytics & Visualization	
JOU 5365	Social Media for Strategic Communication and Journalism	
JOU 5350	Seminar in Mass Communication (may be repeated with different topic)	

#### **Public Relations Concentration**

Title

Concentration Requirements			
	Select 6 semester	hours from the following:	6
	JOU 4315	Strategic Communications Research	
	JOU 4371	Public Relations Media Programming	
	JOU 4368	Advanced Public Relations	
	JOU 4390	Advertising and Public Relations Leadership	
	JOU 5365	Social Media for Strategic Communication and Journalism	
	JOU 5385	Data Analytics & Visualization	
	JOU 5V90	Independent Study in Mass Communication	
	JOU 4V95	Special Studies	

#### **News Ed Concentration**

**Total Hours** 

Code	Title	Hours
Concentration Requi		
Select 6 semester ho	ours from the following:	6
JOU 4325	Advanced Editing	
JOU 4340	Writing and Editing for On-Line Media	
JOU 4359	History of Photography	
JOU 4398	Public Affairs Reporting	
JOU 5V90	Independent Study in Mass Communication	
JOU 4V95	Special Studies	
Total Hours		6

#### **Advertising Concentration**

Code	Title	Hours	
Concentration Requirements			
Select 6 semester h	ours from the following:	6	
JOU 4315	Strategic Communications Research		
JOU 4320	Advertising Management		
JOU 4390	Advertising and Public Relations Leadership		

Total Hours		6
JOU 5V90	Independent Study in Mass Communication	
JOU 5365	Social Media for Strategic Communication and Journalism	
JOU 4V95	Special Studies	

#### **Critical Studies**

Hours

Code	Title	Hours
Concentration Re		
Select 6 semeste	r hours from the following:	6
JOU 4V95	Special Studies	
CSS 4396	American Rhetoric	
JOU 5V90	Independent Study in Mass Communication	
JOU 4V95	Special Studies	
Total Hours		6

## Journalism, M.A. (Online) **Admission**

The entering candidate must meet minimum requirements established by the Graduate School and hold a bachelor's degree in journalism, PR, new media, print, broadcast journalism or in any other discipline. Students must submit a portfolio that includes samples of their work. The GRE General Test is not required. Students should have work experience in a field related to journalism and public relations.

## Requirements

The online Master of Arts degree in journalism requires 36 hours, 30 of which are course work and six of which are a major project. Students will graduate with a concentration in advertising and public relations. The maximum course load for journalism majors is nine hours per semester.

Code	Title	Hours
Course Requirements	s	
Journalism Core		
JOU 5310	Research Methods in Mass Communication	3
JOU 5320	Theory of Mass Communication	3
JOU 5350	Seminar in Mass Communication	3
JOU 5V90	Independent Study in Mass Communication	3
JOU 5388	Master's Project	6
JOU 5385	Data Analytics & Visualization	3
Electives		
Select 15 hours of gr following:	aduate journalism courses from the	15
JOU 4315	Strategic Communications Research	
JOU 4371	Public Relations Media Programming	
JOU 4380	Law and Ethics of Journalism	
JOU 4390	Advertising and Public Relations Leadership	
JOU 5365	Social Media for Strategic Communication and Journalism	

JOU 5395 Crisis & Issues Management

Total Hours 36

## Master of International Journalism, M.I.J.

The Master of International Journalism (M.I.J.) is an interdisciplinary degree program designed for those who wish to prepare for careers in foreign correspondence or in international mass media.

#### **Admission**

For admission to the program, applicants must meet the general requirements set forth by the Graduate School. Further, applicants will be evaluated for admission on the basis of practical experience in journalism, or undergraduate formal course work in journalism, or a combination of the two. Some applicants with majors in the sciences, humanities, and fine arts may also be considered.

## Requirements

The Master of International Journalism degree is a professional journalism degree, multidisciplinary in nature, requiring thirty-six semester hours of course work and an internship. No thesis is required. The M.I.J. student must have a suitable portfolio of work approved by the graduate faculty, prior to graduation. Candidacy is determined by the satisfactory completion of the portfolio, thirty hours of course work, and reading and spoken proficiency (intermediate level) in at least one language other than English. Students must demonstrate this proficiency by passing an examination administered by the Department of Modern Foreign Languages. Students whose native language is not English may use English as their foreign language, meeting the requirement set forth by the Department of Modern Foreign Languages. Students in the program who do not have bachelor's degrees in journalism will either take nine hours of leveling courses, determined by the department, or pass placement examinations meeting department requirements.

Code	Title	Hours
Journalism Core		
JOU 5310	Research Methods in Mass Communication	3
JOU 5320	Theory of Mass Communication	3
JOU 5350	Seminar in Mass Communication	3
Secondary Core		
ECO 5338	Seminar in World Economic Systems	3
International Issue	Course	
3 hours under adv	visement	3
Area Study		
3 hours under adv	visement	3
Graduate-level Ele	ectives	
Electives may be taken from journalism and allied fields, permitting the student to specialize in one international discipline such as economics, environmental studies, or political science, or in a combination of graduate courses in other disciplines with approval of the Graduate Program Director.		12
Internship		
JOU 5V01	International Journalism Internship	6
Total Hours		36

## **Latin American Studies**

Director: Lizbeth Souza-Fuertes

· Latin American Studies Minor (p. 132)

## **Latin American Studies Minor**

The graduate program in Latin American studies is offered as a minor in the M.A. and the Ph.D. programs. Prerequisites for graduate study are intermediate level proficiency in Spanish or Portuguese or another language needed for research and acceptance into the graduate program in a field for which the Latin American area is a suitable minor. The GRE General Test is required.

The student, with the advice of the director of the Latin American studies program, will select courses from those listed below.

Courses available for a minor in Latin American Studies are as follows:

Code	Title	Hours
HIS 4357	Inter-American Relations	3
LAS 4350	Latin American Studies Seminar	3
LAS 4390	Advanced Reading and Research in Latin American Studies	3
PHI 4331	Latin American Philosophy	3
SPA 4376	The Spanish-American Novel	3

# **Mathematics Department of Mathematics**

Chairperson: Lance Littlejohn

Graduate Program Director: Mark Sepanski

The Department of Mathematics offers the Master of Science and the Doctor of Philosophy degrees.

#### Admission

The minimum requirements for beginning graduate work in either the Master of Science or the Doctor of Philosophy degree is twenty-seven semester hours of approved mathematics. The GRE General Test is required of all applicants.

### **Application**

The application procedure including the online application is described in the Admissions section under General Information of this catalog. The Department of Mathematics does not require any special material from the applicant.

### **Financial Support**

The Department of Mathematics offers Graduate Teaching
Assistantships to selected students. An assistantship provides a stipend
at a competitive level and tuition remission for up to nine hours per
semester. Support for one summer session is usually available. Graduate
Assistants normally work as tutors, grade papers, or teach one course. An
application to the graduate program in mathematics is also considered
an application for an assistantship.

More information concerning the graduate programs in mathematics is available at www.baylor.edu/Math/ (http://www.baylor.edu/Math/).

- · Mathematics, M.S. (p. 133)
- · Mathematics, Ph.D. (p. 133)

## Mathematics, M.S.

Thirty-three semester hours of approved graduate courses are required for the MS degree in mathematics (see below). In addition, one comprehensive exam must be passed: either one Qualifying Exam (as listed under the Doctor of Philosophy requirements) or a comprehensive exam given by the Department of Mathematics. No foreign language is required for the Master of Science degree.

Code	Title	Hours
Required Course	s	
MTH 5310	Advanced Abstract Algebra I	3
MTH 5323	Theory of Functions of Real Variables I	3
MTH 5350	Complex Analysis	3
MTH 5330	Topology	3
Electives		
Select 21 semes	ter hours from the following:	21
Any 4000 leve	el or higher MTH course carrying graduate credit	
Any 5000 level STA course		
Or other graduate electives only as approved by the		
Department of Mathematics		
Total Hours		33

## Mathematics, Ph.D.

Seventy-two semester hours of approved graduate courses are required for the Ph.D. degree in mathematics (see below). Other requirements include passing a Qualifying Exam in two of the four year-long core areas (abstract algebra, applied mathematics, real variables, and topology), passing a Preliminary Examination administered by a committee headed by the student's dissertation advisor, and a successful defense of a dissertation. No foreign language is required for the Ph.D. degree.

#### **Core Curriculum**

Code	Title	Hours
<b>Core Courses</b>		
Students must ea	rn a grade of B or better in each of the seven	
core courses.		
MTH 5310	Advanced Abstract Algebra I	3
MTH 5323	Theory of Functions of Real Variables I	3
MTH 5330	Topology	3
MTH 5350	Complex Analysis	3
Select three cours	es from the following:	9
MTH 5311	Advanced Abstract Algebra II	
MTH 5324	Theory of Functions of Real Variables II	
MTH 5331	Algebraic Topology I	
MTH 5360	Applied Mathematics I	
MTH 5361	Applied Mathematics II	
Dissertation		
MTH 6V99	Dissertation	12
Electives		
Select 39 semeste	er hours from the following:	39
Any 4000-level	MTH course carrying graduate credit or higher	

Any 5000-level or higher STA course

Or other graduate electives only as approved by the Department of Mathematics

Total Hours 72

# **Museum Studies Department of Museum Studies**

Chairperson: Kenneth C. Hafertepe Graduate Program Director: Kimberly H. McCray

The Department of Museum Studies prepares Baylor students for careers in the museum profession, cultural organizations, and related non-profit institutions through a traditional MA, a joint BA/MA, and a graduate minor. Students will come away with a solid grounding in museum education, collections management, curation, and administration, and with the opportunity to concentrate in any one of these or in museum-related research.

- · Museum Studies, M.A. (p. 133)
- · Joint BA/MA in Museum Studies (p. 134)
- · Joint BA for Select Majors/MA in Museum Studies (p. 134)
- · Museum Studies Graduate Minor (p. 135)

## Museum Studies, M.A.

The Department of Museum Studies offers a Master of Arts degree in museum studies. The program consists of thirty-six semester hours, including six hours of internship, professional project, or thesis.

### **Admission Process**

New students are admitted for the fall semester only. An applicant for the master's degree in museum studies should have a baccalaureate degree, documentation of courses taken, and GPA earned in previous college or university study, and internship experience in a museum, gallery, historic site, or archive. Applications are considered on a rolling basis until the class is filled. Students wishing to be considered for a graduate assistantship and/or a departmental scholarship, which are the principal form of financial aid in the department, should have their applications complete by February 15.

The application consists of transcripts from all undergraduate and graduate institutions, completion of the Graduate Record Examination (GRE), three letters of recommendation, and a personal statement explaining their interest in museums and museum studies, and why they are a good fit for Baylor. Letters of recommendation must include two letters from academic references and one letter from a professional reference. The admissions committee looks carefully at academic credentials but is also interested in previous experiences that show familiarity with and aptitude for museums and the museum profession. Professional experience may include summer internships or volunteer assignments in a museum or related institution; it does not have to be a full-time position. If you lack such experience in a museum, we suggest you take some time to gain such experience before submitting an application to the program.

Under certain circumstances, students who do not meet all requirements may be admitted into the program on probation and may be required to take undergraduate leveling courses before formal admittance to the program.

## **Requirements for the MA**

Thirty-six semester hours, including

Code	Title	Hours
Required Courses	3	
MST 5301	The Museum: History, Philosophy, Prospects	3
MST 5304	Collections Management	3
MST 5309	Museum Education	3
MST 5311	Issues in Museum Administration	3
MST 5340	Capstone: Major Issues in Museum Administration	3
Select a minimum professional proje	6	
Total Hours		21

All students in either the thesis or non-thesis program are required to take a written comprehensive examination. Thesis students will also have an oral examination representing defense of the thesis. Up to six semester hours of graduate study in museum studies or a cognate field may be transferred from another accredited institution with the approval of both the Department of Museum Studies and the Graduate School. Prospective students are encouraged to have a pre-admission interview.

## **ACA-Approved Courses**

The Academy of Certified Archivists has created a Graduate Course Preapproval Program to evaluate graduate-level archival courses. Courses that have been preapproved by the ACA will count toward the 9 semester hours of credit required to take the ACA exam under the provisional option. The following Museum Studies courses have been preapproved by the ACA:

Code	Title	Hours
MST 5304	Collections Management	3
MST 5311	Issues in Museum Administration	3
MST 5312	Outreach and Community Relations	3
MST 5324	Archival Arrangement and Description	3
MST 5326	Archival Technology and Digital Collections Management	3
MST 5333	Issues in Preservation Management	3

## **Joint BA/MA in Museum Studies**

For Museum Studies undergraduate majors who decide that they wish to continue graduate work the department offers a joint bachelor's and master's degree. Students should apply for the graduate program in their junior year and should take one undergraduate course, and three graduate courses, MST 5304 Collections Management, MST 5309 Museum Education, and MST 5311 Issues in Museum Administration, during their senior year. Having competed the BA, they can graduate after one additional year of study. Students are required to meet all requirements for the BA in Museum Studies for a total of 124 credit hours

## Joint BA for Select Majors/MA in Museum Studies

For undergraduate majors in American Studies, Anthropology, Art and Art History, Journalism, or History who decide that they wish to apply their undergraduate knowledge to work in museums, the department offers a joint bachelor and master degree. Students should apply for the graduate program in their junior year and can take one undergraduate course, and three graduate courses, MST 5304 Collections Management, MST 5309 Museum Education, and MST 5311 Issues in Museum Administration, during their senior year. Having completed the BA, they can graduate after one additional year of study. Students are required to meet all requirements for the BA in their undergraduate major for a total of 124 credit hours.

#### **Admission Process**

Students would apply to the graduate program in their junior year. Like the traditional MA program, applications would be due February 15. Successful applicants would begin their graduate coursework the following fall.

## **Eligibility Requirements**

Eligible students must apply for formal admission to the Graduate School. This process will not require the GRE. Students must submit the following:

- · Two academic letters of reference
  - One letter of reference must be from a professor in the student's major degree program.
- · One professional letter of reference
  - This letter of reference should come from an individual who can speak to the student's professional potential. The individual may have supervised the student in a paid or volunteer position or served as an advisor to a student organization in which the student served in a leadership position.
- · Personal statement
- · Project sample
  - This should be a meaningful project (e.g. an academic paper, a website, an exhibit, a public program, an artwork) that would be included in a professional portfolio.

Eligible students also need to complete the following prior to submitting their application:

Code	Title	Hours
MST 1300	Introduction to Museums	3
Select at least one a	dditional MST course from the following:	3
MST 2303	Museum Educational Programming	
MST 3304	Introduction to Cultural Collections	
MST 4308	Introduction to Material Culture	
MST 4301	Nonprofit Perspectives	
MST 4309	Introduction to American Decorative Arts	
MST 4331	Exhibit Design and Preparation	
Total Hours		

 Interview with the Graduate Program Director to discuss degree planning and program goals. During the senior year, students must complete the following in order to continue in the joint B.A./M.A. program:

· Earn a B or higher in each course taken toward the completion of the 12 hours of graduate credit in the senior year.

## Degree Plan for the Joint BA/MA

Students enrolled in the BA/MA program would fulfill all the requirements of their undergraduate major, and they will also complete an additional 30 hours of graduate study. (Note: MST 5304 Collections Management, MST 5309 Museum Education, and MST 5311 Issues in Museum Administration, taken during the senior year, will count toward both the B.A and the M.A. Students must separately complete all A & S and university requirements for the B.A. in their major for a total of 124 credit hours.)

Code	Title	Hours		
Required Courses				
MST 5304	Collections Management	3		
MST 5309	Museum Education	3		
MST 5311	Issues in Museum Administration	3		
MST 5340	Capstone: Major Issues in Museum Administration	3		
Electives				
Select at least 9 hour following:	s of 5000-level MST seminars from the	9		
MST 5312	Outreach and Community Relations			
MST 5318	Ethical Issues in Museums, Libraries, and Archives			
MST 5323	Historic Preservation			
MST 5324	Archival Arrangement and Description			
MST 5326	Archival Technology and Digital Collections Management			
MST 5327	Special Topics in Museum Studies			
MST 5328	American Material Culture			
MST 5329	American Decorative Arts			
MST 5331	Design and Management of Museum Exhibits			
MST 5333	Issues in Preservation Management			
MST 5V40	Independent Studies in Museums			
The remaining 6 hour	The remaining 6 hours of coursework may be completed from the			

following:

Any 5000-level MST seminar (see above listing)

Any 5000-level graduate seminar in a cognate field (i.e. history, English, etc.) listed in the most recent Graduate Catalog, selected in consultation with the Graduate Program Director.

Any 4000-level course in a cognate field (i.e. American studies, anthropology, art and art history, history, English, etc.) listed in the most recent Graduate Catalog and taught by a member of the graduate faculty, completing the additional requirements designated for graduate credit, selected in consultation with the Graduate Program Director.

**Total Hours** 27

## **Comprehensive Exam**

Students will complete a comprehensive exam testing the student's mastery of the four core areas of museum practice: history and

philosophy, museum education, museum collections management, and museum administration.

## Museum Studies Graduate Minor

The Department also offers a minor in museum studies for those in cognate fields who would like to gain insight into the mission, management, operation, and use of museums, or to prepare those interested in serving as museum trustees.

The minor requires nine semester hours including MST 5301 The Museum: History, Philosophy, Prospects.

### School of Music

Associate Dean for Graduate Studies: Timothy R. McKinney

#### Accreditation

The School of Music graduate programs are accredited by the National Association of Schools of Music.

## **Graduate Degrees in Music**

Graduate programs in music at Baylor University are designed to bring students to the highest levels of performance and scholarship of which they are capable. The graduate faculty of the School of Music is comprised of individuals who have distinguished themselves in their chosen disciplines and who maintain active performance, research, and other professional interests. Graduates from Baylor's School of Music hold positions in orchestras, opera companies, churches, universities and colleges, and conservatories, and other venues throughout the world. Assistantships are available in many performance and academic areas to enable students of superior ability to pursue a quality education in music at Baylor.

- · Master of Music (p. 135)
  - · Church Music, Master of Music (p. 136)
  - Composition, Master of Music (p. 137)
  - · Conducting, Master of Music (p. 137)
  - Musicology, Master of Music (p. 138)
  - · Music Theory, Master of Music (p. 138)
  - · Performance, Master of Music (p. 138)
  - · Collaborative Piano, Master of Music (p. 138)
  - · Piano Pedagogy and Performance, Master of Music (p. 139)
- · Joint Master of Divinity/Master of Music (p. 139)
- Doctoral Degrees in Church Music (p. 141)
  - · Church Music (Ph.D.) (p. 141)
  - Church Music (D.M.A.) (p. 141)
- Advanced Performers Certificate Program (p. 142)

## **Master of Music**

The Master of Music degree is offered in the School of Music with majors in church music, composition, conducting, musicology, music theory, performance, collaborative piano, and piano pedagogy and performance.

### Admission

Graduates of recognized four-year courses leading to a bachelor's degree in music with a minimum GPA of 3.0 may become candidates for the Master of Music degree. Students desiring to become candidates for the

degree must have the equivalent of the undergraduate major in music at Baylor University in the field of concentration in which they wish to continue. Those who lack courses prerequisite to graduate study may make up the undergraduate work, for which graduate credit may be granted, provided the course work is at the 4000 level and appropriate to the degree program. All students will take music theory and music history diagnostic examinations. Certain majors, including Vocal Performance, Choral Conducting, Collaborative Piano, and the Vocal Performance Concentration of Church Music, require additional diagnostic exams in Diction. Appropriate remedial course work may be required.

Applicants for degrees with emphasis in performance, collaborative piano, piano pedagogy, or the performance option of church music must audition (in person or submit a video recording of a recent performance) with repertoire of at least senior recital level. A repertoire list must be submitted for evaluation at the time of the audition. Applicants for the major in composition or the composition option in church music must submit a portfolio of recently completed compositions. An example of a recent paper is required of applicants who intend to pursue an emphasis in musicology, church music, or music theory. Applicants seeking admission to the conducting program must submit a video of their work in both rehearsal and performance. Papers, composition portfolios, videos, and audio recordings should be submitted to the School of Music. To request an audition and/or submit materials, please go to the School of Music's website: https://www.baylor.edu/music/.

The Graduate Record Examination General Test (GRE) is required of applicants in musicology and music theory; the GRE General Test is not required of church music, composition, conducting, performance, piano pedagogy and performance, or collaborative piano majors.

Applicants in musicology must possess intermediate proficiency in German or French (see Graduate School Language Requirement).

## **Special Requirements for Master's Degrees**

The normal time for completion of the requirements for the degree ranges from two semesters and two summers to four semesters. A minimum of thirty semester hours is required. No correspondence work may be counted for graduate credit.

Enrollment in an ensemble, as assigned by the conducting faculty, is required throughout the term of residence. Ensemble participation is not required of Piano Performance majors or Collaborative Piano majors.

Students in piano pedagogy may fulfill the ensemble requirement through enrollment in two semesters of Studio Collaborative Piano, Piano Ensemble, or Chamber Music. Organ performance majors will fulfill the ensemble requirement through enrollment in two semesters of a choral ensemble.

All candidates for a master's degree must pass a comprehensive oral examination.

Students who desire to pursue a double major (e.g., Music Theory and Piano Performance) must fulfill all application requirements for and be accepted by both areas. An additional 15-18 credit hours will be required to complete the major in the second area (the number of hours depends upon the majors chosen). Except for the core course requirements of 9 credit hours, no courses can be credited toward degree requirements in both areas (e.g., a recital in Piano Pedagogy and Performance cannot be used to fulfill degree requirements in Piano Performance).

## **Summer Applied Lessons**

Applied music courses are only open in summer sessions to MM, MDiv/MM, DMA, and PhD students in their primary applied concentration and only with the approval of the Associate Dean for Academic Affairs.

- · Church Music, Master of Music (p. 136)
- Composition, Master of Music (p. 137)
- · Conducting, Master of Music (p. 137)
- · Musicology, Master of Music (p. 138)
- · Music Theory, Master of Music (p. 138)
- · Performance, Master of Music (p. 138)
- · Collaborative Piano, Master of Music (p. 138)
- · Piano Pedagogy and Performance, Master of Music (p. 139)

### **Curriculum for Master of Music**

The core of study for all Master of Music degrees is as follows:

Code	Title	Hours
Core Courses		
MUS 5302	Analytical Techniques	3
MUS 5320	Research Methods and Bibliography	3
Select one course fro	om the following:	3
MUS 5321	Seminar in The Middle Ages	
MUS 5322	Seminar in The Renaissance Era	
MUS 5323	Seminar in The Baroque Era	
MUS 5325	Seminar in The Classic Era	
MUS 5326	Seminar in The Romantic Era	
MUS 5328	Seminar in Music of World War I to the Present	

Total Hours 9

- · Church Music, Master of Music (p. 136)
- Composition, Master of Music (p. 137)
- Conducting, Master of Music (p. 137)
- Musicology, Master of Music (p. 138)
- Music Theory, Master of Music (p. 138)
- Performance, Master of Music (p. 138)
- Collaborative Piano, Master of Music (p. 138)
- Piano Pedagogy and Performance, Master of Music (p. 139)

## Church Music, Master of Music Required Courses for all Church Music Majors

Code	Title	Hours
Core Requirements		
Complete all the cou	rses listed under the Core Requirements	9
<b>Church Music Core</b>		
Select one course in	each category:	14
Congregational Song		
MUS 4374	The Song of the Church (required) <sup>1</sup>	
MUS 5353	Congregational Song in Global Perspective	

MUS 5357	Congregational Song in Historical Perspective	
MUS 5346	Leading the Church's Song	
Worship		
MUS 4373	Worship in the Church (required) 1	
MUS 5349	Perspectives on Worship	
MUS 5352	Worship in Global Perspective	
MUS 5347	Liturgical Traditions	
MUS 5350	Resources for Worship	
Leadership/Administra	ation	
MUS 4375	Leadership in Music Ministry	
MUS 5345	Leadership for Ministry	
MUS 5354	The Business of Ministry	
Vocal/Choral		
MUS 5342	Choral/Vocal Music Ministry	
MUS 5351	Sacred Choral Literature	
Conducting		
MUS 4261	Advanced Choral Conducting	
MUS 4259	Fundamentals of Conducting	
Elective		
3-hour elective in Chu	ırch Music	3
<b>Concentration Requir</b>	rements	
Select one option from	m the following:	10
Option A: Church Minis	stry	
Additional courses	s drawn from the Church Music core	
Applied		
General electives i	n music	
Option B: Composition		
Composition <sup>2</sup>	2	
MUS 5170	Graduate Recital <sup>3</sup>	
General electives i	n music	
Option C: Conducting	_	
Conducting and Ch	noral literature <sup>4</sup>	
MUS 5141	Performance Document	
MUS 5170	Graduate Recital	
General electives i	n music	
	and the second s	

To be admitted to the program, the candidate must submit a video of conducting that will be evaluated by the conducting and church music faculties.

For the conducting project, the student will assemble a choir. In consultation with the church music faculty and the appropriate conducting faculty, the student will select repertoire that reflects the music from a variety of styles and periods. Approximately six anthems will be prepared and presented. The repertoire will be prepared under the supervision of the church music and choral conducting faculties. The document, which will be related to the repertoire of the concert or service, will be written under the supervision of the church music faculty.

#### Option D: Performance

Applied Major		
MUS 5141	Performance Document	
MUS 5170	Graduate Recital	
Piano proficiency of level IVs required for vocal, instrumental, or		

organ emphasis, and level VIIs for piano emphasis.

In the vocal and organ emphases the recital will consist primarily of sacred music; a collaborative and/or solo recital will be acceptable for a piano emphasis.

The document that accompanies the recital will be supervised by the church music faculty.

Option E: Thesis	
MUS 5V99 Th	nesis
Applied	
Additional courses drawn from teh Church Music core	
General electives in m	nusic

After the completion of applied study, students are required to present a performance project (representative program of works appropriate for church in the student's performance medium) to the church music faculty.

**Total Hours** 36

- Students who had an equivalent course in their undergradute degree may choose one of the other options upon the approval of the Church Music faculty and Graduate Program Director.
- Choose from MUS 4203 Electroacoustic Music Composition, MUS 5207 Graduate Composition I, MUS 5208 Graduate Composition II, MUS 5209 Graduation Composition III, and MUS 5V89 Special Research Problems.
- <sup>3</sup> The recital may consist of a concert format or a presentation of original compositions within a service.
- Choose from MUS 4260 Orchestral Conducting, MUS 4261 Advanced Choral Conducting, MUS 4262 Band Conducting, MUS 5270 Applied Conducting, and MUS 4337 Choral Literature.

## **Composition, Master of Music**

Code	Title	Hours	
Core Requirement	ts		
Complete all the o	courses listed under the Core Requirements	9	
Core Courses			
MUS 4203	Electroacoustic Music Composition	2	
MUS 5207	Graduate Composition I	2	
MUS 5208	Graduate Composition II	2	
MUS 5209	Graduation Composition III	2	
MUS 5328	Seminar in Music of World War I to the Present	3	
MUS 5355	Analysis Seminar	3	
MUS 5V99	Thesis	3	
Electives			
Select four semes	ster hours of electives	4	
Total Hours	Total Hours		

## **Conducting, Master of Music**

Code	Title	Hours
Core Requiremen	nts	
Complete all the	Complete all the courses listed under the Core Requirements	
<b>Core Courses</b>		
MUS 4260	Orchestral Conducting	2
MUS 4261	Advanced Choral Conducting	2
MUS 4262	Band Conducting	2

## **Musicology, Master of Music**

Code	Title	Hours
Core Requirements		
Complete all the cour	ses listed under the Core Requirements	9
Core Courses		
Two additional Music requirements	ology Seminars from those listed in the core	6
MUS 5329	Foundations and Trends in Musicology	3
MUS 5319	Foundations and Trends in Ethnomusicology	3
MUS 5V99	Thesis	3
Applied Music		3
Electives		
Select three semester hours of electives <sup>1</sup>		
Enrollment is required for every term in residence. <sup>2</sup>		
MUS 5010	Academic Division Colloquium (Enrollment is required for every term in residence.)	0
Total Hours		30

Chosen in consultation with the student's advisor in support of thesis research. Piano proficiency of level VIs or two semesters of piano with a minimum grade of "B" is required.

## **Music Theory, Master of Music**

Code	Title	Hours
Core Requirements		
Complete all the cour	ses listed under the Core Requirements	9
<b>Core Courses</b>		
MUS 5201	Pedagogy of Theory	2
MUS 5301	History of Music Theory	3
MUS 5328	Seminar in Music of World War I to the Present	3
MUS 5355	Analysis Seminar (two semesters)	6
MUS 5V99	Thesis	3
Electives		
Select four semester	hours of electives	4

Total Hours		30
MUS 5010	Academic Division Colloquium (Enrollment is required for every term in residence.)	0

Supportive courses in music literature, music theory, composition, or applied music to total a minimum of thirty hours. Piano proficiency of level VIIIs or two semesters of piano with a minimum grade of "B" is required.

## **Performance, Master of Music**

(Offered in strings, woodwinds, brass, percussion, voice, piano, organ, harp)

Code	Title	Hours
Core Requirement	s	
Complete all the c	ourses listed under the Core Requirements	9
<b>Core Courses</b>		
Applied Major		12
MUS 5170	Graduate Recital (two required, one sem. hr. each)	2
Supportive courses chosen from music literature, music theory, pedagogy of major area <sup>1</sup> or applied music <sup>2</sup>		7
Total Hours		30

- Instrumental students must take one of the following courses appropriate to their major performance area: MUS 4333 Percussion Literature and Pedagogy, MUS 4334 String Chamber Literature, MUS 4335 Woodwind Literature and Pedagogy, or MUS 4336 Brass Literature and Pedagogy.
- <sup>2</sup> A maximum of four semester hours of applied music is permitted among the supportive courses.

One of the recitals may be a lecture-recital, a performance with chamber ensemble, an accompaniment of a major performance, or a major opera role at the discretion of the student's graduate committee. The recitals will consist of repertoire learned while the student is in residence for the degree. The student must be enrolled for applied music during the term in which a recital is given. If the recitals are not given before the twelve hours of applied music concentration are completed, the student must continue with applied study.

## **Collaborative Piano, Master of Music**

Code	Title	Hours
Core Requirements		
Complete all the cour	ses listed under the Core Requirements	9
Core Courses		
MUS 5252 & MUS 5253	Seminar in Vocal Collaboration I and Seminar in Vocal Accompanying II	4
MUS 5254 & MUS 5255	Seminar in Instrumental Collaboration I and Seminar in Instrumental Collaboration II	4
MUS 5170	Graduate Recital (two recitals equally representing vocal and instrumental repertoire)	2
MUS 51K5	Applied Piano: Collaborative (one sem. hr. each semester) 1	4

MUS 51K1	Graduate Piano (applied lessons one sem. hr. each semester) <sup>1</sup>	4
Electives		
Select three seme	ster hours from the following:	3
MUS 4325	Opera Literature	
MUS 4327	Song Literature I	
MUS 4329	Song Literature II	
MUS 4334	String Chamber Literature	
MUS 4335	Woodwind Literature and Pedagogy	
MUS 4336	Brass Literature and Pedagogy	
MUS 5V89	Special Research Problems	
Total Hours		30

Collaborative Piano (collaborative repertoire/private coaching) will alternate, one hour per week with Graduate Piano (applied lessons).

## Piano Pedagogy and Performance, Master of Music

Title

Code

**Total Hours** 

Code	Title	Hours
<b>Core Requirements</b>		
Complete all the cou	urses listed under the Core Requirements	9
Core Courses		
MUS 4315 & MUS 4316	Advanced Piano Pedagogy and Practicum I and Advanced Piano Pedagogy and Practicum II	6
MUS 5170	Graduate Recital	1
MUS 52K1	Graduate Piano	8
MUS 5V16	Research Project in Piano Pedagogy	2
Electives		
Select four semeste	er hours from the following:	4
MUS 4322	Piano Literature I	
MUS 4324	Piano Literature II	
MUS 4V13	Workshop in Keyboard Music	
MUS 5114	Internship in Piano Teaching I	
MUS 5115	Internship in Piano Teaching II	
MUS 5201	Pedagogy of Theory	
MUS 5252	Seminar in Vocal Collaboration I	
MUS 5253	Seminar in Vocal Accompanying II	
MUS 5254	Seminar in Instrumental Collaboration I	
MUS 5255	Seminar in Instrumental Collaboration II	
Organ		
Harpsichord		

## Joint Master of Divinity/Master of Music

The Master of Divinity degree is designed primarily for students preparing for pastoral ministry, though it also provides preparation for other specialized ministries. The Master of Music degree in church music is a professional graduate degree for those who plan to serve in the music ministry. The degree is designed to develop proficiency in performance,

a knowledge of church music (including music history, music theory and conducting), and an understanding of the theological context of church music and the administration of a church music program.

#### **Admission**

Students seeking admission to the joint degree program will be required to fulfill admission requirements to the George W. Truett Theological Seminary, the Graduate School, and the School of Music. Students must apply and be admitted to each of the programs. Upon commencing seminary studies, the student may enroll in courses in both programs.

## Requirements

Hours

30

Students will complete sixty semester hours of the theological education core, three hours of elective, twelve hours of music concentration courses, and twelve hours of Master of Music courses to satisfy requirements for the Master of Divinity. To complete requirements for the Master of Music degree, an additional eighteen semester hours will be taken from the Church Music degree program in one of the following five options: Thesis, Performance, Conducting, Church Ministry, or Composition. Since both degrees are awarded simultaneously, all requirements in both schools must be completed in order to receive either degree.

Code	Title	Hours
Theological Educatio	n Core Courses	
Introductory Courses	1	
THEO 7340	Introduction to Christian Scriptures	3
THEO 7341	Introduction to Christian History and	3
	Theology	
Spiritual Formation		
PRTH 7101	Spiritual Formation I	1
PRTH 7102	Spiritual Formation II	1
PRTH 7103	Spiritual Formation III	1
PRTH 7004	Spiritual Formation Retreat	0
Christian Scriptures		
THEO 7370	Christian Scriptures I	3
THEO 7372	Christian Scriptures II	3
THEO 7371	Christian Scriptures III	3
THEO 7373	Christian Scriptures IV	3
Christian Theology		
THEO 7360	Christian Texts and Traditions I	3
THEO 7361	Christian Texts and Traditions II	3
THEO 7362	Christian Texts and Traditions III	3
THEO 7382	Constructive Theology	3
THEO 7396	The Baptist Identity	3
Christian Ministry		
LEAD 7301	Leadership for Ministry	3
or PAST 7330	Introduction to Pastoral Care	
WOCW 7385	Introduction to Christian Witness and Mission	3
PRCH 7316	Preaching I	3
THEO 7316	Christian Worship	3
PRTH 7391	Integrative Seminar: Faith and Practice	3
MENT 7V00	Mentoring in Ministry	9
Elective		

Select three semester hours		3
Music Concentration Courses		
Required Courses		
MUS 4374	The Song of the Church	3
MUS 4375	Leadership in Music Ministry	3
MUS 5342	Choral/Vocal Music Ministry	3
or MUS 5351	Sacred Choral Literature	
Select one course t	from the following:	3
THEO 7317	Studies in Worship	
MUS 5353	Congregational Song in Global Perspective	
MUS 5357	Congregational Song in Historical Perspective	
MUS 5346	Leading the Church's Song	
MUS 5349	Perspectives on Worship	
MUS 5352	Worship in Global Perspective	
MUS 5347	Liturgical Traditions	
MUS 5350	Resources for Worship	
Master of Music Co	ourses	
	credited toward the Master of Divinity degree ul completion of the Master of Music degree.	
MUS 5302	Analytical Techniques	3
MUS 5320	Research Methods and Bibliography	3
Musicology Seminal	•	
Select one course t	from the following:	3
MUS 5321	Seminar in The Middle Ages	
MUS 5322	Seminar in The Renaissance Era	
MUS 5323	Seminar in The Baroque Era	
MUS 5325	Seminar in The Classic Era	
MUS 5326	Seminar in The Romantic Era	
MUS 5328	Seminar in Music of World War I to the Present	
MUS 4259	Fundamentals of Conducting	2
or MUS 4261	Advanced Choral Conducting	
Select one of the fo	ollowing:	1
MUS 5V89	Special Research Problems	
One hour of grad	duate applied music	
MUS 5037	Church Music Forum (4 semesters)	0
Ensemble (4 semesters)		
<b>Covenant Group</b>		
Complete 4 semest	ters	
Lifelong Learning L	Jnits	
0 11 6 1	(0001:(1 1 1 1:1)	

Satisfactory completion of 200 Lifelong Learning Units.

#### **Master of Divinity**

Six hours of Master of Divinity credits are accepted toward the Master of Music degree upon the successful completion of the Master of Divinity degree.

#### **Master of Music**

The Master of Music degree requires an additional eighteen hours of Music School courses selected from one of the five options below:

#### Option A: Thesis

MUS 5V99 Thesis
Applied

Additional course from Church Music core (under III above)

**Church Music Electives** 

General music Electives

After the completion of applied study, students are required to present a performance project (representative program of works appropriate for church in the student's performance medium) to the church music faculty.

#### Option B. Performance

Applied	
MUS 5170	Graduate Recital
MUS 5141	Performance Document <sup>2</sup>
Church Music Elec	tives

#### General music Electives

Piano proficiency of level IVs is required for vocal, instrumental, and organ emphasis areas, level VIIs for piano emphasis. In the vocal and organ emphasis areas the recital will consist primarily of sacred music; a collaborative and/or solo recital will be acceptable for a piano emphasis.

#### Option C: Conducting

Conducting and Choral Literature <sup>3</sup>		
MUS 5170	Graduate Recital <sup>4</sup>	
MUS 5141	Performance Document <sup>5</sup>	
Church Music Electives		

#### General music Electives

To be admitted to the conducting option the candidate must submit a video of conducting which will be evaluated by the conducting and church music faculties. In consultation with the church music faculty and appropriate conducting faculty, the student will select repertoire that reflects music from a variety of styles and periods. Approximately six anthems will be prepared under the supervision of the church music and choral conducting faculties.

#### Option D: Church Ministry

Additional course from Church Music core (under III above)

**Applied** 

**Church Music Electives** 

General music Electives

#### Option E: Composition

Composition <sup>6</sup>

MUS 5170 Graduate Recital

Church Music Electives

General music Electives

#### Total Hours 105

These are required courses; however, based upon previous academic experience, students may petition to waive or substitute these courses. Introductory courses are waived from the degree plan by passing an advanced standing exam.

The document that accompanies the recital MUS 5141 Performance Document will be supervised by the church music faculty in cooperation with the appropriate applied faculty member(s).

Courses to be selected from MUS 4260 Orchestral Conducting, MUS 4261 Advanced Choral Conducting, MUS 4262 Band Conducting, MUS 4337 Choral Literature, and MUS 5270 Applied Conducting.

<sup>4</sup> For the conducting project (MUS 5170 Graduate Recital) the student will assemble a choir.

- The document (MUS 5141 Performance Document), which will be related to the repertoire of the concert or service, will be written under the supervision of the church music faculty.
- Courses to be selected from MUS 4203 Electroacoustic Music Composition, MUS 5207 Graduate Composition I, MUS 5208 Graduate Composition II, MUS 5209 Graduation Composition III, or MUS 5V89 Special Research Problems.

## **Doctoral Degrees in Church Music**

The School of Music offers courses of study leading to the Doctor of Philosophy in church music and the Doctor of Musical Arts in church music.

#### **Admission Requirements**

Applicants must have earned a master's degree in music from an accredited college or university. Applicants are encouraged to have significant prior professional experience in the field of music. At least two years of full-time employment or the equivalent in part-time and/or volunteer work is recommended.

Prospective students must submit official GRE scores. The GRE must have been taken within five years of the application for admission. Normal expectations for PhD students are a combined Verbal/ Quantitative score of at least 300, with a minimum Verbal score of 153; expectations for DMA students are a combined score of at least 297, with a minimum Verbal score of 152.

Students from non-English speaking countries must take the Test Of English as a Foreign Language and submit a minimum score of 600 (250 computer-based, 100 internet-based). (Comparable scores on the IELTS, PTE, or Duolingo exams may also be submitted.) Applicants also must submit a master's thesis or significant research paper as a writing sample. The research paper may take the form of a published book or article, a major paper for a master's-level course, or a paper written specifically to fulfill this requirement. The writing sample must demonstrate familiarity with appropriate research techniques, originality of thought, and ability to write with clarity.

Applicants will have a face-to-face interview with the Church Music faculty. The applicant should prepare a curriculum vita for the interview that includes all relevant academic and professional experience as well as goals and plans for the future. Prospective DMA students must audition for and be accepted by the Church Music and applied faculties in their area of performance. No audition is required for PhD applicants.

Three letters of recommendation are required. At least one should be from a person qualified to comment on the applicant's master's degree work, and at least one should be from a person who can speak to the applicant's music activity in a local congregation.

Diagnostic examinations in music history, music theory, conducting, voice, and piano will be administered to each student.

- · Church Music (Ph.D.) (p. 141)
- Church Music (D.M.A.) (p. 141)

## Church Music, Ph.D.

## **Curriculum for the Doctor of Philosophy in Church Music**

Church Mu	ISIC	
Code	Title	Hours
Required Courses		
MUS 6341	Introduction to Research in Church Music	3
MUS 6348	Professional Development and Teaching Practicum	3
Church Music Ser	ninars	
Select five semina	ars from the following:	15
MUS 6342	Research in Congregational Song	
MUS 6343	Research in Church Music History	
MUS 6344	Research in Church Music Philosophy	
MUS 6345	Research in Christian Worship	
MUS 6346	Research in Music Ministry	
MUS 6347	Research in Sacred Choral Music	
Musicology and/o	or Music Theory	
Select six semest	er hours from the following:	6
MUS 5321	Seminar in The Middle Ages	
MUS 5322	Seminar in The Renaissance Era	
MUS 5323	Seminar in The Baroque Era	
MUS 5325	Seminar in The Classic Era	
MUS 5326	Seminar in The Romantic Era	
MUS 5328	Seminar in Music of World War I to the Present	
MUS 5329	Foundations and Trends in Musicology	
MUS 5319	Foundations and Trends in Ethnomusicology	
MUS 5355	Analysis Seminar	
MUS 5201	Pedagogy of Theory	
MUS 5301	History of Music Theory	
MUS 5V89	Special Research Problems	
Minor Area		
a single field of st	of 5000-level or above course work taken in udy other than Church Music. The remaining ctives may be taken in any field.	12
Dissertation		
MUS 6V99	Dissertation	9
Total Hours		48

## **Church Music, D.M.A.**

## **Curriculum for the Doctor of Musical Arts** in Church Music

Code Required Courses	Title	Hours
MUS 6341	Introduction to Research in Church Music	3
MUS 6348	Professional Development and Teaching Practicum	3
<b>Church Music Semi</b>	nars	
Select five seminars	from the following:	15

Total Hours		48
MUS 5170	Graduate Recital (2)	2
MUS 6V10	Doctoral Performance Document (accompanying 2nd recital)	3
Select 16 semester h	nours of applied music	16
Applied Music		
MUS 5V89	Special Research Problems	
MUS 5301	History of Music Theory	
MUS 5201	Pedagogy of Theory	
MUS 5355	Analysis Seminar	
MUS 5319	Foundations and Trends in Ethnomusicology	
MUS 5329	Foundations and Trends in Musicology	
MUS 5328	Seminar in Music of World War I to the Present	
MUS 5326	Seminar in The Romantic Era	
MUS 5325	Seminar in The Classic Era	
MUS 5323	Seminar in The Baroque Era	
MUS 5322	Seminar in The Renaissance Era	
MUS 5321	Seminar in The Middle Ages	
Select six semester l	nours from the following:	6
Musicology and/or M	lusic Theory	
MUS 6347	Research in Sacred Choral Music	
MUS 6346	Research in Music Ministry	
MUS 6345	Research in Christian Worship	
MUS 6344	Research in Church Music Philosophy	
MUS 6343	Research in Church Music History	
MUS 6342	Research in Congregational Song	

## **Advanced Performers Certificate Program**

(Piano or Organ)

The Advanced Performers Certificate is intended for students who demonstrate the potential to establish a career as a performing artist. Accordingly, the goals of this non-degree program are more narrowly focused than traditional graduate performance degrees. The requirements for the Advanced Performers Certificate Program are designed for students who have demonstrated the ability to perform advanced repertoire and whose artistic communication and technical mastery of major repertoire for the instrument are unusually strong.

It is expected that the student applying for admission to the program will have completed a Bachelor of Music degree or its equivalent from a recognized institution. Those applying for admission to the Advanced Performers Certificate Program must follow the procedures and regulations of other students applying for acceptance to the Graduate Division of the School of Music. (GRE not required)

### **Admission**

Upon recommendation of the faculty of the Keyboard Division, a student may be accepted to the Advanced Performers Certificate Program.

Admission will require a live audition before a committee that will include at least four members of the Keyboard Division faculty appointed by the Director of Keyboard Studies and the Graduate Program Director

in Music. The option of a video performance may be approved when distance to the audition would be a hardship. When the audition is by video, the student must present a live audition before a designated faculty committee during the first semester of residence in order to be fully accepted into the program.

The audition will require sixty minutes of solo repertoire representing the 18th, 19th, and 20th centuries and will include at least two major works and two virtuoso etudes from the literature. The audition committee may choose from the repertoire prepared.

Students who have been admitted to the Advanced Performers Certificate Program will be advised on course content by the Graduate Program Director in Music in consultation with the major teacher and the Director of Keyboard Studies.

## **Assessment of Progress in the Program**

Students will be required to maintain a 3.0 GPA to remain in the program. Recitals must receive a grade of A- to be passed. A committee consisting of four Keyboard Division faculty, one faculty member from another applied division, and the Graduate Program Director in Music will grade the required recitals.

A probationary semester will be granted when a student's GPA falls below the required GPA. Students placed on probationary status will be evaluated yearly by the Dean of the School of Music, the major teacher involved, and any members of the Keyboard Division faculty assigned by the Dean.

## **Residency Requirements**

All course requirements for the Advanced Performers Certificate Program must be completed in residence at Baylor University. The student may complete the credit requirements in four regular Fall-Spring semesters or may distribute the semester hours over four regular Fall-Spring semesters and two summer terms. The minimum time allowed to complete the requirements is two years and the maximum is three years.

## Language Requirement

Title

All international students whose first language is not English must achieve a TOEFL score of 550 (213 computer based or 80 Internet based) to be admitted to the Advanced Performers Certificate Program.

Hours

### Curriculum

Total Hours		32
MUS 5170	Graduate Recital	2
Select literature, pedagogy, music history or music theory courses appropriate to the area and for which the student is qualified.		6
Music Courses		
MUEN 5136	Advanced Performers Certificate Collaborative Keyboard (includes two full-length collaborative recitals)	4
Select 20 semester hours		20
Applied Major		
Course Requirements	3	

Additional courses not included in the program curriculum may be added upon consultation with the Graduate Program Director in Music, the

major teacher, and the Director of Keyboard Studies. Added courses will not be counted toward the requirement.

## **Louise Herrington School of Nursing**

Associate Dean of Online Graduate Programs: Dr. Kristi Feutz

The Louise Herrington School of Nursing offers a Doctor of Nursing Practice with majors in Adult Gerontology Nurse Practitioner (AGACNP), Family Nurse Practitioner (FNP), Neonatal Nurse Practitioner (NNP), Primary Care Pediatric Nurse Practitioner (PNP-PC), Acute Care Pediatric Nurse Practitioner (PNP-AC/PC), Executive Nurse Leader (ENL), Nurse-Midwifery (NM) and Certified Registered Nurse Anesthesia (CRNA), a US Army affiliated program.

- · Doctor of Nursing Practice (DNP) (p. 143)
  - Executive Nurse Leadership, DNP-ENL (p. 144)
  - Family Nurse Practitioner (FNP Specialty Track), BSN to DNP Degree (p. 145)
  - Neonatal Nurse Practitioner (NNP Specialty Track), BSN to DNP Degree (p. 146)
  - Nurse-Midwifery (NM Specialty Track), BSN to DNP Degree (p. 147)
  - Pediatric Nurse Practitioner (AC/PC-PNP Specialty Dual Track), BSN to DNP Degree (p. 148)
  - Adult Gerontology Acute Care Nurse Practitioner (AGACNP Specialty Track), BSN to DNP Degree (p. 149)
  - · APRN Post Master's DNP (p. 151)

## **Doctor of Nursing Practice (DNP)**

The NP/NM Doctor of Nursing Practice (DNP) degree is a 75-89 credit hour curriculum with specialty tracks in Adult Gerontology Nurse Practitioner (AGACNP), Family Nurse Practitioner (FNP), Neonatal Nurse Practitioner (NNP), Pediatric Nurse Practitioner (acute care and primary care) and Nurse-Midwifery (NM). Applicants who possess a Baccalaureate degree with a major in Nursing or a master's degree with a major in Nursing and who are seeking a role change are eligible to apply for the BSN to DNP program. Applicants who completed an advanced practice master's degree in nursing and are not seeking a new role are eligible to apply for the Post-Master's Doctor of Nursing Practice (DNP) degree. Full time and part time degree plans are available.

## **Admissions Requirements**

Admission requirements for the Post Baccalaureate to Doctor of Nursing Practice Degree:

For admission to the BSN to NP/NM DNP program, applicants must meet the general requirements set forth by the Graduate School and the Louise Herrington School of Nursing.

Admissions criteria for BSN to DNP at the time of application:

- 1. Completed BSN with a nursing GPA of 3.0 or higher.
- 2. Experience:
  - a. AGACNP 1-year full-time nursing experience
  - b. FNP- 1-year full-time nursing experience
  - c. NNP- 1-year experience in a level III NICU
  - d. PNP- 1-year full-time nursing experience

- e. NM- 1-year experience in labor & delivery, mother-baby unit or in an Outpatient OB/GYN
- 3. Unencumbered and current RN license
- Three acceptable letters of recommendation (one from an immediate supervisor, one from a peer nurse, one from an MSN, DNP or PhD prepared nurse)
- 5. An acceptable writing sample.
- 6. There is no foreign language requirement.

## Admission requirements for post master's to NP/MW DNP without a role change:

- Master's degree as an Advanced Practice Nurse in the specialty role of FNP, NNP, PNP or NM
- 2. Unencumbered license to practice as an Advanced Practice Nurse in the specialty role of AGACNP, FNP, NNP, PNP or NM
- 3. Cumulative Master's GPA of 3.0 or higher
- 4. Experience:
  - a. AGACNP 1-year nursing experience as an APRN-AGACNP
  - b. FNP- 1-year nursing experience as an APRN-FNP
  - c. NNP-1-year nursing experience as an APRN-NNP
  - d. PNP- 1-year nursing experience as an APRN-PNP
  - e. NM-1-year nursing experience as an APRN-NM
- Documentation of successful completion (grade of B or better) of a health-related graduate level statistics course prior to matriculation in the program.
- 6. Acceptable writing sample
- Three letters of recommendation as follows: one from an immediate supervisor, one from a peer nurse, and one from an MSN, DNP, or PhD prepared nurse.
- 8. There is no foreign language requirement.

### **DNP Program Outcomes**

- 1. Synthesize scientific evidence and methods to design, direct, and evaluate strategies to promote effective patient-centered care.
- Incorporate leadership skills and interprofessional team building strategies to improve quality metrics within health care systems, organizations, and diverse practice settings.
- 3. Employ information systems and technology in the delivery of transformative health care.
- Advocate for evidence-based health policy to improve local, national, and/or global patient and health population outcomes.
- Utilize effective interprofessional communication and collaborative skills to facilitate improvement in population health.
- 6. Demonstrate advanced levels of clinical judgment and systems thinking in designing, delivering, and evaluating evidence-based care for clinical prevention and population health.
- 7. Integrate scientific knowledge with faith-in-action, incorporating culturally sensitive and diverse approaches to advanced nursing care.

## **DNP Advanced Practice Nursing Core**

Code	Title	Hours
NUR 5201	Introduction to Statistical Methods	2
NUR 5209	Theoretical Concepts for the Advanced Practice Registered Nurse	2
NUR 5211	Servant Leadership and Advanced Practice Nursing	2

NUR 5280	Health Informatics and Innovations in Technology	2
NUR 5312	The Roles and Business of the Advanced Practice Registered Nurse (APRN)	3
NUR 5314	Scientific Inquiry	3
NUR 5332	Advanced Human Pathophysiology	3
NUR 5349	Global Healthcare and Missions	3
NUR 5351	Advanced Pharmacology	3
NUR 5354	Advanced Health Assessment/Promotion/ Disease Prevention	3
NUR 6110	Data Management for the Advanced Practice Nurse	1
NUR 63C1	DNP Project I	3
NUR 61C2	DNP Project II	1
NUR 62C3	DNP Project III	2
NUR 6272	Applied Ethics for Advanced Practice Nursing	2
NUR 6316	Transforming Health Care Organizations and Changing Outcomes	3
NUR 6373	Clinical Epidemiology	3
NUR 6375	Translational Science	3
NUR 6377	Policy and Implications for Health	3
NUR 6V76	Advanced Practice Nursing Residency	3-6

- Executive Nurse Leadership, DNP-ENL (p. 144)
- Family Nurse Practitioner (FNP Specialty Track), BSN to DNP Degree (p. 145)
- Neonatal Nurse Practitioner (NNP Specialty Track), BSN to DNP Degree (p. 146)
- · Nurse-Midwifery (NM Specialty Track), BSN to DNP Degree (p. 147)
- Pediatric Nurse Practitioner (AC/PC-PNP Specialty Dual Track), BSN to DNP Degree (p. 148)
- Adult Gerontology Acute Care Nurse Practitioner (AGACNP Specialty Track), BSN to DNP Degree (p. 149)
- APRN Post Master's DNP (p. 151)

## **Executive Nurse Leadership, DNP- ENL**

The Baylor University Louise Herrington School of Nursing DNP-ENL online program prepares graduates with advanced executive knowledge and competencies to strategically lead change, transform care models to improve patient-centric outcomes and influence current and emerging healthcare organizations and systems.

The curriculum is 36 credit hours in length.

## Admission Requirements for DNP-ENL Degree

- MSN or BSN with masters in non-nursing health-related field (MHA, MPH, MBA, etc) and certified in Executive Nursing Practice (AONL, ANCC)
- 2. Unencumbered RN license
- 3. Those with a total GPA of 3.0 and above will be considered.

- Two years of healthcare administration (director or above) experience within the last five years.
- 5. Acceptable writing sample
- 6. There is no foreign language requirement.

#### **ENL Curriculum**

Code	Title	Hours
NUR 6175	Scientific Inquiry for Executive Nurse Leaders	1
NUR 6275	Translational Science for Executive Nurse Leaders	2
NUR 6301	Developing Executive Nursing Presence, Authority, and Influence	3
NUR 6302	Resource Attainment and Allocation	3
NUR 6303	Influential Communication & Relationship Building	3
NUR 6304	Optimizing Quality and Safety Outcomes	3
NUR 6305	Business Intelligence and Advanced Decision-making in Complex Healthcare Organizations	3
NUR 6306	Creating Excellence in Professional Practice Environments	3
NUR 6307	Strategic Economic and Financial Concepts	3
NUR 6308	Transforming Systems and Care Delivery Models for Diverse Populations and Emerging Needs	3
NUR 6V09	Doctor in Nursing Practice Executive Nursing Leadership Residency	3-6
NUR 6310	Evidence Informed Health Policy for the Executive Nurse Leader	3
NUR 6203	Doctor of Nursing Practice-Executive Nursing Leadership-Project 1	2
NUR 6102	Doctor of Nursing Practice-Executive Nursing Leadership-Project 2	1
NUR 6103	Doctor of Nursing Practice-Executive Nursing Leadership-Project 3	1

## **Sample Curriculum Plan for ENL**

Course Year 1 Fall Trimester	Title	Hours
NUR 6301	Developing Executive Nursing Presence, Authority, and Influence	3
NUR 6302	Resource Attainment and Allocation	3
	Hours	6
<b>Spring Trimester</b>		
NUR 6175	Scientific Inquiry for Executive Nurse Leaders	1
NUR 6275	Translational Science for Executive Nurse Leaders	2
NUR 6303	Influential Communication & Relationship Building	3
NUR 6203	Doctor of Nursing Practice-Executive Nursing Leadership-Project 1	2
	Hours	8

Summer Trimes	ter	
NUR 6310	Evidence Informed Health Policy for the Executive Nurse Leader	3
NUR 6304	Optimizing Quality and Safety Outcomes	3
	Hours	6
Year 2		
Fall Trimester		
NUR 6305	Business Intelligence and Advanced Decision-making in Complex Healthcare Organizations	3
NUR 6306	Creating Excellence in Professional Practice Environments	3
NUR 6102	Doctor of Nursing Practice-Executive Nursing Leadership-Project 2	1
	Hours	7
Spring Trimeste	er	
NUR 6307	Strategic Economic and Financial Concepts	3
NUR 6308	Transforming Systems and Care Delivery Models for Diverse Populations and Emerging Needs	3
	Hours	6
Summer Trimes	ster	
NUR 6V09	Doctor in Nursing Practice Executive Nursing Leadership Residency	3-6
NUR 6103	Doctor of Nursing Practice-Executive Nursing Leadership-Project 3	1
	Hours	4-7
	Total Hours	37-40

## Family Nurse Practitioner (FNP Specialty Track), BSN to DNP Degree

The Family Nurse Practitioner specialty track is a 75-credit hour graduate nursing curriculum to prepare registered nurses to deliver primary health care to clients of all ages focusing on underserved individuals from a variety of cultures. Emphasis is placed on health promotion, disease prevention, management of acute and chronic illnesses, and advanced skills. This is an online program with 3 required virtual or on-campus immersions. The program uses a variety of clinical experiences.

The program of study conforms to educational guidelines from the Texas Board of Nursing, the Essentials of Doctoral Education for Advanced Nursing Practice (AACN, 2006), the National Organization of Nurse Practitioner Faculties (NONPF), and Criteria for Evaluation of Nurse Practitioner Programs (NTF, 2016). Graduates of the program are eligible to sit for national Family Nurse Practitioner certification examinations offered by the American Nurses Credentialing Center (ANCC) and the American Association of Nurse Practitioners (AANP).

## **APRN DNP/Family Nurse Practitioner Required Specialty Courses**

Code	Title	Hours
NUR 5153	Advanced Practice FNP I & NM I Primary Care Practicum	1
NUR 5250	Advanced Family Practice III/Low Resource Clinical	2

NUR 5251	Family Nurse Practitioner International Clinical	2
NUR 5255	FNP I: Primary Care for FNP APRNS	2
NUR 5274	Women's Health Across the Lifespan	2
NUR 5300	Primary Care Pediatric Management for the Family Nurse Practitioner	3
NUR 5356	Family Health Care Management II	3
NUR 5357	Family Health Care Management III	3
NUR 5359	Advanced Family Practice II	3
NUR 5450	Family Nurse Practitioner Residency	4

### Sample Curriculum Plan for APRN DNP/ Family Nurse Practitioner Specialty Track - Fall Start

Course Year 1	Title	Hours
Fall Trimester		
NUR 5209	Theoretical Concepts for the Advanced Practice Registered Nurse	2
NUR 5201	Introduction to Statistical Methods	2
NUR 5211	Servant Leadership and Advanced Practice Nursing	2
NUR 5351	Advanced Pharmacology	3
	Hours	9
Spring Trimester		
NUR 5349	Global Healthcare and Missions	3
NUR 6316	Transforming Health Care Organizations and Changing Outcomes	3
NUR 5312	The Roles and Business of the Advanced Practice Registered Nurse (APRN)	3
	Hours	9
Summer Trimeste	er	
NUR 5332	Advanced Human Pathophysiology	3
NUR 5314	Scientific Inquiry	3
NUR 6272	Applied Ethics for Advanced Practice Nursing	2
	Hours	8
Year 2		
Fall Trimester		
NUR 5354	Advanced Health Assessment/Promotion/ Disease Prevention	3
NUR 6377	Policy and Implications for Health	3
	Hours	6
Spring Trimester		
NUR 5153	Advanced Practice FNP I & NM I Primary Care Practicum	1
NUR 5255	FNP I: Primary Care for FNP APRNS	2
NUR 6373	Clinical Epidemiology	3
	Hours	6
Summer Trimeste	er	
NUR 5356	Family Health Care Management II	3
NUR 5359	Advanced Family Practice II	3

NUR 6375	Translational Science	3
	Hours	9
Year 3		
Fall Trimester		
NUR 5250	Advanced Family Practice III/Low Resource	2
or NUR 5251	Clinical or Family Nurse Practitioner International Clinical	
NUR 6110	Data Management for the Advanced Practice Nurse	1
NUR 5357	Family Health Care Management III	3
NUR 5300	Primary Care Pediatric Management for the Family Nurse Practitioner	3
	Hours	9
Spring Trimester	•	
NUR 63C1	DNP Project I	3
NUR 5450	Family Nurse Practitioner Residency	4
NUR 5280	Health Informatics and Innovations in Technology	2
	Hours	9
Summer Trimest	rer	
NUR 6V76	Advanced Practice Nursing Residency	3
NUR 5274	Women's Health Across the Lifespan	2
NUR 61C2	DNP Project II	1
	Hours	6
Year 4		
Fall Trimester		
NUR 62C3	DNP Project III	2
NUR 6V76	Advanced Practice Nursing Residency	3
	Hours	5
	Total Hours	76

## Neonatal Nurse Practitioner (NNP Specialty Track), BSN to DNP Degree

The Neonatal Nurse Practitioner specialty track is a 75-credit hour graduate nursing curriculum designed to prepare experienced registered nurses for advanced practice in neonatal nursing. The curriculum emphasizes advanced nursing care of newborns and infants from birth through the first two years of life. The spectrum of health from promotion of wellness to management of acute and chronic illness in a variety of settings is incorporated into the program. This online program with 2 required virtual or on-campus immersions, offers a variety of clinical experiences designed to provide students with hands-on, real-life experience as an Advanced Practice Neonatal Nurse with options for an international DNP project and mission opportunities.

The program of study conforms to educational guidelines from the Texas Board of Nursing, the Essentials of Doctoral Education for Advanced Nursing Practice (AACN, 2006), the National Association of Neonatal Nurses (NANN), and the National Organization of Nurse Practitioner Faculties (NONPF) and Criteria for the Evaluation of Nurse Practitioner Programs (NTF, 2016). Graduates of the program will be eligible to sit for national Neonatal Nurse Practitioner certification examination offered by the National Certification Corporation for the Obstetric, Gynecologic and Neonatal Nursing Specialties (NCC).

## **APRN DNP/Neonatal Nurse Practitioner Required Specialty Courses**

Code	Title	Hours
NUR 5163	Advanced Assessment and Diagnostics of the Newborn/Infant Practicum	1
NUR 5262	Advanced Assessment and Diagnostics of the Newborn/Infant	2
NUR 5266	Advanced Neonatal Nursing Practicum I	2
NUR 5360	Embryology and Developmental Physiology	3
NUR 5361	Advanced Newborn/Infant Pharmacotherapeutics	3
NUR 5363	Advanced Neonatal Nursing Practicum II	3
NUR 5365	Advanced Neonatal Nursing Management I: High-Risk & Critically III Newborns/Infants	3
NUR 5367	Advanced Neonatal Nursing Management II: Acute & Chronic Problems of Newborns/Infants	3
NUR 5369	Advanced Neonatal Nursing Practicum III Residency	3
NUR 6202	The NICU Graduate	2
NUR 6369	Clinical Genetics in Practice	3

### Sample Curriculum Plan for APRN DNP/ Neonatal Nurse Practitioner Specialty Track - Fall

Course	Title	Hours
Year 1		
Fall Trimester		
NUR 5209	Theoretical Concepts for the Advanced Practice Registered Nurse	2
NUR 5201	Introduction to Statistical Methods	2
NUR 5211	Servant Leadership and Advanced Practice Nursing	2
NUR 5361	Advanced Newborn/Infant	3
	Pharmacotherapeutics	
	Hours	9
Spring Trimester		
NUR 5349	Global Healthcare and Missions	3
NUR 6316	Transforming Health Care Organizations and Changing Outcomes	3
NUR 5312	The Roles and Business of the Advanced Practice Registered Nurse (APRN)	3
	Hours	9
Summer Trimest	er	
NUR 5332	Advanced Human Pathophysiology	3
NUR 5314	Scientific Inquiry	3
NUR 6272	Applied Ethics for Advanced Practice Nursing	2
	Hours	8
Year 2		
Fall Trimester		
NUR 5360	Embryology and Developmental Physiology	3
NUR 6202	The NICU Graduate	2

NUR 6377	Policy and Implications for Health	3
	Hours	8
Spring Trimester		
NUR 6373	Clinical Epidemiology	3
NUR 5163	Advanced Assessment and Diagnostics of	1
	the Newborn/Infant Practicum	
NUR 5262	Advanced Assessment and Diagnostics of the Newborn/Infant	2
		-
Summer Trimest	Hours	6
NUR 5266		2
NUR 5365	Advanced Neonatal Nursing Practicum I Advanced Neonatal Nursing Management I:	3
NUN 3303	High-Risk & Critically III Newborns/Infants	3
NUR 6375	Translational Science	3
	Hours	8
Year 3		
Fall Trimester		
NUR 5363	Advanced Neonatal Nursing Practicum II	3
NUR 5367	Advanced Neonatal Nursing Management	3
	II: Acute & Chronic Problems of Newborns/	
	Infants	
NUR 6110	Data Management for the Advanced Practice Nurse	1
	Hours	7
Spring Trimester		
NUR 5369	Advanced Neonatal Nursing Practicum III Residency	3
NUR 63C1	DNP Project I	3
NUR 6369	Clinical Genetics in Practice	3
	Hours	9
Summer Trimest	er	
NUR 6V76	Advanced Practice Nursing Residency	4
NUR 5280	Health Informatics and Innovations in	2
	Technology	_
NUR 61C2	DNP Project II	1
	Hours	7
Year 4		
Fall Trimester	DAID Ducines III	0
NUR 62C3	DNP Project III	2
NUR 6V76	Advanced Practice Nursing Residency	3
	Hours	5
	Total Hours	76

## Nurse-Midwifery (NM Specialty Track), BSN to DNP Degree

The Nurse-Midwifery specialty track is a 75-credit hour curriculum combining academic preparation with clinical experiences for the independent health care management of women and newborns that acknowledges the family's importance. Students are prepared to provide holistic and individualized care to women throughout the lifespan, from menarche into and including menopause, while implementing the midwifery model of care. This is an online program with 6 required virtual or on-campus immersions. Our program is committed to the education of

nurse-midwives in a unique Christian environment. Enrolling diverse and qualified students that embrace diversity, equality, and inclusion and who will focus their service on caring for vulnerable populations is a priority.

Graduates from the nurse-midwifery program are eligible to take the midwifery national certification examination offered by the American Midwifery Certification Board (AMCB). The program of study conforms to educational guidelines from the Texas Board of Nursing, The Essentials of Doctoral Education for Advanced Nursing Practice (AACN, 2006) and the American College of Nurse Midwives (ACNM), Accreditation Commission for Midwifery Education (ACME). The nurse-midwifery program is fully accredited by the ACNM Accreditation Commission for Midwifery Education (ACME)

8403 Colesville Road, Ste. 1550 Silver Spring, MD 20910-6374 Tel: 240-485-1802 www.midwife.org/accreditation (http://www.midwife.org/accreditation/)

## **APRN DNP/Nurse-Midwifery Specialty Required Courses**

Code	Title	Hours
NUR 5140	Professional Issues and the History of Nurse-Midwifery	1
NUR 5158	Nurse Midwifery I: Primary Care for Women Practicum	1
NUR 5254	Nurse-Midwifery I: Primary Care of Women	2
NUR 5242	Nurse-Midwifery II A: Women's Health	2
NUR 5243	Nurse-Midwifery II B: Women's Health and gynecologic care	2
NUR 5248	Nurse-Midwifery IV: High Risk Family and Abnormal Gyn Practicum	2
NUR 5344	Nurse-Midwifery III: Care of the Childbearing Family	3
NUR 5345	Nurse-Midwifery III: Care of the Childbearing Family Practicum	3
NUR 5346	Nurse-Midwifery IV: High Risk Family and Abnormal Gynecologic Conditions	3
NUR 5370	Practice Residency for Midwifery	3
NUR 5V43	Nurse-Midwifery II: Women's Health Practicum	3

### Sample Curriculum Plan for APRN DNP/ Nurse-Midwifery Specialty Track - Fall Start

Course	Title	Hours
Year 1		
Fall Trimester		
NUR 5209	Theoretical Concepts for the Advanced Practice Registered Nurse	2
NUR 5201	Introduction to Statistical Methods	2
NUR 5211	Servant Leadership and Advanced Practice Nursing	2
NUR 5351	Advanced Pharmacology	3
	Hours	9

Spring Trimester		
NUR 5349	Global Healthcare and Missions	3
NUR 6316	Transforming Health Care Organizations and Changing Outcomes	3
NUR 5312	The Roles and Business of the Advanced Practice Registered Nurse (APRN)	3
	Hours	9
Summer Trimeste	er	
NUR 5332	Advanced Human Pathophysiology	3
NUR 5314	Scientific Inquiry	3
NUR 6272	Applied Ethics for Advanced Practice Nursing	2
	Hours	8
Year 2		
Fall Trimester		
NUR 5354	Advanced Health Assessment/Promotion/ Disease Prevention	3
NUR 6377	Policy and Implications for Health	3
	Hours	6
Spring Trimester		
NUR 5158	Nurse Midwifery I: Primary Care for Women Practicum	1
NUR 5254	Nurse-Midwifery I: Primary Care of Women	2
NUR 6373	Clinical Epidemiology	3
	Hours	6
Summer Trimeste	er	
NUR 5242	Nurse-Midwifery II A: Women's Health	2
NUR 5243	Nurse-Midwifery II B: Women's Health and gynecologic care	2
NUR 5V43	Nurse-Midwifery II: Women's Health Practicum	3
NUR 6375	Translational Science	3
	Hours	10
Year 3		
Fall Trimester		
NUR 5344	Nurse-Midwifery III: Care of the Childbearing Family	3
NUR 5345	Nurse-Midwifery III: Care of the Childbearing Family Practicum	3
NUR 6110	Data Management for the Advanced	1
110110110	Practice Nurse	
	Hours	7
Spring Trimester		
NUR 5248	Nurse-Midwifery IV: High Risk Family and Abnormal Gyn Practicum	2
NUR 5346	Nurse-Midwifery IV: High Risk Family and Abnormal Gynecologic Conditions	3
NUR 63C1	DNP Project I	3
	Hours	8
Summer Trimeste	er	
NUR 5280	Health Informatics and Innovations in Technology	2

NUR 61C2	DNP Project II	1
	Hours	6
Year 4		
Fall Trimester		
NUR 5140	Professional Issues and the History of Nurse-Midwifery	1
NUR 62C3	DNP Project III	2
NUR 6V76	Advanced Practice Nursing Residency	3
	Hours	6
	Total Hours	75

# Pediatric Nurse Practitioner (AC/PC-PNP Specialty Dual Track), BSN to DNP Degree

The Pediatric Nurse Practitioner Dual specialty track is a 75-credit hour graduate nursing curriculum which prepares registered nurses to deliver primary health care to clients ages birth to adolescence, focusing on patient-and-family centered care within the context of the family unit. Emphasis is placed on health promotion and disease prevention, in addition to management of acute and chronic illnesses. With an additional 14 credit hours, this dual specialty track also prepares registered nurses to deliver health care to pediatric clients with complex acute, critical, or chronic illness in the acute care setting. This is an online program with 3 required virtual or on-campus immersions for the primary care track, and an additional 2 required virtual or on-campus immersions during the acute care semesters.

The program of study conforms to educational guidelines from the Texas Board of Nursing, the Essentials of Doctoral Education for Advanced Nursing Practice (AANC, 2006), the National Organization of Nurse Practitioner Faculties (NONPF), and Criteria for Evaluation of Nurse Practitioner Programs (NTF, 2016).

## APRN DNP/Pediatric Nurse Practitioner PC/AC Required Courses

Code	Title	Hours
NUR 5305	Advanced Pediatric Health Care Management I: Primary Care	3
NUR 5100	Advanced Pediatric Health Care Management I: Practicum	1
NUR 5202	Genomics in a Pediatric Setting	2
NUR 5307	Advanced Pediatric Health Care Management II: Acute & Common Health Care Needs	3
NUR 5200	Advanced Pediatric Health Care Management II: Practicum	2
NUR 5308	Advanced Pediatric Health Care Management III: Chronic Health Needs	3
NUR 5309	Advanced Pediatric Health Care Management III: Practicum	3
NUR 5400	PNP Primary Care Residency	4
NUR 6309	Pediatric Acute Care Nurse Practitioner I	3
NUR 6407	Pediatric Acute Care Nurse Practicum I	4
NUR 6311	Pediatric Acute Care Nurse Practitioner II	3

76

NUR 6406	Pediatric Acute Care Nurse Practitioner II:	4
	Practicum	

### Sample Curriculum Plan for APRN DNP/ Pediatric Nurse Practitioner (AC & PC) -Fall Start

NUR 5200	Care Needs Advanced Pediatric Health Care Management II: Practicum	2
NUD FOCO		_
	Management II: Acute & Common Health	
NUR 5307	Advanced Pediatric Health Care	3
NUR 6375	Translational Science	3
Summer Trimeste		9
NUN 03/3	Hours	3 9
NUR 5202 NUR 6373	Genomics in a Pediatric Setting Clinical Epidemiology	2
NUID E202	Management I: Practicum	0
NUR 5100	Advanced Pediatric Health Care	1
NUR 5305	Advanced Pediatric Health Care Management I: Primary Care	3
<b>Spring Trimester</b>		
	Hours	6
NUR 6377	Policy and Implications for Health	3
NUR 5354	Advanced Health Assessment/Promotion/ Disease Prevention	3
Year 2 Fall Trimester		
	Hours	8
	Nursing	
NUR 6272	Applied Ethics for Advanced Practice	2
NUR 5332	Scientific Inquiry	3
Summer Trimester NUR 5332	Advanced Human Pathophysiology	3
Cummor Trime	Hours	9
	Practice Registered Nurse (APRN)	
NUR 5312	The Roles and Business of the Advanced	3
מוכט חטוו	and Changing Outcomes	3
NUR 5349 NUR 6316	Global Healthcare and Missions Transforming Health Care Organizations	3
Spring Trimester	Olah al Hashbassa and Mississa	^
	Hours	9
NUR 5351	Advanced Pharmacology	3
INOIL JZ [ ]	Servant Leadership and Advanced Practice Nursing	2
NUR 5201 NUR 5211	Introduction to Statistical Methods	2
AU ID FOCE	Practice Registered Nurse	-
Fall Trimester NUR 5209	Theoretical Concepts for the Advanced	2
Year 1		
	Title	Hours

Year 3		
Fall Trimester		
NUR 5308	Advanced Pediatric Health Care Management III: Chronic Health Needs	3
NUR 5309	Advanced Pediatric Health Care Management III: Practicum	3
NUR 6110	Data Management for the Advanced Practice Nurse	1
	Hours	7
Spring Trimester		
NUR 6202	The NICU Graduate	2
NUR 5400	PNP Primary Care Residency	4
NUR 63C1	DNP Project I	3
	Hours	9
Summer Trimeste	er	
NUR 6V76	Advanced Practice Nursing Residency	3
NUR 5280	Health Informatics and Innovations in Technology	2
NUR 61C2	DNP Project II	1
NUR 61C2	DNP Project II  Hours	1
NUR 61C2 Year 4	<u> </u>	
	<u> </u>	
Year 4	<u> </u>	
Year 4 Fall Trimester	Hours	6
Year 4 Fall Trimester NUR 62C3	Hours  DNP Project III	6
Year 4 Fall Trimester NUR 62C3	Hours  DNP Project III  Advanced Practice Nursing Residency	6 2 3
Year 4 Fall Trimester NUR 62C3 NUR 6V76	Hours  DNP Project III  Advanced Practice Nursing Residency	6 2 3
Year 4 Fall Trimester NUR 62C3 NUR 6V76 Spring Trimester	Hours  DNP Project III  Advanced Practice Nursing Residency	2 3 <b>5</b>
Year 4 Fall Trimester NUR 62C3 NUR 6V76 Spring Trimester AC-only	Hours  DNP Project III  Advanced Practice Nursing Residency  Hours	2 3 5
Year 4 Fall Trimester NUR 62C3 NUR 6V76  Spring Trimester AC-only NUR 6309	Hours  DNP Project III  Advanced Practice Nursing Residency  Hours  Pediatric Acute Care Nurse Practitioner I	6 2 3
Year 4 Fall Trimester NUR 62C3 NUR 6V76  Spring Trimester AC-only NUR 6309	Hours  DNP Project III  Advanced Practice Nursing Residency  Hours  Pediatric Acute Care Nurse Practitioner I  Pediatric Acute Care Nurse Practicum I  Hours	2 3 5 (3) (4)
Year 4 Fall Trimester NUR 62C3 NUR 6V76  Spring Trimester AC-only NUR 6309 NUR 6407	Hours  DNP Project III  Advanced Practice Nursing Residency  Hours  Pediatric Acute Care Nurse Practitioner I  Pediatric Acute Care Nurse Practicum I  Hours	2 3 5 (3) (4)
Year 4 Fall Trimester NUR 62C3 NUR 6V76  Spring Trimester AC-only NUR 6309 NUR 6407  Summer Trimester	Hours  DNP Project III  Advanced Practice Nursing Residency  Hours  Pediatric Acute Care Nurse Practitioner I  Pediatric Acute Care Nurse Practicum I  Hours	2 3 5 (3) (4)

# Adult Gerontology Acute Care Nurse Practitioner (AGACNP Specialty Track), BSN to DNP Degree

Hours
Total Hours

The Adult-Gerontology Acute Care Nurse Practitioner (AGACNP) specialty track is a 75-credit hour graduate nursing curriculum to prepare registered nurses to serve as an advocate for patients with complex acute, critical, and chronic illness, disability, and/or injury to improve patient outcomes in diverse populations. The role encompasses care ranging from disease prevention to acute and critical care management. The AGACNP provides direct healthcare services to improve patient outcomes by utilizing evidence-based practice, clinical reasoning, and interprofessional collaboration. The AGACNP provides specialized care for patients 18 years and older with greater autonomy at the highest level in multiple settings including the ICU, ER, trauma units, specialty clinics, surgery, other hospital services, and long-term care facilities. This is an

online program with 3 required virtual or on-campus immersions. The program utilizes a variety of clinical experiences.

The program of study conforms to educational guidelines from the Texas Board of Nursing, the Essentials of Doctoral Education for Advanced Nursing Practice (AACN, 2021), the National Organization of Nurse Practitioner Faculties (NONPF), and Criteria for Evaluation of Nurse Practitioner Programs (NTF, 2016). Graduates of the program are eligible to sit for national Adult-Gerontology examinations offered by the American Nurses Credentialing Center (ANCC) and the American Association of Critical Care Nurses (AACN).

## **APRN DNP/Adult Gerontology Acute Care Required Specialty Courses**

Code	Title	Hours
NUR 5103	Diagnostic Reasoning	1
NUR 5213	Adult-Gerontology Acute Care NP Management I: Practicum	2
NUR 5214	(NUR 5214::AGACNP II Practicum)	2
NUR 5215	(NUR 5215::AGACNP Residency)	2
NUR 5311	Gerontology Considerations for APRN Practice	3
NUR 5333	Adult Gerontology Acute Care NP Management I: Common Problems	3
NUR 5334	Adult Gerontology Acute Care NP Management II: Chronic Problems	3
NUR 5335	(NUR 5335::AGACNP Management III)	3
NUR 5336	(NUR 5336::AGAC III Practicum)	3

# Sample Curriculum Plan for APRN DNP/Adult Gerontology Acute Care NP(AGACNP) - Spring Start

Course	Title	Hours
Year 1		
Spring Trimester		
NUR 5209	Theoretical Concepts for the Advanced Practice Registered Nurse	2
NUR 5201	Introduction to Statistical Methods	2
NUR 5211	Servant Leadership and Advanced Practice Nursing	2
NUR 5351	Advanced Pharmacology	3
	Hours	9
Summer Trimeste	er	
NUR 5349	Global Healthcare and Missions	3
NUR 6316	Transforming Health Care Organizations and Changing Outcomes	3
NUR 5312	The Roles and Business of the Advanced Practice Registered Nurse (APRN)	3
	Hours	9
Fall Trimester		
NUR 5332	Advanced Human Pathophysiology	3
NUR 5314	Scientific Inquiry	3

NUR 6272	Applied Ethics for Advanced Practice	2
11011 0272	Nursing	
	Hours	8
Year 2		
Spring Trimester		
NUR 5354	Advanced Health Assessment/Promotion/ Disease Prevention	3
NUR 6377	Policy and Implications for Health	3
NUR 5311	Gerontology Considerations for APRN Practice	3
	Hours	9
Summer Trimeste	er	
NUR 5103	Diagnostic Reasoning	1
NUR 5333	Adult Gerontology Acute Care NP Management I: Common Problems	3
NUR 5213	Adult-Gerontology Acute Care NP Management I: Practicum (150 hours)	2
	Hours	6
Fall Trimester		
NUR 6375	Translational Science	3
NUR 5334	Adult Gerontology Acute Care NP	3
	Management II: Chronic Problems	
NUR 5214	NUR 5214::AGACNP II Practicum	2
	Hours	8
Year 3		
<b>Spring Trimester</b>		
NUR 5335	NUR 5335::AGACNP Management III	3
NUR 5336	NUR 5336::AGAC III Practicum	3
NUR 5280	Health Informatics and Innovations in Technology	2
NUR 6110	Data Management for the Advanced Practice Nurse	1
	Hours	9
Summer Trimeste	er	
NUR 5215	NUR 5215::AGACNP Residency	2
NUR 6373	Clinical Epidemiology	3
NUR 63C1	DNP Project I	3
	Hours	8
Fall Trimester		
NUR 6V76	Advanced Practice Nursing Residency (225	3
	hours)	
NUR 61C2	DNP Project II	1
	Hours	4
Year 4		
<b>Spring Trimester</b>		
NUR 62C3	DNP Project III	2
NUR 6V76	Advanced Practice Nursing Residency (225	3
	hours)	
	Hours	5
	Total Hours	75

#### **APRN Post Master's DNP**

## **Sample Curriculum Plan for APRN Post Master's DNP**

(no change in advanced practice role):

Course	Title	Hours
Year 1		
Fall Trimester		
NUR 5209	Theoretical Concepts for the Advanced Practice Registered Nurse	2
NUR 5211	Servant Leadership and Advanced Practice	2
	Nursing	
NUR 6373	Clinical Epidemiology	3
	Hours	7
Spring Trimester		
NUR 6316	Transforming Health Care Organizations and Changing Outcomes	3
NUR 6377	Policy and Implications for Health	3
NUR 5349	Global Healthcare and Missions	3
	Hours	9
Summer Trimest	er	
NUR 6375	Translational Science	3
NUR 6272	Applied Ethics for Advanced Practice	2
	Nursing	
NUR 6110	Data Management for the Advanced Practice Nurse	1
	Hours	6
Year 2		
Fall Trimester		
NUR 63C1	DNP Project I	3
NUR 6V76	Advanced Practice Nursing Residency	1
	Hours	4
Spring Trimester		
NUR 61C2	DNP Project II	1
NUR 6V76	Advanced Practice Nursing Residency	1-6
NUR 5280	Health Informatics and Innovations in	2
	Technology	
	Hours	4-9
Summer Trimest	er	
NUR 6V76	Advanced Practice Nursing Residency	1-6
NUR 62C3	DNP Project III	2
	Hours	3-8
	Total Hours	33-43

## Philosophy

### **Department of Philosophy**

Chairperson: Jackson T. Buras

**Graduate Program Director:** Alexander Pruss

Associate Graduate Program Director: Francis Beckwith

#### **Admission**

The Department of Philosophy offers graduate work leading to the Master of Arts and the Doctor of Philosophy degrees. For admission to its graduate program, the department requires

- 1. a bachelor's degree from an accredited institution;
- 2. at least fifteen hours of course work in philosophy;
- 3. a Graduate Record Examination General Test (GRE) score predictive of success in this program.
- 4. The Philosophy Department normally requires the GRE for all applicants. Exceptions may be made at the Department's discretion on a case-by-case basis. Please apply to the Director of Graduate Studies if you believe an exception in your case would be reasonable;
- 5. a brief writing sample; and
- 6. three letters of recommendation.

The faculty of the department may modify these requirements in exceptional circumstances. We currently do not admit students for terminal M.A. studies, but doctoral students often find it useful to receive the M.A. degree when they have completed enough of the program to qualify for it.

- · Philosophy, M.A. (p. 151)
- · Philosophy, Ph.D. (p. 151)
- · Philosophy Graduate Minor (p. 152)

## Philosophy, M.A. Required Course Work

Code	Title	Hours
Required Course W	<i>l</i> ork	
30 hours in Philosothe 5000-level.	ophy. At least twenty-one semester hours from	30
PHI 5330	Readings in Ancient and Medieval Philosophy	3
or PHI 5331	Readings in Modern and Contemporary Phil	osophy
Total Hours		33

## Philosophy, Ph.D.

Code	Title	Hours
Specific Courses Req	uired	
PHI 5318	Logic for Philosophers	3
PHI 5319	Philosophical Writing	3
PHI 5350	Workshop in Teaching Philosophy	3
PHI 5330	Readings in Ancient and Medieval Philosophy	3
PHI 5331	Readings in Modern and Contemporary Philosophy	3
PHI 6V10	Prospectus Research	1-6
PHI 6V99	Dissertation	9
Area Couras Baguiros	monto	

#### **Area Course Requirements**

A total of 15 semester hours required as follows:

Contemporary Issues in Philosophy

Each graduate student must satisfy a Contemporary Issues area requirement in each of ethics, epistemology and metaphysics. The requirement is satisfied by receiving a grade of B or higher in a 5000-level course of at least three credits which is primarily in the area in question according to the decision of the Graduate Director, and which course is not listed under Specific Courses Required. Moreover, the same course cannot be used to satisfy more than one of the Contemporary Issues requirements, or to satisfy both a Contemporary Issues requirement and a History of Philosophy requirement.

Select nine semester	hours from the following:	9
PHI 5310	Value Theory	
PHI/PSC 5311	Readings from the Philosophers (Course may be taken up to six times with different topics for a total of eighteen credit hours)	
PHI 5313	Topics in Action Theory	
PHI 5315	Topics in Philosophy of Mind	
PHI 5316	Contemporary Philosophical Problems	
PHI 5319	Philosophical Writing	
PHI 5320	Special Topics in Philosophy (may be taken up to four times, with different topics)	
PHI 5321	Topics in Epistemology	
PHI 5322	Topics in Metaphysics	
PHI 5333	Seminar in Political Philosophy	
PHI 5342	Seminar on Religion, Law, and Politics	
PHI 5360	Contemporary Ethical Theory (may be taken up to three times, with different topics)	
PHI 5361	Topics in Contemporary Philosophy of Religion (may be taken up to three times, with different topics)	
PHI 5362	Issues in Contemporary Philosophy of Science (may be taken up to three times, with different topics)	
PHI 5365	Topics in Philosophy of Language (may be taken up to three times, with different topics)	
PHI 5393	Advanced Seminar in Political Philosophy	
History of Philosophy		
Select six semester h	nours from the following:	6
PHI 4314	History of Philosophy: Patristic and Medieval	
PHI 4331	Latin American Philosophy	
PHI 4340	East Asian Philosophy	
PHI 4341	Contemporary Continental Philosophy	
PHI 4342	Contemporary American Philosophy	
PHI 4365	Jewish Philosophy	
PHI/PSC 4379	Islam and Democracy	
PHI 4V99	Special Topics in Philosophy	
PHI 5301	Readings from Plato	
PHI 5302	Readings from Aristotle	
PHI 5306	Readings from Kierkegaard	
PHI/PSC 5311	Readings from the Philosophers (Course may be taken up to six times with different	

topics for a total of eighteen credit hours)

PHI 5312	Topics in Classical Philosophy (Course may be taken up to three times with different topics for a total of nine credit hours)
PHI 5314	Topics in Modern Philosophy (Course may be taken up to three times with different topics for a total of nine credit hours)
PHI/PSC 5343	Classical Political Thought
PHI/PSC 5353	Medieval Political Thought
PHI 5363	Modern Political Thought

#### **Electives**

30 Semester hours required chosen with the approval of the Graduate Program Director to cover a broad range of contemporary philosophical issues and historical areas and to ensure a development of at least one area of specialization (AOS) and an area of competency (AOC). Students who enter the Ph.D. program in philosophy with an M.A. in philosophy or a closely related discipline may have the 30 elective hours reduced to take appropriate account of their previous graduate work. The Graduate Program Director will determine the exact number of hours that will transfer, but the maximum number will be 18 semester hours. No course used to fulfill a requirement in Sections 1 and 2 of these requirements can be used towards the electives requirement.

Total Hours 70-75

## **Philosophy Preparation**

- A written examination in classical texts of ancient philosophy and medieval philosophy.
- A written examination in classical texts of modern and twentieth century philosophy.
- A written dissertation prospectus (not more than 15 pages) and a bibliography.
- 4. An oral dissertation prospectus defense.
- 5. A dissertation and a bibliography.
- 6. An oral examination over the dissertation.

### **Foreign Language**

No foreign language is strictly required for completion of the Ph.D. in philosophy. However, no later than at the time of the prospectus defense, the dissertation committee shall set for each student any relevant requirements beyond the philosophy course work necessary to the pursuit of the student's research, as well as the means by which these are to be satisfied. Normally this will be a foreign language.

### **Teaching Preparation**

- 1. Six to twelve hours of assisting in introductory courses.
- 2. PHI 5350 Workshop in Teaching Philosophy
- 3. Six to twelve hours of teaching as an instructor of record.

## **Philosophy Graduate Minor**

To qualify for a graduate minor in philosophy, students must complete twelve semester hours at the 4000 or 5000-level. These courses are selected in consultation with the Graduate Program Director in their own department as well as the approval of the Graduate Program Director in the philosophy department in order to ensure a broad coverage of contemporary issues and historical time periods.

For further description of the department's graduate program, interested parties may consult the more extensive description of the program at the department's internet site: http://www.baylor.edu/Philosophy/.

### **Doctor of Physical Therapy, DPT**

The Baylor University Doctor of Physical Therapy (DPT) Program prepares physical therapists who are skilled, compassionate, and evidence-based clinicians; passionate in their pursuit of knowledge and professional development; and servant leaders to their community and profession. The program is 24 months in length and includes a blend of online coursework (synchronous and asynchronous) comprising 50% of the curriculum, 8 onsite lab immersion sessions in Waco, Texas comprising 20% of the curriculum, and 31 weeks of clinical education comprising 30% of the program. The core curriculum of foundational science, clinical science, and patient and practice management courses is delivered in a hybrid learning environment, integrates clinical reasoning and critical psychomotor skill development during onsite lab immersion sessions, and culminates in a structured and collaborative clinical education program. The DPT curriculum blends course content and assignments to foster professional formation and emphasize collaboration, critical thinking, and evidence-based practice.

### **Program Accreditation Status**

The Baylor University Doctor of Physical Therapy program is accredited by the

Commission on Accreditation in Physical Therapy (CAPTE) 3030 Potomac Ave., Suite 100 Alexandria, Virginia 22305-3085 telephone: 703-706-3245

email: accreditation@apta.org website: http://www.capteonline.org

### **Admission Requirements**

The Baylor University Doctor of Physical Therapy (DPT) Program is designed for qualified individuals who wish to further their academic studies in the field of physical therapy. The program specifically targets traditional and nontraditional students with the demonstrated potential to navigate the academic rigors of professional physical therapist education in a hybrid learning environment. Students accepted into the DPT Program must meet the following criteria:

- Complete a baccalaureate degree from a regionally accredited institution prior to the program start date. Admission may be granted pending completion of the degree.
- 2. Completion of all prerequisite coursework with a grade of "C-" or above, to include: Biology with laboratory recommended (6 semester hours), Chemistry with laboratory (8 semester hours), Physics with laboratory (8 semester hours), Human Anatomy and Physiology with laboratory (8 semester hours), Statistics (3 semester hours), Psychology (3 semester hours), Abnormal or Developmental Psychology (3 semester hours), and English Composition or Writing (3 semester hours). Applicants must complete Anatomy and Physiology courses within the last 5 years prior to application.
- 3. Minimum cumulative and prerequisite course GPA of 3.00.
- 4. Graduate Record Examination (GRE) completed within the last 5 years of anticipated program start date.
- Two (2) letters of recommendation: One reference must be a licensed physical therapist.

- 6. Completion of a minimum of 100 hours of observation, volunteer, or work experience with a licensed physical therapist in at least two practice settings is recommended. Examples of different practice settings include: outpatient clinics; acute care hospitals; inpatient rehabilitation facilities; skilled nursing, extended care, or subacute facilities; home health; pediatric (community-based, inpatient, or outpatient); wound care; and hospice care.
- 7. Test of English as a Foreign Language (TOEFL), International English Language Testing System (IELTS), or Duolingo exam is required for all applicants for whom English is not their first language or have completed a degree and prerequisite courses in a foreign country.
- 8. Completion of a Physical Therapy Centralized Application Service (PTCAS) application and a Baylor University Graduate School supplemental application.
- 9. Personal interview.
- 10. Fulfill Technical Standards with or without accommodation.
- 11. Background Check prior to matriculation.

A full description of the DPT Program admission requirements and technical standards are provided at www.baylor.edu/dpt (http://www.baylor.edu/dpt/).

### **Graduation Requirements**

For a student to graduate from the Doctor of Physical Therapy program, the student must be in a good academic and professional standing, have had satisfactory progress in all trimesters of the academic program, and satisfactorily complete the following:

- Successfully complete the required credit hours of academic and clinical education course work.
- 2. Maintain a minimum cumulative grade point average of 3.00 or above.
- 3. Achieve a "Pass" or letter grade of "C" (70%) or better in all academic and clinical courses as stipulated within each course syllabus.
- Achieve entry-level competence as a physical therapist, as demonstrated on the Physical Therapist Clinical Internship Evaluation Tool (CIET).
- 5. Exhibit professional behaviors and abilities consistent with clinical practice as described in the Standards of Practice for Physical Therapy, Core Values for the Physical Therapist and Physical Therapist Assistant, Code of Ethics for the Physical Therapist, and the Technical Standards within the DPT Student Handbook.

#### Curriculum

The professional curriculum leading to the Doctor of Physical Therapy degree requires students to complete 97 semester credit hours of coursework in 6 continuous academic trimesters over a 24-month period. Students are enrolled into the DPT program as a cohort and complete required courses in a prescribed, sequential manner. Course sequencing within the curriculum is designed to optimize the student's ability to learn and integrate course material into future didactic and clinical education experiences. The curriculum is dynamic to keep abreast with best evidence in both clinical and educational practice.

Course	Title	Hours
Semester One		
DPT 6100	Professional Physical Therapist Practice I	1
DPT 6212	Functional Movement	2
DPT 6214	DPT 6214::Clinical Medicine I	2

DPT 6300	Human Physiology	3
DPT 6540	Physical Therapy Examination	5
DPT 6610	DPT 6610::Human Anatomy	6
	Hours	19
Semester Two		
DPT 6620	DPT 6620::Musculoskeletal System I	6
DPT 6221	DPT 6221::Clinical Medicine II	2
DPT 6331	Physical Therapy Interventions	3
DPT 6421	DPT 6421::Clinical Research	4
DPT 6450	Applied Neuroscience	4
	Hours	19
Semester Three		
DPT 6332	DPT 6332::Musculoskeletal System II	3
DPT 6334	DPT 6334::Musculoskeletal System III	3
DPT 6431	DPT 6431::Aging Adult	4
DPT 6470	Cardiopulmonary Practice	4
DPT 6531	DPT 6531::Neuromuscular System	5
	Hours	19
Semester Four		
DPT 6220	Bracing, Orthotics, and Prosthetics	2
DPT 6341	DPT 6341::Clinical Medicine III	3
DPT 6350	Management of the Pediatric Patient	3
DPT 6351	DPT 6351::Clinical Integration I	3
DPT 6441	DPT 6441::Clinical Experience I	4
	Hours	15
Semester Five		
DPT 6110	Capstone I	1
DPT 6151	DPT 6151::Pain Science	1
DPT 6310	Health Promotion and Fitness  Management	3
DPT 6360	Advanced Patient Management	3
DPT 6370	Business Management and Entrepreneurship	3
DPT 6442	DPT 6442::Clinical Experience II	4
	Hours	15
Semester Six		
DPT 6120	Capstone II	1
DPT 6270	Professional Competencies II	2
DPT 6710	DPT 6710::Clinical Experience III	7
-	Hours	10
	Total Hours	97

## Physics Department of Physics

**Chairperson:** Lorin S. Matthews **Graduate Program Director:** David J. Hilton

The department offers the Master of Arts, Master of Science, and Doctor of Philosophy degrees in physics. For admission to major graduate study in physics, students must satisfy the following requirements:

1. Thirty-two semester hours of undergraduate physics, including six semester hours of 4000-level courses in physics.

Eighteen semester hours in undergraduate mathematics, including differential equations.

The Graduate Record Examination Subject Test in physics is optional. For admission to minor graduate study in physics, students must have completed a minimum of nineteen semester hours in undergraduate physics and must satisfy the prerequisites for the courses which are to be counted for graduate credit.

- Physics, M.A. and M.S. (p. 154)
- Physics, Ph.D. (p. 154)

## Physics, M.A. and M.S.

Requirements for the Master of Arts (M.A.) degree are thirty-six semester hours, including at least eighteen hours of 5000-level courses (of which twelve must be from Ph.D. core courses) and an oral examination or the Ph.D. qualifying examination. Requirements for the Master of Science (M.S.) degree are thirty semester hours of graduate courses, including 6 hours of thesis and at least twelve semester hours from the Ph.D. core courses. The Physics Department does not have a foreign language requirement for the master's degrees.

Students working toward an M.A. or M.S. degree are required to register for PHY 5180 Graduate Physics Colloquium each semester, until two semester hours have been completed.

The Department of Physics also offers the M.A. and M.S. degrees with a specialty in environmental physics. In addition to the admission requirements listed above, the following regulations also apply:

- The student's Advisory Committee shall include one member of the physical sciences faculty, active in the Department of Environmental Studies.
- A minimum of eighteen hours of graduate-level physics (twelve semester hours of 5000-level physics) is required.
- Six semester hours of graduate-level course work in environmental studies are required.
- 4. Six semester hours of research PHY 5V99 Thesis are required for the thesis with the research problem area being in environmental physics.

Additional information concerning the M.A. and M.S. degrees with a specialty in environmental physics may be obtained from the chairperson of the department.

### Physics, Ph.D.

A minimum of seventy-eight hours is required for the Ph.D. in physics. As part of this requirement, the student must receive course credit for the physics Ph.D. core (PHY 5320 Classical Mechanics I, PHY 5330 Electromagnetic Theory I, PHY 5331 Electromagnetic Theory II, PHY 5340 Statistical Mechanics, PHY 5360 Mathematical Physics I, PHY 5370 Quantum Mechanics I, and PHY 5371 Quantum Mechanics II) along with credit for four semester hours of 5180 (colloquium) which must be completed in residence. The remaining hours will consist of a combination of advanced courses as required by the student's supervisory committee, electives, and twelve hours of dissertation with its associated research. In order to carry out the dissertation research, a student must declare the Ph.D. Candidacy by passing the Ph.D. qualifying examination. The Physics department does not have a foreign language requirement for the Ph.D. degree.

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6

The research required for the Ph.D. degree will be conducted in one of the active research areas within the department. Currently, this includes theoretical and experimental fields of astrophysics and space science, plasma physics, classical and quantum gravitation, cosmology, elementary particle physics, non-linear dynamics, quantum optics, condensed matter, and surface chemical physics.

The experimental labs include the Spectroscopy and Imaging laboratory equipped with optical, chemical, and physical scanning probe microscopes (SPMs), LSAM (Laboratory for Surface Analysis and Modification) with an XSAM 800 Surface analysis system, quantum optics laboratory with advance laser spectroscopies, semiconductor laser optics lab with a Nd: YAG laser and optical parametric oscillator, the HIDPL (Hypervelocity Impacts and Dusty Plasma Lab) equipped with two GEC rf reference cells, a larger, custom complex plasma cell, the PK-4 BU (an analogue to the PK-4 device currently on the International Space Station), a Zyvex S100 nanomanipulator, two Nd: YAG (Coherent VERDI) laser systems, a femtosecond Ti:Sapphire laser system, a light gas accelerator, an Inductively Coupled Plasma generator and a 1.6 second Drop Tower, and BLMEE (Baylor Laboratory for Materials in Extreme Environments equipped with an ultrafast magnetospectroscopy laboratory equipped with an amplified titanium:sapphire laser, a femtosecond optical parametric amplifier, a femtosecond optical parametric oscillator. All of the physics labs are supported by onsite machine and electronics shops. The department is also active in experimental High Energy Physics at the CERN Large Hadron Collider near Geneva, Switzerland, the Fermi National Accelerator Laboratory in Batavia, Illinois, and at the National High Magnetic Field Laboratory in Tallahassee, Florida. Researchers also utilize Baylor's high performance computing cluster, Kodiak, with 64 compute nodes with 36 cores each, five additional nodes equipped with NVIDIA GPUs, as well as the computing resources at the national and international research laboratories.

## **Political Science Department of Political Science**

Chairperson: W. David Clinton

Graduate Program Director: Timothy W. Burns

The Department of Political Science offers graduate work leading to the Master of Arts and Doctor of Philosophy degrees in political science, as well as the following M.A. degrees:

- · Master of Arts in international relations
- · Master of Public Policy and Administration
- Master of Public Policy and Administration and Juris Doctor, offered jointly with the Baylor University School of Law

#### **Admission**

For admission to the department's graduate programs, an applicant must present:

- a bachelor's degree from an accredited college or university either in political science or a field relevant to applicant's program of study
- 2. an overall GPA and a Graduate Record Examination General Test (GRE) score predictive of success in the program
- 3. three letters of recommendation
- a "statement of purpose," identifying areas of primary interest, describing intellectual background and ambitions, and explaining how

- the degree sought facilitates applicant's academic and professional goals (1-2 pages)
- 5. a brief writing sample (e.g., an undergraduate paper of 10-12 pages)
- expressed areas of academic/research interests compatible with those of the faculty
- applicants whose native language is not English and whose undergraduate degree is from an institution outside the United States must also submit results from either the TOEFL, IELTS, or Duolingo exam. (For further details, see the section on Admissions at the front of this catalog.)

Decisions about admissions and financial aid will, in each case, be based on evaluation of these materials as a whole.

- · Political Science, M.A. (p. 155)
- · Political Science, Ph.D. (p. 156)
- · International Relations, M.A. (p. 156)
- · Master of Public Policy and Administration, MPPA (p. 157)
- Joint Juris Doctor/Master of Public Policy and Administration, JD/ MPPA (p. 158)

## Political Science, M.A.

### Requirements

Thirty-six hours of graduate study. A minimum of eighteen of those hours, exclusive of thesis credits, must be in courses at the 5000-level. For information on transferring graduate credit from an accredited university or college, see the section on transfer credit in the General Degree Requirements Section in the front of the catalog. The M.A. in political science is not an independent degree, but is ordinarily awarded only to students enrolled in the Ph.D. program upon completion of the course requirements here described.

Code	Title	Hours
Distribution Requirements		

Students select a primary and secondary field from the following three fields:

Political philosophy/political theory

American politics/constitutional law

International Relations/Comparative politics

Primary field requirement	9
Secondary field requirement	6
Third field requirement	3

#### **Elective Courses**

Students will choose four additional graduate courses from the Political Science department's remaining 4000 and 5000-level courses to make up a program of study of at least 30 hours. With the approval of the Graduate Program Director, students may take up to six elective hours outside of the Political Science department. These hours must be at the 4000-level or higher.

#### Writing and Special Study Options

The Master of Arts degree in political science may be earned in two ways. After consultation with the Graduate Program Director, all students will choose one of the following:

Thesis program: Students who elect to write a thesis are required to complete six semester hours of thesis credit including an oral defense of the project.

Non-thesis program: Students may elect to take six additional hours of graduate level course work rather than write a thesis. Students who do not write a thesis must pass a comprehensive examination.

Total Hours 36

Note: All students must plan to take their examinations during the spring or fall semesters, even if anticipating an August graduation.

## Political Science, Ph.D. Requirements

Requirement	Hours
Requirements	72 sem. hrs.
Students select a major and minor field	
from the following three fields:	
Political philosophy/political theory	
American politics/constitutional law	
International relations/comparative	
politics	
Major field requirement	18 sem. hrs.
Minor field requirement	12 sem. hrs.
Third field requirement	3 sem. hrs.
Methodology/Language Requirements <sup>1</sup>	3-9 sem. hrs.
Electives (may include 9 sem. hrs. in	9-24 sem. hrs.
interdisciplinary concentration)	
Dissertation work	12 sem. hrs.

<sup>&</sup>lt;sup>1</sup> Includes PSC 5323 Research Design and Research Methods

### **Political Science Preparation**

- Either an M.A. thesis or a comprehensive exam in the student's second year is required for the M.A. degree, which will be used in the evaluation of a student's preparation to continue on for the Ph.D.
- 2. Doctoral students who choose international relations/comparative politics as their major field may elect to receive a Master of Arts in international relations rather than in political science by completing the requirements for that degree, but substituting the "writing and special study options" of the M.A. in political science for those of the terminal M.A. in international relations. In addition, those doctoral students who choose to receive an M.A. in international relations may request that the third field requirement of the M.A. degree in political science be postponed until the student's third year of study.
- 3. Comprehensive exams in both major and minor fields of study.
- 4. An approved dissertation prospectus.
- 5. Student must register for 12 credits of PSC 6V99 Dissertation. 3-6 of these hours may be taken in a section of 6V99 designed for the purpose of discussion and criticism of dissertation chapters and journal articles. Dissertation writing group will also serve as a forum for research presentations for job interviews when appropriate. This special section of PSC 6V99 Dissertation is designed to increase students' skills and writing strategies for presenting their work to the scholarly community, facilitate completion of the dissertation, improve the quality of written work, and produce

important publications at the dissertation stage helpful to students' careers

### Methodology/Language Preparation

- 1. PSC 5323 Research Design and Research Methods, (3 hours).
- Competency in either one foreign language (classical or modern)
  or a course in advanced research methods and statistics, such as
  SOC 5312 Social Science Data Analysis (cross-listed as PSC 5312
  Social Science Data Analysis). When appropriate, a second foreign
  language or course in statistics will be recommended.

### **Professional Paper**

 All students must complete a professional paper approved by two professors who have worked with the student in the subfield in which the paper is written.

### **Teaching Preparation**

- 1. 3-4 semesters of work as a teaching apprentice for undergraduate courses
- 3 credits of PSC 5396 Teaching Political Science, must be taken in conjunction with teaching apprenticeships. (These can be included in field requirements).
  - Up to 6 credits of PSC 5396 Teaching Political Science may be taken, but 3 credits of PSC 5396 Teaching Political Science are required.
- 3. Teaching experience in one or more undergraduate courses.

Students who enter the Ph.D. program with an M.A. degree from another institution will find the requirements modified to take appropriate account of their previous graduate work.

## International Relations, M.A. Program of Study

The minimum requirement for the Master of Arts graduate degree is thirty-six hours, which must include at least one-half of those semester hours, exclusive of thesis credits, at the 5000-level. For information on transferring graduate credit from an accredited university or college, see the section on transfer credit in the General Degree Requirements Section in the front of the catalog.

Code	Title	Hours
Core Courses		
Select at least six co	urses from the following:	18
PSC 4303	International Human Rights	
PSC 4316	Grand Strategy	
PSC 4365	International Political Economics	
PSC 4375	International Organization	
PSC 5315	Development of International Relations Thought	
PSC 5323	Research Design and Research Methods	
PSC 5324	Seminar in Comparative Politics	
PSC 5325	Seminar in International Relations	
PSC 4305	International Law	
PSC 4335	Public Discourse and Foreign Policy	
PSC 4346	Intelligence and Covert Action	
PSC 4355	Power, Morality, and International Relations	

PSC 4379	Islam and Democracy	
PSC 4385	Diplomacy in Theory and Practice	
PSC 4395	Terrorism	
PSC 5335	Seminar in National Security Decision Making	
PSC 5344	Comparative Constitutional Law	
PSC 5345	American Foreign Policy	
PSC 5355	Development of Strategic Thought	
Electives		
from the following	ld select four courses (12 semester hours) g "Regions" and "Global Studies" courses, in the Graduate Program Director. <sup>1</sup>	12
<b>Writing and Speci</b>	al Study Options	
	n with the Graduate Program Director, a student f the following options:	6
PSC 5V12	Graduate Internship (involving a written report on at least three months of full-time supervised employment with an agency	

PSC 5V12	Graduate Internship (involving a written report on at least three months of full-time supervised employment with an agency involved in International Affairs)
PSC 5392	Professional Paper in Public Policy and Administration (and one additional 5000- level graduate elective)
PSC 5V99	Thesis (including an oral defense of the project)

Six semester hours of graduate-credit study at a foreign university, as approved by the Graduate Program Director and the Dean of the Graduate School.

Total Hours 36

### Fields of Study Regions

Code Asia	Title	Hours
PSC 4325	Asian International Relations	3
PSC 4344	Government and Politics of Russia	3
PSC 4364	The Governments and Politics of the Asia-Pacific Region	3
PSC 4374	Governments and Politics of East Asia	3
AST 4350	Seminar in Asian Studies	3
PHI 4340	East Asian Philosophy	3
REL 4346	Topics in Asian Religions	3
Europe and the Unite	d States	
PSC 4324	British Government and Politics	3
PSC 4335	Public Discourse and Foreign Policy	3
PSC 4354	Governments and Politics of Western Europe	3
PSC 5310	Seminar in American Politics	3
PSC 5335	Seminar in National Security Decision Making	3
PSC 5345	American Foreign Policy	3
HIS 4336	Europe since World War I	3

HIS 4339	Cultural and Intellectual History of Modern Europe	3
HIS 4343	France since 1815	3
HIS 4390	U.S. Foreign Relations to 1919	3
HIS 4392	U.S. Foreign Relations since 1919	3
PHI 4341	Contemporary Continental Philosophy	3
REL 5335	Modern European Christianity	3
Latin America		
PSC 4304	Governments and Politics of Latin America	3
HIS 5350	Seminar in Latin American History	3
LAS 4350	Latin American Studies Seminar	3
PHI 4331	Latin American Philosophy	3
Middle East and Africa		
PSC 4334	Governments and Politics of the Middle East	3

#### **Global Issues and Institutions**

Code	Title	Hours
PSC 4305	International Law	3
PSC 4316	Grand Strategy	3
PSC 4346	Intelligence and Covert Action	3
PSC 4355	Power, Morality, and International Relations	3
PSC 4375	International Organization	3
PSC 4379	Islam and Democracy	3
PSC 4383	Contemporary Political Thought	3
PSC 4385	Diplomacy in Theory and Practice	3
PSC 4395	Terrorism	3
PSC 5315	Development of International Relations Thought	3
PSC 5320	Seminar in Comparative Public Policy	3
PSC 5344	Comparative Constitutional Law	3
PSC 5355	Development of Strategic Thought	3
PSC 5391	Reading Course in Political Science	3
ANT 4350	Development and Indigenous People	3
CSS 4353	Public Discourse and Foreign Policy	3
ECO 4334	Economic Development	3
ECO 5321	Energy Economics	3
ECO 5330	Problem Areas in International Economics	3
ECO 5338	Seminar in World Economic Systems	3
ECO 5343	History of Economic Thought	3
ENV 4310	World Food Problems	3

# Master of Public Policy and Administration, MPPA

### **Program of Study**

The minimum requirement for the Master of Public Policy and Administration graduate degree is thirty-six hours. A minimum of one-half of the semester hours required for the master's program, exclusive of thesis credits, must be in courses numbered at the 5000-level. For information on transferring graduate credit from an accredited university or college, see the section on transfer credit in the General Degree Requirements Section in the front of the catalog.

PSC 5391 Reading Course in Political Science may be taken twice for credit either in Regions or Global Issues.

There are three components of the MPPA program:

Code	Title	Hours
Core Courses		
Select seven courses	from the following:	21
PSC 4300	Political Behavior	
PSC 4307	Environmental Law	
PSC 4310	Politics and Communication	
PSC 4316	Grand Strategy	
PSC 4322	Seminar in Public Administration	
PSC 4330	Urban Political Processes	
PSC 4335	Public Discourse and Foreign Policy	
PSC 4342	Public Policy and the Courts	
PSC 4346	Intelligence and Covert Action	
PSC 4350	Political Parties	
PSC 4355	Power, Morality, and International Relations	
PSC 4385	Diplomacy in Theory and Practice	
PSC 5310	Seminar in American Politics	
PSC 5321	Seminar in Public Law	
PSC 5323	Research Design and Research Methods	
PSC 5330	American Political Development	
PSC 5340	The American Founding	
PSC 5344	Comparative Constitutional Law	
PSC 5345	American Foreign Policy	
PSC 5350	Seminar in Presidential Rhetoric	
PSC 5391	Reading Course in Political Science (may be taken twice)	
<b>Elective Courses</b>		
Select nine semester	hours from the following (including at least	9

Select nine semester hours from the following (including at least one 5000-level graduate course):

Courses listed above.

**PSC 5V99** 

Other Political Science courses.

Relevant graduate-level courses in cognate fields (e.g., Accounting, Economics, Environmental Studies, History, Management, Quantitative Business Analysis, Sociology).

After consultation with the Graduate Program Director, a student

#### Professional Internship/Research

		-
will choose one o	f the following options:	
PSC 5V12	Graduate Internship (involving a written report on at least three months of full- time supervised employment with a public service agency)	
PSC 5392	Professional Paper in Public Policy and Administration (and one additional 5000-	

Total Hours 36

Thesis (including an oral defense of the

level graduate elective)

project)

## Joint Juris Doctor/Master of Public Policy and Administration, JD/MPPA

Program Directors: Leah W. Jackson, Associate Dean and Professor, Baylor Law School; Timothy W. Burns, Graduate Program Director, Department of Political Science

#### **Admission**

Students are required to fulfill admission requirements for both the Law School and the MPPA program. The Baylor University School of Law web site at http://law.baylor.edu/ contains the most current information about the admissions standards of that school.

### **Program of Study**

Students receive twelve quarter hours of credit on a pass/fail basis toward their JD upon successful completion of the MPPA degree requirements and twelve semester hours of credit on a pass/fail basis toward their elective requirements for the MPPA upon successful completion of JD degree requirements. Thus, JD/MPPA students complete 114 quarter hours of Law and 24 semester hours of Political Science course work. A minimum of one-half of the semester hours required for the master's program, exclusive of thesis credits, must be in courses numbered at the 5000-level. Neither degree may be awarded until all course work is complete. Therefore, all requirements of both schools must be finished before the candidate may receive either degree.

 Upon commencing law studies, the student is required to take the first three quarters consecutively. After the first three quarters, students may set individual schedules for law school and the MPPA courses. In the Law School, JD/MPPA students must complete the following elective courses:

Code	Title	Hours
LAW 9359		3
LAW 9265	Municipal Government	2

JD/MPPA students must also fulfill the following Political Science requirements:

Code	Title	Hours
Core Courses		
Select 15 semester	hours from the following:	15
PSC 4300	Political Behavior	
PSC 4305	International Law	
PSC 4307	Environmental Law	
PSC 4310	Politics and Communication	
PSC 4316	Grand Strategy	
PSC 4322	Seminar in Public Administration	
PSC 4330	Urban Political Processes	
PSC 4335	Public Discourse and Foreign Policy	
PSC 4342	Public Policy and the Courts	
PSC 4346	Intelligence and Covert Action	
PSC 4350	Political Parties	
PSC 4355	Power, Morality, and International Relations	
PSC 4385	Diplomacy in Theory and Practice	
PSC 5310	Seminar in American Politics	
PSC 5321	Seminar in Public Law	

PSC 5323	Research Design and Research Methods	
PSC 5330	American Political Development	
PSC 5340	The American Founding	
PSC 5344	Comparative Constitutional Law	
PSC 5345	American Foreign Policy	
PSC 5350	Seminar in Presidential Rhetoric	
PSC 5391	Reading Course in Political Science (Public Policy and Administration topics, may only be taken once)	

#### **Elective Courses**

Select six semester hours (including at least one 5000-level graduate course) from the following:

Courses listed above.

Other Political Science courses.

Relevant graduate-level courses in cognate fields (e.g., Accounting, Economics, Environmental Studies, History, Management, Quantitative Business Analysis, Sociology).

#### Professional Internship/Research

Select one of the following options:

PSC 5V12	Graduate Internship (A student must complete three semester hours of the Graduate Internship. This involves supervised, full-time employment that combines practical field experience and research. Completion of the course requires a written report of the work done during the internship. Students must work in a public sector agency. Both the Graduate Program Director for the Political Science department and the Associate Dean of the Law School must approve all internships.)
PSC 5392	Professional Paper in Public Policy and Administration

Total Hours 27

## George W. Truett Theological Seminary

Dean: Todd D. Still

**Associate Dean for Academic Affairs:** Angela Reed **Director of Ph.D. in Preaching:** Scott M. Gibson

Preaching, Ph.D. (p. 159)

## Preaching, Ph.D. Program Description

The Ph.D. in Preaching program provides an opportunity for qualified students to engage in graduate work in the discipline of homiletics at the highest level. It provides preparation for research and teaching in undergraduate and graduate theological education and for the development of pastor-scholars. The Baylor program offers a rich study of preaching in relation to exegesis, history, theology, ecclesiology, homiletical structure and practice, and teaching.

### **Admission Requirements**

Applicants will be required to have a Master of Divinity degree (or 72 hours of graduate credit from an accredited program) with a 3.5 or higher cumulative grade point average.

Students must submit the following items as part of the application process:

- Provide a statement of purpose of 7-10 pages (single-space) indicating rationale for pursuing graduate work in preaching.
- Applicants will also be required to submit two sermon manuscripts and recordings of two preaching events.
- 3. Applicants will demonstrate their facility with the biblical languages by submitting exegetical papers for both sermons and by taking a language competency exam during the admissions process. One foreign language must be completed before the end of the first year of the program. Until then, the student will be admitted on probation.
- 4. Applicants will provide a sample of scholarly writing. One example (not exceeding 25 pages double-spaced) of a recent work of scholarly writing that provides evidence of one's capacity to think analytically and critically about homiletics.
- Applicants will provide a resume or Curriculum Vitae. Include a list of publications and professional presentations.
- Applicants must have three to five years of full-time pastoral/ preaching ministry.
- 7. Applicants will submit official transcripts of all degree work: undergraduate, master's degrees, and specifically the master of divinity degree (with a 3.5 or higher cumulative grade point average on a 4.0 scale) from a regionally accredited seminary or university.
- 8. Applicants will provide three letters of recommendation.

### **Degree Requirements**

6

The Ph.D. in Preaching program has both residential and distance students. A Ph.D. in Preaching orientation will take place before the first seminar for each entering class. Total hours required for the Ph.D. in Preaching is 57 hours beyond the master's degree.

Given the hybrid structure of the program, students will enroll in two one-week intensive courses in the fall and two in the spring. Students will take two courses in one summer and one course in the two other summers. All Ph.D. seminars involve pre-seminar and post-seminar work, in addition to the hours in the classroom during the seminar. After three full years of course work, students will take comprehensive exams in the fall of the fourth year and begin work on a prospectus. The remainder of the program will be devoted to the dissertation. Students will satisfactorily complete a dissertation in accordance with guidelines provided by the Ph.D. in Preaching and by the Graduate School.

Students may take up to 9 hours in graduate programs external to Baylor University with the approval of the Director of the Ph.D. in Preaching program.

#### Other Requirements

- Prior to completion of their degree, all students will have a minimum of one article and one book review submitted for publication in a peerreviewed scholarly journal.
- Upon admission, if not already, students will become members of the Evangelical Homiletics Society and must attend the yearly Annual Meeting.

#### **PhD Preaching Courses**

Code	Title	Hours
PHDP 6350	History of Preaching from the First Testament to Wycliffe	3
PHDP 6351	History of Preaching from the Reformation to Post-Modern Preaching	3
PHDP 6354	Homiletical Theory and Methods	3
PHDP 6360	Studies in OT and Proclamation	3
PHDP 6361	Studies in the New Testament and Proclamation	3
PHDP 6362	Studies in Theology and Proclamation	3
PHDP 6363	Hermeneutics for Preaching	3
PHDP 6364	Teaching Preaching	3
PHDP 6365	Research Methodology	3
PHDP 6366	Victorian and Edwardian Preaching: Preaching in the Grand Style	3
PHDP 6367	Studies in Minoritized Preaching Traditions	3
PHDP 6370	Preaching and Culture: Engaging Societal Shifts in North America	3

# Psychology and Neuroscience Department of Psychology and Neuroscience

Chairperson: Charles A. Weaver, III

**Director of the Psy.D. Clinical Psychology Program:** Christine Limbers **Director of the Ph.D. Psychology Program:** Joaquin Lugo

- · Graduate Degrees in Clinical Psychology (p. 160)
  - · Clinical Psychology, M.S.C.P. (p. 160)
  - · Clinical Psychology, Psy.D. (p. 160)
- · Graduate Degrees in Psychology (p. 161)
  - · Psychology, M.A. (p. 161)
  - · Psychology, Ph.D. (p. 161)

## Graduate Degrees in Clinical Psychology

The department offers two graduate degrees in clinical psychology: Doctor of Psychology (Psy.D.) and Master of Science in Clinical Psychology (M.S.C.P.).

Students are not admitted directly to the Master of Science in Clinical Psychology program. However, students admitted to the Psy.D. program will also pursue a Master of Science in Clinical Psychology degree. This program is available only to students who are initially admitted to the Psy.D. degree program. Students admitted to the Ph.D. in psychology are not permitted to pursue a Master of Science in Clinical Psychology degree.

The Psy.D. degree prepares students as practitioner scientists in clinical psychology. The program is fully accredited by the American Psychological Association. Formal course work is integrated with practicum and research experiences to produce highly qualified practitioners in this area of specialization. Admission to this program is made only at the beginning of the second six weeks of the summer session each year, and all application materials including a supplemental

application (autobiography, a record of relevant experience), and three letters of recommendation received on or before December 1 of the year prior to which the applicant wishes to begin.

- · Clinical Psychology, M.S.C.P. (p. 160)
- · Clinical Psychology, Psy.D. (p. 160)

## Clinical Psychology, M.S.C.P. Admission

Applicants must be previously admitted to the Doctor of Psychology Program. The admission requirements are listed in the General Information section of this catalog.

### **Program of Study**

Completion of all required courses through the Fall semester of the third year of study for the Doctor of Psychology degree, including completion of eighteen hours of Clinical and Research Practicum (PSY 5371 Clinical and Research Practicum II) and Research Practicum II) and fifteen courses. Completion of the first written doctoral comprehensive examination is required as well as current good standing in the Doctor of Psychology program. This program does not require a foreign language. The required courses for the Doctor of Psychology in Clinical Psychology program follow.

## Clinical Psychology, Psy.D.

Requirements for this degree are listed in the General Information section of this catalog. Policies and operating procedures for each of the above degrees are detailed in a program manual. The program manual is provided to each student upon enrollment. This program does not require a foreign language.

### **Program of Study (Semester Hours)**

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Code	Title	Hours
Required Courses		
PSY 5371	Clinical and Research Practicum I (three terms) <sup>1</sup>	9
PSY 5325	Ethics and Professional Issues in Clinical Psychology <sup>1</sup>	3
PSY 5316	Clinical Psychopathology <sup>1</sup>	3
PSY 5431	Psychological Assessment I 1	4
PSY 5429	Psychotherapy I: Cognitive-Behavior Therapy <sup>1</sup>	4
PSY 5423	Psychotherapy II: Advanced Cognitive Behavior Therapy <sup>1</sup>	4
PSY 5432	Psychological Assessment II <sup>1</sup>	4
PSY 5372	Clinical and Research Practicum II (three terms) <sup>1</sup>	9
PSY 5333	Psychological Assessment III <sup>1</sup>	3
PSY 5335	Multicultural Issues <sup>1</sup>	3
PSY 5410	Psychopathology and Assessment in Children <sup>1</sup>	4
PSY 5321	Developmental Psychology <sup>1</sup>	3
PSY 5323	Biological Foundations of Behavior <sup>1</sup>	3
PSY 5344	History of Psychology, Racism, and the United States <sup>1</sup>	3

Total Hours	·	115
PSY 6V99	Dissertation (6 hours required)	6
PSY 6V01	Clinical Internship (three terms)	3
PSY 5V24	Individualized Professional Development and Research	3
PSY 5370	Administration and Supervision	3
PSY 5334	Clinical Health Psychology	3
PSY 5426	Clinical Intervention with Children <sup>1</sup>	4
PSY 5428	Group and Systems Approaches to Psychotherapy	4
PSY 5388	Advanced Statistical Methods <sup>1</sup>	3
PSY 5330	Neuropharmacology	3
PSY 5311	Seminar in Memory and Cognition	3
PSY 5317	Psychotherapy III: Seminar in Psychotherapy	3
PSY 5302	Measurement in Psychology	3
PSY 5301	Introduction to Experimental Design <sup>1</sup>	3
PSY 5339	Social Psychology 1	3
PSY 5373	Clinical and Research Practicum III (three terms) $^{2}$	9

<sup>&</sup>lt;sup>1</sup> Required courses for M.S.C.P.

## **Graduate Degrees in Psychology**

The department offers two graduate degrees in psychology:

- · Psychology, M.A. (p. 161)
- · Psychology, Ph.D. (p. 161)

### Psychology, M.A.

Students are not admitted directly to the Master of Arts program. However, students admitted to the Ph.D. program may, with the approval of the faculty, pursue a Master of Arts degree. This option is available only to students who are initially admitted to the Ph.D. degree program. Students admitted to the Psy.D. program are not permitted to pursue a Master of Arts degree in psychology.

## Non-Terminal M.A. in Psychology (students continuing in the doctoral program)

Students are encouraged to earn their M.A. in psychology by:

- · Completing the core courses marked with an asterisk (\*),
- Registration and completion of three additional hours of NSC 5V99 Thesis/PSY 5V99 Thesis, and
- · Proposing, completing, and defending a thesis.

M.A. requirements are usually completed by the second or third year of study.

#### Terminal M.A. in Psychology

In rare circumstances, a student admitted to the doctoral program may leave before completing all of the work required of the Ph.D. In exceptional cases, the student may be given the opportunity to complete a terminal M.A. in psychology. This terminal M.A. requires completion of at least five additional hours, taken from PSY 5V51 Supervised Teaching,

PSY 5V96 Research Methods in Experimental Psychology and/or electives, and may or may not require completing and defending a thesis, depending on the nature of the work and the decision of the psychology faculty and program director.

## Psychology, Ph.D.

The doctoral program in Psychology has three training tracks; Behavioral Neuroscience, Social Psychology, and General Experimental Psychology. All Ph.D. students begin by taking a set of general core classes representing the breadth in the discipline of psychology. Differences in the tracks begin with the specialty core which is comprised of course work specific to Behavioral Neuroscience, Social Psychology, or General Experimental Psychology. Upon acceptance to doctoral candidacy, students in each track have a specific set of doctoral and elective classes from which to choose.

The Ph.D. program in psychology prepares students for university teaching/research, and applied positions in universities, hospitals, industry, or government. The program consists of course work, a qualifying examination, research leading to a doctoral dissertation, and a final oral examination. Students are admitted to the program only in the fall semester.

Students in the Ph.D. program in psychology at Baylor University are expected to acquire sufficient knowledge and expertise to permit them to work as independent scholars at the frontier of Psychology upon graduation. The Doctor of Philosophy degree is ultimately awarded to those individuals who have attained a high level of scholarship in a selected field through independent study, research, and creative thought.

Students entering the program with post-baccalaureate work or a post-baccalaureate degree from an accredited institution may apply a maximum of 12 semester hours of graduate course work toward the Ph.D. degree. These transfer hours must be approved by the major adviser and program director.

The program is designed to concentrate course work during the first three years of study, leading to the qualifying examination. Upon successfully passing the qualifying examination, students are admitted to Ph.D. candidacy, where course demands are minimal. This program does not require a foreign language.

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Code	Title	Hours	
<b>General Core Course</b>	es		
NSC 5311	Seminar in Memory and Cognition <sup>1</sup>	3	
PSY 5323	Biological Foundations of Behavior <sup>1</sup>	3	
PSY 5339	Social Psychology <sup>1</sup>	3	
PSY 5301	Introduction to Experimental Design <sup>1</sup>	3	
PSY 5388	Advanced Statistical Methods <sup>1</sup>	3	
NSC/PSY 5V71	Selected Topics in Neuroscience <sup>1</sup>	3	
NSC/PSY 5V96	Research Methods in Neuroscience <sup>1</sup>	3	
NSC/PSY 5V99	Thesis <sup>1</sup>	3	
NSC/PSY 5100	Psychology and Neuroscience Seminar <sup>1</sup>	4	
NSC/PSY 5V51	Supervised Teaching	6	
NSC/PSY 6V10	Prospectus Research	5	
CHE 5101	Responsible Conduct of Research	1	
NSC/PSY 6V99	Dissertation	12	
Specialty Cores and Doctoral Classes			
Select one of the fol	lowing specialty areas:	26	

<sup>&</sup>lt;sup>2</sup> Only 6 hours required for M.S.C.P.

#### Behavioral Neuroscience

Total Hours		78
Elective Hours		
PSY 5100	Psychology and Neuroscience Seminar	
PSY 5307	Advanced Statistics II <sup>1</sup>	
PSY 5302	Measurement in Psychology <sup>1</sup>	
General Experiential F	Psychology	
Elective Hours		
PSY 5100	Psychology and Neuroscience Seminar	
or PSY 5342	Advanced Topics in Social Psychology	
PSY 5350	Advanced Personality Psychology <sup>1</sup>	
PSY 5307	Advanced Statistics II <sup>1</sup>	
PSY 5302	Measurement in Psychology <sup>1</sup>	
Social Psychology		
Elective Hours		
NSC 5100	Psychology and Neuroscience Seminar	
NSC 5319	Clinical Neuroscience - Advanced <sup>1</sup>	
NSC 5330	Neuropharmacology <sup>1</sup>	

Required courses for M.A. (31 hours plus 3 hours of NSC 5V99 Thesis) for the behavioral neuroscience track
Required courses for M.A. (31 hours plus 3 hours of PSY 5V99 Thesis) for the general and social track

#### **Electives**

Code	Title	Hours
NSC 4312	Behavioral Medicine	3
NSC 4330	Advanced Principles of Neural Science	3
PSY 4339	Psychology of Religion	3
NSC 5V06	Individual Studies in Neuroscience	1-3
PSY 5V06	Individual Studies in Psychology	1-3
NSC 5V71	Selected Topics in Neuroscience	1-9
PSY 5V71	Selected Topics in Psychology	1-3
NSC 5V96	Research Methods in Neuroscience	1-12
PSY 5V96	Research Methods in Experimental Psychology	1-3
NSC 5V99	Thesis (cannot apply to Terminal MA)	3
PSY 5V99	Thesis (cannot apply to Terminal MA)	3
STA 5305	Advanced Experimental Design	3
PSY 5307	Advanced Statistics II	3
PSY 5313	Advanced Measurement in Psychology	3
NSC 5318	Perception	3
PSY 5315	Quantitative Psychology	3
NSC 5320	Learning and Behavior Theory	3
PSY 5321	Developmental Psychology	3
PSY 5342	Advanced Topics in Social Psychology	3
NSC 5360	Neurophysiology	3
PSY 5380	Multidimensional Scaling	3
NSC 5430	Neuroanatomy	4
BIO 5307	Advanced Cell Biology	3
BIO 5409	Cancer Biology	4
GEO 5V90	Special Problems in Geology	1-5

PSY 5386	Exploratory Factor Analysis	3
PSY 5389	Mathematical Models in Psychology	3
PSY 5390	Confirmatory Factor Analysis and Structural Equations Models	3
PSY 5391	Multilevel Modeling	3

With the consent of the Graduate Program Director, elective courses may be taken in other departments, provided the course has graduate standing.

Policies and operating procedures for each of the above degrees are detailed in a program manual provided to each student upon enrollment.

## **Public Health Department of Public Health**

Chairperson: Dr. Eva Doyle

Graduate Program Director: Dr. Eva Doyle

MPH@Baylor (online) Director: Dr. Jasmine Opusunju

The Department of Public Health is home to all accredited public health degree programs (undergraduate and graduate) at Baylor University. Students in these programs are prepared for public health practice and research in a variety of work settings. Our graduates promote health in local and global settings as they work in government-sponsored public health agencies, nonprofit organizations, universities, corporate wellness programs, and population health programs in healthcare settings.

#### **Initial Contacts**

All components of the graduate degree program are the ultimate responsibility of the Graduate Program Director (GPD) and Chairperson of the Department of Public Health. However, each degree option is directed by a different faculty member. Students interested in the oncampus MPH program should contact the GPD for general information and the concentration director for concentration details. Students interested in the online MPH program should contact the MPH@Baylor Director for information specific to the online program. For the Ph.D. program, students should contact the Director of the Ph.D. in Public Health program.

### **Degree Options**

At the graduate level, we offer a Master of Public Health (MPH) degree and a Doctor of Philosophy (Ph.D.) in Public Health degree. The MPH degree program contains *three* concentration (specialization) options (and a joint-degree option) from which students may choose in the *oncampus* program and *one* concentration in the *online* program.

#### **On-Campus Options**

- MPH in Community Health (p. 163)
- Joint degree: Bachelor of Science in Public Health/MPH in Community Health
- MPH in Epidemiology (p. 164)
- MPH in Environmental Health Science (p. 164) (in partnership with the Department of Environmental Science)
- Joint degree: Bachelor of Science in Environmental Health Science/ MPH in Environmental Health Science (p. 165) (in partnership with the Department of Environmental Science)

The Ph.D. in Public Health (p. 166) degree program contains two concentration (specialization) options from which eligible students may

choose: *Epidemiology* or *Social and Behavioral Health Science*. The Ph.D. program is an on-campus (residential) program only.

#### **Online Option**

· Master of Public Health, MPH (Online) (p. 165)

## Master of Public Health, MPH (On-Campus)

### **Degree Scope**

Full-time students in the MPH on-campus degree program usually begin in the fall semester and complete the degree within 18 months. The total number of required credit hours ranges from 42 to 43 credit hours depending on the concentration. The required courses include a set of core MPH courses required of all MPH students regardless of concentration and some concentration-specific courses and requirements. All MPH students progress through a prescribed sequence of courses designed to introduce them to basic public health concepts and gradually build practice-relevant perspectives, skills, and experience.

## Required Practice Experience and Culminating Project

Students in each concentration of the on-campus MPH program must complete a practice experience and an applied culminating project relevant to the professional practice of that concentration. In some concentrations, the student must complete a practice experience (e.g., practicum) midway through the program and a culminating project (capstone project) in the final semester of the program. In other concentrations, the student completes both (practice experience and culminating project) in the final semester. Students should contact the director of their concentration for requirement details and plan well in advance for this essential element of their professional preparation in public health.

### **Admission to MPH On-campus Program**

Prospective students seeking admission into the on-campus MPH program must initiate the application process through a national public health application system called SOPHAS (sophas.org (http://sophas.org)). Visit the SOPHAS website and follow application instructions. Contact the GPD of our department if you have questions.

Applicants must meet the admission requirements of the Baylor Graduate School for full or probationary status. The GRE General Test is required with a combined total score of 300 (quantitative + verbal) serving as a starting point for consideration. (At least a 50th percentile ranking in each exam area is preferred). An analytical writing score of 4.0 or higher is also preferred. An undergraduate GPA of at least 3.0 is also an important consideration. International students must meet Baylor Graduate School standards for applicable language testing and scores.

- Community Health Concentration, MPH (On-Campus) (p. 163)
- BSPH/MPH in Community Health Joint Degree (On-Campus) (p. 163)
- Epidemiology Concentration, MPH (On-Campus) (p. 164)
- Environmental Health Science Concentration, MPH (On-Campus) (p. 164)

 BSPH/MPH in Environmental Health Science Joint Degree (On-Campus) (p. 165)

## **Community Health Concentration,** MPH (On-Campus)

Dr. Beth A. Lanning, Concentration Director

Required:

Code	Title	Hours
Required Public Heal	lth Core	
PUBH 5001	Professional Seminars in Public Health	0
STA 5300	Statistical Methods	3
ENV 5302	Foundations of Environmental Health Science	3
PUBH 5315	Theoretical Foundations of Public Health	3
PUBH 5334	Foundations of Public Health	3
PUBH 5337	Public Health Concepts in Epidemiology	3
PUBH 5378	Administration and Leadership in Public Health	3
Additional Required	Courses	
PUBH 5329	Current Topics in Public Health	3
or PUBH 4340	Global Health	
PUBH 5350	Assessment and Planning in Public and Community Health	3
PUBH 5360	Evaluation in Public and Community Health	3
PUBH 5379	Research Methods in Public Health	3
PUBH 5V94	Public Health Practicum	3
Restricted Elective		
Select one course from	om the following:	3
PUBH 4321	Human Sexuality	
PUBH 4327	Dying and Death Education	
PUBH 4331	Intervention Design in Public and Community Health	
PUBH 4341	Cross-Cultural Health Communication	
PUBH 5370	Physical Activity and Public Health	
PUBH 5348	Applied Data Analysis for Epidemiology and Population Health	
GRT 5351	Nutrition and Aging	
NUTR 5354	Nutrition in Public Health	
SOC 5332	The Sociology of Health: Health Delivery Systems	
<b>Required Culminatin</b>	g Experience	
PUBH 5699	Community Health Capstone	6
Total Hours		42

## **BSPH/MPH in Community Health Joint Degree (On-Campus)**

Dr. Beth A. Lanning and Mrs. Margo Shanks, Co-Directors

The BSPH/MPH joint program is a 5-year program of study. This joint degree program enables qualified students to obtain a Bachelor of Science in Public Health (see undergraduate catalog) and a Master of

Public Health in Community Health in a minimum of five years of full-time study. All requirements for both the BSPH and MPH must be met, and the degrees are awarded concurrently.

#### **Admission**

Undergraduate students in the BSPH program can apply for the BSPH/MPH joint program at the end of their junior year. Applicants must be BSPH majors and have a GPA of 3.2 or higher in the major prior to applying for the program. The applicants must obtain approval of the undergraduate BSPH advisor and program director, the MPH program director, and the GPD. Applicants are required to take the GRE before being admitted into the program and meet all requirements for entry into the Baylor Graduate School as an MPH student. The BSPH degree will be awarded with the MPH upon completion of all degree requirements. Students who decide to withdraw or who do not maintain a 3.2 will be allowed to finish the BSPH but will have admission to the graduate MPH degree program cancelled, and any graduate work completed will appear on the undergraduate transcript and will count on the bachelor's degree. These students will not be allowed to re-enter the joint degree program at a later date.

### Requirements

A maximum of 15 credits of MPH-level course work will count toward both degrees. These 15 credit hours include the following MPH courses, which are already embedded as requirements in the 42-credit hour MPH degree.

Code	Title	Hours
Requirements		
PUBH 5337	Public Health Concepts in Epidemiology	3
PUBH 5350	Assessment and Planning in Public and Community Health	3
PUBH 5360	Evaluation in Public and Community Health	3
PUBH 5V94	Public Health Practicum (permission required)	3
PUBH 5699	Community Health Capstone	6

Though other students in the MPH program have the option of completing a thesis instead of the final 400-hour internship, students in the joint program must complete the 400-hour internship to satisfy contact hour requirements from the national accrediting body for the undergraduate portion of the joint degree. Joint degree students are strongly encouraged to complete as many undergraduate courses as possible prior to beginning MPH courses and to take no more than one undergraduate course per semester while taking MPH courses. Students are encouraged to contact appropriate advisors in each program for further details.

## **Epidemiology Concentration, MPH** (On-Campus)

Dr. Liang Wang, Concentration Director

Required:

Code	Title	Hours
Restricted Public	Health Core	
PUBH 5001	Professional Seminars in Public Health	0
STA 5300	Statistical Methods	3

Total Hours		42
PUBH 5399	Epidemiology Capstone	3
Required Culminating	g Experience	
STA 5303	Applied Regression Analysis	3
PUBH 5V94	Public Health Practicum	3
PUBH 5379	Research Methods in Public Health	3
PUBH 5350	Assessment and Planning in Public and Community Health	3
PUBH 5348	Applied Data Analysis for Epidemiology and Population Health	3
PUBH 5347	Global Health Epidemiology	3
PUBH 5338	Methods in Epidemiology	3
Additional Required	Courses	
PUBH 5378	Administration and Leadership in Public Health	3
PUBH 5337	Public Health Concepts in Epidemiology	3
PUBH 5334	Foundations of Public Health	3
PUBH 5315	Theoretical Foundations of Public Health	3
ENV 5302	Foundations of Environmental Health Science	3

## **Environmental Health Science Concentration, MPH (On-Campus)**

Dr. Ben Ryan, Concentration Director

Required:

Code	Title	Hours
Required Public Heal	th Core	
ENV 5102	Current Advances in Environmental Science	1
STA 5300	Statistical Methods	3
ENV 5302	Foundations of Environmental Health Science	3
PUBH 5315	Theoretical Foundations of Public Health	3
PUBH 5334	Foundations of Public Health	3
PUBH 5337	Public Health Concepts in Epidemiology	3
PUBH 5378	Administration and Leadership in Public Health	3
Additional Required 0	Courses	
ENV 4325	Human Health Risk Assessment	3
ENV 4344	Fundamentals of Toxicology	3
ENV 4345	Water Management	3
PUBH 5350	Assessment and Planning in Public and Community Health	3
NUTR 5354	Nutrition in Public Health	3
Restricted Elective		
Select one course fro	m the following:	3
BIO 5315	Genomics & Infectious Diseases	
BIO 4354	Neglected Tropical Diseases	
ENV 4485	Introduction to Geographic Information Systems	
ENV 5288/5188	Concepts for Advanced Laboratory Methods in Life Sciences	

To	otal Hours		43
E	NV 5V99	Research for Master's Thesis	3
El	NV 5V90	Graduate Environmental Practicum	3
R	estricted Culminatir	ng Experience	
	PUBH 4355	Human Diseases	
	PUBH 4340	Global Health	
	ENV 5303	Environmental Chemical Analysis	
	ENV 5301	Global Health and Environmental Aspects of Disater Risk Reduction	

## **BS/MPH in Environmental Health Science Joint Degree (On-Campus)**

Dr. Bryan Brooks, Director

The BS/MPH in Environmental Health Science joint program is a 5-year program of study. This joint degree program enables qualified students to obtain a Bachelor of Science in Environmental Health Science (see undergraduate catalog) and a Master of Public Health in Environmental Health Science in a minimum of five years of full-time study. All requirements for both the BS and MPH degrees must be met, and the degrees are awarded concurrently.

#### **Admission**

Undergraduate students in the BS in Environmental Health Science program can apply for the MPH joint program at the end of their junior year. Applicants must be BS in Environmental Health Science majors and have a GPA of 3.2 or higher in the major prior to applying for the program. The applicants must obtain approval of the undergraduate program and graduate program directors for the two degrees. Applicants are required to take the GRE before being admitted into the program and meet all requirements for entry into the Baylor Graduate School as an MPH student. The BS degree will be awarded with the MPH degree upon completion of all degree requirements. Students who decide to withdraw or who do not maintain a 3.2 will be allowed to finish the BS degree but will have admission to the graduate MPH degree program cancelled, and any graduate work completed will appear on the undergraduate transcript and will count on the bachelor's degree. These students will not be allowed to re-enter the joint degree program at a later date.

### Requirements

A maximum of 15 credits of MPH-level course work will count toward both degrees. These 15 credit hours include the following MPH courses, which are already embedded as requirements in the 43-credit hour MPH degree.

Code	Title	Hours
Requirements		
PUBH 5337	Public Health Concepts in Epidemiology	3
ENV 4325	Human Health Risk Assessment	3
ENV 4344	Fundamentals of Toxicology	3
ENV 4345	Water Management	3
ENV 5V90	Graduate Environmental Practicum	3

Students are encouraged to contact appropriate advisors in each program for further details.

## Master of Public Health, MPH (Online)

The Department of Public Health offers an online MPH degree through the MPH@Baylor program. Only one concentration is currently offered through this online program, an MPH in Community Health. This 42-credit hour program can be completed between 12-24 months. The program includes two required 1-credit-hour public health immersion courses. The Public Health Immersion I course includes students coming to the campus of Baylor University in Waco, Texas for an immersion weekend consisting of invaluable interaction with peers and professors, training in interprofessional education (IPE) and collaboration skills, engagement in community health assessment activities, and early-stage training needed to begin developing ideas for the culminating graduate project that students must complete toward the end of the degree program. The Public Health Immersion II course trains students on how to develop a quality graduate project proposal in preparation for the culminating experience at the end of the program. The culminating project, which includes the completion of a 250-hour minimum internship experience, may be completed in an approved organization/agency and location. All courses, with the exception of the immersion weekend experience, are offered and completed fully online.

Courses in the online program are offered on a quarter system with course start dates occurring in January, April, July, and September. Students may enroll in 1-4 courses per quarter with 6 credit hours per quarter considered full-time. Students can choose to complete the program on a full-time or part-time basis. Students seeking to complete the program on an accelerated timeline must meet additional criteria and receive acceptance to this track during the admissions process. The time to complete varies based on the chosen track:

Full-time, accelerated: 12 monthsFull-time; standard: 18 months

· Part-time: 24 months

## **Admissions Requirements for Online MPH**

Applicants to the online MPH in Community Health program must have earned a Bachelor's degree from an accredited institution in the United States, or proof of equivalent training at a foreign university. Additionally, applicants must have earned a bachelor's degree with a GPA that demonstrates strong academic success, which is normally 3.0 or higher.

There is no GRE requirement for this program. However, the GRE is recommended for applicants with less than 3 years of work experience **or** who have not previously attained a Master's degree. Additionally, an optional essay will be available in the application for these candidates to state why previous coursework or work experience prepares them for the quantitative aspect of the program. Scores from the following exams can also be accepted: MCAT, LSAT, DAT, GMAT.

The admissions team accepts and reviews applications year-round on a rolling basis. Successful applicants possess backgrounds that demonstrate an ability to apply critical thinking skills to solve problems, collaborate with others and work on multidisciplinary teams, understand the importance of data-driven decision making, and embrace the significance of community engagement and cultural relevance in the health promotion process.

All applicants must submit the online application, a resume/curriculum vitae, official transcripts from accredited institutions, three letters of recommendation, and a personal statement.

### **MPH Online Degree Plan**

## (Full-Time, Standard-18 Months)

Course	Title	Hours
Quarter 1		
PUBH 5315	Theoretical Foundations of Public Health	3
PUBH 5334	Foundations of Public Health	3
	Hours	6
Quarter 2		
PUBH 5337	Public Health Concepts in Epidemiology	3
PUBH 5350	Assessment and Planning in Public and Community Health	3
	Hours	6
Quarter 3		
PUBH 5379	Research Methods in Public Health	3
STA 5300	Statistical Methods	3
PUBH 5121	Public Health Immersion I	1
	Hours	7
Quarter 4		
PUBH 5360	Evaluation in Public and Community Health	3
PUBH 5122	Public Health Immersion II	1
Elective		3
	Hours	7
Quarter 5		
PUBH 5378	Administration and Leadership in Public Health	3
Elective		3
Elective		3
	Hours	9
Quarter 6		
ENV 5302	Foundations of Environmental Health Science	3
PUBH 5V70	Special Topics in Public Health	4
	Hours	7
	Total Hours	42

#### **Electives**

A total of 3 electives are required and must be selected from the following courses:

Code	Title	Hours
PUBH 5329	Current Topics in Public Health	3
PUBH 5358	Global Public Health	3
PUBH 5380	Determinants of Health & Health Equity	3
PUBH 5390	Public Health Policy and Practice	3
PUBH 5V94	Public Health Practicum	3-4

### Public Health, Ph.D.

Director: Dr. Rodney Bowden

### **Program Description**

The Doctor of Philosophy in Public Health degree program is designed to equip students to work in a variety of settings as public health researchers. Students in the program must choose a concentration in *Epidemiology* or *Social and Behavioral Health Science*. Researchers with expertise in *Social and Behavioral Health Science* apply behavioral and social science to understand how contributing factors at multiple social-ecological levels impact health-related behavior, health status, and quality of life. Researchers in *Epidemiology* apply epidemiological methods to identify and monitor critical and/or emerging public health issues and risks in a population so that decision-makers can effectively prioritize and respond to important public health needs. Successful candidates in both concentrations are prepared to apply public health theory, research methods, and critical thinking specific to their specialty areas to address critical public health issues in local and global settings.

Students enter the 3-year program having already completed a master's degree (see *Admission*). The program experience includes on-going one-on-one research training from a faculty mentor, course work that covers research basics and in-depth learning in discipline-specific research, exposure to cross-disciplinary perspectives, hands-on grant-and manuscript-writing experiences, and experiential training in how to teach public health in university settings.

#### **Admission**

Applicants must have completed a Master of Public Health (MPH) or Master of Science in Public Health (MSPH) degree in a concentration that matches or is closely related to the selected concentration for this doctoral program. The degree must be from a school or program accredited by the Council on Education for Public Health. Applications must be submitted into the national SOPHAS application system at sophas.org. Applicants should contact the program director for detailed information regarding the application and admissions process, including the procedures needed to secure commitment from a faculty member willing to mentor and supervise the student as a graduate research assistant.

### **Required Courses**

A minimum of 62 credit hours are required for this degree. Students must select one of the two following concentrations and follow requirements for that concentration. Contact the program director for details about the required sequence of courses, qualifying examination, dissertation, and post-defense manuscript submission.

### **Epidemiology Concentration**

Choose 2 additional graduate courses

Code	Title	Hours
<b>Concentration Course</b>	es	
PUBH 6331	Advanced Epidemiologic Methods	3
PUBH 6332	Advanced Epidemiologic Data Analysis	3
PUBH 6370	Grant Writing and Research Ethics in Public Health	3
Interdisciplinary Area	1	
Select one course fro	m the following:	3
PUBH 5315	Theoretical Foundations of Public Health	
PUBH 5350	Assessment and Planning in Public and Community Health	
PUBH 5360	Evaluation in Public and Community Health	

Must be from 2 separate non-public health disciplines and approved by faculty mentor & committee.

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<b>Applied Research</b>	and Statistical Methods	15
	omplement planned research area. Must be ty mentor & committee.	
Mentored Public H	lealth Research	
PUBH 6300	Mentored Public Health Research (Complete course three times in separate semesters)	9
Teaching Develop	ment in Public Health	
PUBH 6101	Mentored Teaching in Public Health I	1
PUBH 6102	Mentored Teaching in Public Health II	1
EDL 6302	Teaching and Learning in Higher Education	3
<b>Professional Writi</b>	ng in Public Health	
PUBH 6380	Seminar on Professional Writing in Public Health	3
<b>Doctoral Dissertat</b>	ion	
PUBH 6V99	Doctoral Dissertation in Public Health	12

## Social and Behavioral Health Science Concentration

Total

Code	Title	Hours
<b>Concentration Cours</b>	es	
PUBH 6321	Advanced Theory & Practice in Behavioral Health I	3
PUBH 6322	Advanced Theory & Practice in Behavioral Health II	3
PUBH 6370	Grant Writing and Research Ethics in Public Health	3
Interdisciplinary Area	a	
Select one course fro	om the following:	3
PUBH 5347	Global Health Epidemiology	
PUBH 5348	Applied Data Analysis for Epidemiology and Population Health	
Choose 2 additional	graduate courses	6
	parate non-public health disciplines and ty mentor & committee.	
Applied Research an	d Statistical Methods	
STA 5303	Applied Regression Analysis	3
STA 5384	Multivariate Statistical Methods	3
	courses that complement planned research ved by faculty mentor & committee.	9
Mentored Public Hea	lth Research	
PUBH 6300	Mentored Public Health Research (Complete course three times in separate semesters)	9
Teaching Developme	nt in Public Health	
PUBH 6101	Mentored Teaching in Public Health I	1
PUBH 6102	Mentored Teaching in Public Health II	1
EDL 6302	Teaching and Learning in Higher Education	3
<b>Professional Writing</b>	in Public Health	
PUBH 6380	Seminar on Professional Writing in Public Health	3

#### **Doctoral Dissertation**

PUBH 6V99	Doctoral Dissertation in Public Health	12
Total		62

### **Program Completion Requirements**

Students in either concentration are recognized as candidates for a doctoral degree only after they have successfully completed all required courses, passed the doctoral qualifying examination (written and oral components), successfully completed and orally defended their dissertation (written component includes two manuscripts ready for journal submission), submitted two dissertation-generated manuscripts for publication (a post-defense manuscript submission requirement), and completed all other department and university requirements.

## Religion

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### **Department of Religion**

Chairperson: Doug Weaver

Graduate Program Director: James D. Nogalski

The Department of Religion has offered graduate work since 1966. Both the university and the department are friendly to faith and to the church and thus provide a setting distinctive in American higher education. The graduate faculty in religion is committed to forming graduate students in the scholarly tasks of research and teaching. That agenda, along with an increasingly impressive cohort of graduate students, creates a lively context for graduate studies in religion. Visit the program's website: www.baylor.edu/religion/graduate (http://www.baylor.edu/religion/graduate/)

The graduate program in religion is designed to offer a range of educational opportunities for the serious student of religion. Various programs at both the Master of Arts and Doctor of Philosophy levels are structured to meet diverse needs and objectives.

- Religion, M.A. (p. 167)
- Religion, Ph.D. (p. 168)

## Religion, M.A. Admission

For admission to study toward a Master of Arts in religion, students must have completed a minimum of eighteen hours in the classical disciplines in which we offer graduate seminars (Old Testament, New Testament, Historical Studies, and Theological Studies), including nine hours of 3000to 4000-level courses. Certain courses in closely related fields may apply with the approval of the Graduate Administrative Committee in religion. Admission to this program of study shall follow the policy of admission described elsewhere in this graduate catalog. Applicants must present grade-point averages and Graduate Record Examination General Test (GRE) scores that are predictive of success in the program. An applicant's academic record must be high in quality and broad in content. It must be of such quality as to give positive evidence of capacity for graduate study and a genuine scholarly interest. Those seeking admission into the M.A. program will need intermediate competence (at least two semesters or the equivalent) in ancient languages if required by the field to which they are applying.

### **Related Opportunities**

Opportunities are available for M.A. students in other programs at Baylor to include a religion component in their studies.

The department also offers a non-thesis route to the M.A. With the approval of the faculty, Ph.D. students who are not able to complete the dissertation may pursue the non-thesis M.A. Contact the Graduate Program Director in Religion for details.

#### **Curriculum**

For a description of the program for the degree (courses, thesis, examination), see the General Information section of this catalog. The Religion M.A. requires 30 semester hours. If one opts to write a thesis, the M.A. includes 27 semester hours of course work and three semester hours of thesis credit. Students, in consultation with their area faculty, may opt to complete a non-thesis M.A. by taking an additional seminar at the 5000-level in their area of study in their final semester. The non-thesis M.A., then, includes all 30 hours in course work.

Intermediate proficiency in one foreign language is a requirement for the M.A. Methods for achieving the proficiency are described earlier in this catalog under Specific Degree Requirements for the M.A. The foreign language used to satisfy the requirement is determined by the Graduate Program Director in consultation with the student's faculty advisor.

The M.A. program is designed for the student with adequate background in religion who wants to pursue intensive study and research within one of the four major divisions (Old Testament, New Testament, Historical Studies, and Theological Studies). In consultation with the student's faculty advisor and the Graduate Program Director in Religion, a program of study centered in one of the departmental divisions can be designed. In this program, the student may be permitted to take as many as six semester hours outside the Department of Religion, if these courses contribute directly to the student's specialized interest.

### Religion, Ph.D.

The Doctor of Philosophy with a major in religion provides an opportunity for qualified students to do graduate work in this discipline at the highest level and in the university setting. It provides preparation for research and teaching in the college and university setting where religion is taught as one of the liberal arts and in relation to other such disciplines, particularly the humanities, the social sciences, and the natural sciences.

#### **Admission**

Admission to doctoral study requires a masters degree or its equivalent. The degree must be an accredited degree in religion. By "equivalent" is meant approximately thirty semester hours of accredited graduate work in religion at the degree level of M.A., B.D., or M.Div. International students must also demonstrate that they meet the minimum University requirements for English proficiency to be admitted into the graduate program.

Before enrollment for doctoral study, each student's total record will be reviewed by the graduate faculty of the Department of Religion through its graduate admissions committee. Approval will be based on each student's record including:

- 1. B.A. work (both quality and content).
- M.A. or equivalent (both quality and content). The applicant must submit a GPA predictive of success in the program.

- Scores for the Graduate Record Examination General Test (GRE) will be accepted but not required.
- 4. Academic letters of reference.
- 5. Writing samples.
- 6. An autobiographical essay.
- 7. An interview.

Admission to doctoral study presupposes a broad foundation in biblical, historical, and theological disciplines. Upon application for admission to doctoral study, students must specify a major area of concentration: Old Testament Studies, New Testament Studies, Historical Studies, or Theological Studies. In the review of their record, special attention will be given to their foundation in that area. Applicants in Old Testament or New Testament studies must have completed a minimum of twelve (12) semester hours of one biblical language (Greek or Hebrew) and (6) semester hours in the other, with a grade of B or above in the last semester of each language.

The deadline for the completion of applications for doctoral admission and for financial assistance is December 15. Those admitted typically begin language courses in the summer and doctoral course work in the fall semester.

#### **Course Requirements**

For the Ph.D. in religion, forty-five hours are required, which includes nine hours of dissertation credits and thirty-six hours of course work. The course work includes a minimum of twenty-four semester hours in a field of concentration (Old Testament, New Testament, Historical Studies, Theological Studies); nine hours of electives, and a three-hour seminar on theories of religion.

Concentration: The Ph.D. program requires thirty-three semester hours (minimum) in one of the four fields declared as the concentration field. All courses in the field of concentration must be at the 5000 level.

Elective Courses: A minimum of nine semester hours of graduate courses appearing in the graduate catalog.

Theories of Religion: A seminar for all first-year students concerning theories of the academic study of religion.

### **Coursework (36 Hours)**

Requirement	Hours
Religion Concentration: Eight, three-hour, 5000-level seminars	24
Electives: Outside or inside the Religion Department, but not in the Concentration	9
Required Course: Theories of Religion Seminar	3
Total Hours	36

### **Foreign Languages**

The requirement of foreign languages as research tools is related to the student's concentration and to research needs. The basic requirement is intermediate proficiency in two foreign languages. Methods for achieving the proficiency are described earlier in this catalog under Specific Degree Requirements for the Ph.D. The following statements indicate the policy for each area:

**Old Testament Studies, New Testament Studies:** The requirement is German and French. The area faculty may approve the substitution of another language for French if the student's research needs justify the substitution.

**Historical Studies:** Students will achieve intermediate proficiency in two languages, other than English, necessary for their chosen field of research. The two languages will be negotiated with Historical Studies Faculty and conveyed to the Office of Graduate Studies.

**Theological Studies:** The requirement is German and French. The area faculty may approve the substitution of another language for French if the student's research needs justify the substitution.

Additional language study may be required in relation to research needs.

One language must be completed before the beginning of course work, and the faculty recommends that all language work be completed in summer sessions. All foreign language requirements must be completed before students begin the last twenty-four semester hours of course work.

### **Preliminary Examinations**

The preliminary examinations will come at the completion of course work (see the General Information section of this catalog). The examinations are described in a program guide that is provided to each student by the Department of Religion.

Admission to candidacy for the Ph.D. with a major in religion will follow the policy related to passing the foreign language examinations, the preliminary examinations, submission of an approved prospectus and certification by the Dean of the Graduate School.

### **Dissertation**

The final stage in the doctoral work is the satisfactory completion of a dissertation. Nine semester hours of dissertation credit are required along with a final oral examination on the dissertation.

## Robbins College of Health and Human Sciences

- · Doctor of Occupational Therapy, OTD (p. 169)
- Post-Professional Doctor of Occupational Therapy, PP-OTD (p. 173)

## **Doctor of Occupational Therapy, OTD**

Department Chair: Marian Gillard, Ph.D., OTR, FAOTA

Academic Fieldwork Coordinator: Kirsten Davin, OTD, OTR, ATP, SMS

Director of Doctoral Capstone: Barbara Doucet, Ph.D., OTR

#### Mission

To prepare practice scholars, educational innovators, and professional leaders to utilize clinically meaningful research in the implementation of best practice to meet the changing demands of the Occupational Therapy profession. The Department of Occupational Therapy offers two distinct program tracks, entry-level and post-professional.

## **General Information For the Entry-Level OTD Program**

#### **Program Description**

The Entry-Level Occupational Therapy Doctorate (EL OTD) program provides an accelerated, learner-centered, occupation-based, hybrid educational program that emphasizes academic excellence, life-long-scholarship, and servant leadership. This 2-year, hybrid-education program prepares doctoral-level, reflective Occupational Therapy practitioners with the requisite clinical reasoning skills and professional values to be responsive to the occupational needs of persons, organizations and populations within the communities they serve. Graduates are eligible to sit for the National Certification Examination administered by the National Board for Certification in Occupational Therapy (NBCOT). Graduates are employed as Occupational Therapists in such settings as hospitals, school systems, long-term care facilities, mental health facilities, rehabilitation hospitals, out-patient settings and the community.

The EL OTD program has applied for accreditation by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 6116 Executive Blvd., Suite 200, North Bethesda, MD 20852-4929. ACOTE's telephone number c/o AOTA is (301) 652-AOTA and its Web address is www.acoteonline.org (https://acoteonline.org/).

For the graduate to sit for the NBCOT Certification Exam, the following must occur:

- · The program must hold ACOTE Candidacy Status,
- · have an ACOTE pre-accreditation review,
- · complete an ACOTE on-site evaluation,
- · be granted ACOTE accreditation status and,
- students must complete all academic and fieldwork requirements of the OTD Program.

After successful completion of the exam, the individual will be an Occupational Therapist, Registered (OTR). Information about NBCOT and the certification examination can be found at www.nbcot.org (http://www.nbcot.org). In addition, all states require licensure to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination.

Note: A felony conviction may affect a graduate's ability to sit for the NBCOT Certification Examination or attain state licensure. An individual, who has a felony background and is considering entering an occupational therapy program, can have his or her background reviewed prior to applying for the exam by requesting an Early Determination Review: (https://www.nbcot.org/en/Students/Services#EarlyDetermination (https://www.nbcot.org/en/Students/Services/#EarlyDetermination)).

#### **Robbins College of Health and Human Sciences**

The Department of Occupational Therapy is housed within the Robbins College of Health and Human Sciences (RCHHS). The following policies and guidelines apply to the OTD program.

#### **Entry-Level OTD Program Admission Requirements**

The following requirements apply to the EL OTD program and must be met by every applicant to be considered for admission.

#### **Program Admission Requirements**

Admission to the OTD program closely follows the admission criteria for all health science programs in the Robbins College of Health and Human Sciences with differences reflecting the need for prerequisite courses unique to, and in support of the OTD curriculum. Students applying to the EL OTD program should have the requisite skills and demonstrated potential to navigate the academic rigors of an accelerated and hybrid model of OTD education.

#### **Prerequisites for Admission**

The following prerequisites (or their approved transfer equivalents) are required for admission:

Completion of all prerequisite coursework with a GPA of 3.00 or greater on a 4.00 scale:

- · Human Movement, Biomechanics, or Physics (3 semester hours)
- · Abnormal Psychology (3 semester hours)
- · Human Development (lifespan) (3 semester hours)
- · Social Sciences (200-level) (6 semester hours)
- · Statistics (3 semester hours)
- · Medical Terminology (1 semester hour)
- Human Anatomy and Physiology I with laboratory (4 semester hours)
- · Human Anatomy and Physiology II with laboratory (4 semester hours)
  - Applicants must complete Anatomy and Physiology courses
    within the last 5 years prior to application or demonstrate
    ongoing work experiences that have kept this knowledge current
    (e.g. occupational therapy assistant, athletic trainer, etc.).
     For other courses, letter-graded prerequisite coursework is
    acceptable, no matter when the course work was completed.

#### Application

Completion of an Occupational Therapy Centralized Application Service (OTCAS) application and a Baylor University Graduate School supplemental application.

- The Occupational Therapy Program uses the Occupational Therapy Centralized Application Service (OTCAS) for those wishing to apply to the program. All students use the Occupational Therapy Centralized Application Service (OTCAS) to apply to the occupational therapy program. Visit the website at: https://otcas.liaisoncas.com/applicantux/#/login.
- It is strongly encouraged that all applicants thoroughly review the instructions for submitting an application through OTCAS as available for download through the OTCAS website before attempting to apply to the Baylor University Doctor of Occupational Therapy Program.
- · Supporting Materials submitted through OTCAS:
  - Official Transcripts: Applicants must arrange for OTCAS to receive an official transcript from each college and university from which a degree was earned (bachelor's or higher) in the United States and/or Canada.
  - Graduate Record Examination (GRE): Applicants must arrange for the Educational Testing Service (ETS) to send official GRE scores through OTCAS using the code designated specifically for the occupational therapy program. The OTCAS Program Code for the Baylor University Doctor of Occupational Therapy Program is 4686.
  - References: Applicants must arrange for references to be submitted electronically through OTCAS. Each evaluator providing a reference will be contacted using an email address provided in

OTCAS by the applicant. It is preferred that one recommendation be from a licensed occupational therapy practitioner.

- · Current CV/Resume
- Writing Sample: Applicant must provide a carefully written 5paragraph essay describing one treatment activity observed during an occupational therapy observation. Describe the purpose of the activity and the client's response. Sample is scored for writing mechanics and content.
- · OTD Essay
- Test of English as a Foreign Language (TOEFL), International English Language Testing System (IELTS), or Duolingo: If English is not an applicant's first (primary) language, official TOEFL, IELTS, or Duolingo scores must be submitted to OTD@baylor.edu.
- For assistance with applications students may contact: Admissions Program Manager at OTD@baylor.edu.

#### **Application Review**

The OTD Admissions Committee and faculty will review all completed applications (i.e., application and all supporting materials received) in the order of receipt. Applicants are evaluated based on the following items:

- Cumulative GPA
- · Pre-requisite GPA
- · GRE verbal percentile rank
- · GRE quantitative percentile rank
- · Observation hours
- · References
- · Personal Essay

Other factors considered, but not required:

- · Relevant work experience
- · Prior military experience

The OTD admissions committee uses this evaluative process to ensure nondiscrimination and equal opportunity for all applicants. The OTD admissions committee will grant admission interviews by invitation only. The OTD program does not offer credit for previous work experience, coursework or experiential learning, nor is advanced placement credit available for this program.

#### **Interview Process**

The OTD Program Director or designee will contact selected applicants and provide further instructions for completing the interview process. Interviews are conducted using a video-based platform called Kira Talent®. Students record and upload their responses to a series of standardized interview questions for review by program faculty and the Admissions Committee. Students must have a computer with a webcam and internet service to complete this interview.

#### **Selection Process**

The OTD admissions committee and faculty will accept students into the program based on a holistic evaluation of the submitted application, supporting documents, and interview. All applicants will be notified by email and/or mail regarding final selection decisions.

#### **Application Deadlines**

The program has two applications windows. Please refer to the Baylor OTD Program website for the current information: https://www.baylor.edu/otd/index.php?id=966869 (https://www.baylor.edu/otd/?id=966869).

For questions related to admission to the program, please contact OTD Admissions at OTD@baylor.edu.

#### **General Admission Requirements**

- Bachelor's degree from a regionally accredited institution prior to OTD classes beginning. Provisional admission may be granted pending completion of the undergraduate degree. Students are required to successfully complete and document a minimum of four (4) FTE academic years of preprofessional preparation.
- · Minimum cumulative and prerequisite course GPA of 3.00.
- Graduate Record Examination (GRE) completed within the last 5 years.
- Three (3) letters of recommendation: it is preferred that one of your recommendations be from a licensed occupational therapy practitioner.
- Recommended thirty (30) hours of volunteer or work experience with an occupational therapy practitioner.
- · Personal interview.
- · Ability to fulfill Technical Standards with or without accommodation.
- · Background Check prior to matriculation.
- Test of English as a Foreign Language (TOEFL), International English
  Testing Service (IELTS), or Duolingo exam is required for all applicants
  for whom English is not the first language or those who have
  completed a degree and prerequisite courses in a foreign country.
  - · Acceptable TOEFL scores: Internet based score = 80
  - Acceptable IELTS scores: are an overall band score of 6.5
  - · Acceptable Duolingo scores: are an overall score of 125
  - · Official TOEFL scores must be submitted to OTD@baylor.edu.

Note: Meeting minimal entrance requirements does not necessarily guarantee admission.

## Additional Requirements Once Accepted into the Program

Once accepted into the Occupational Therapy Program, and prior to beginning classes, students must submit the following documentation to the Department of Occupational Therapy:

- Attend the mandatory OTD Program Orientation.
- · Purchase student liability insurance annually.
- · Provide documentation of health insurance
- Purchase all required OTD textbooks, manuals and laboratory supplies.
- Assume all responsibility for transportation to and from all facilities used for educational experiences, including clinical agencies assigned.
- · Complete HIPAA Training
- · Adhere to the OTD Program Dress Code
  - No ear gauges, piercing other than a single post in the ear lobes.
  - · No visible tattoos are permitted while in labs, or in uniform.
  - If a clinical site has a dress code more restrictive than that of the OTD Program, students will adhere to the more restrictive code.
- · Submit application for.
  - · Child Abuse History Clearance.
  - FBI Clearance/ federal criminal background study.
  - Texas Criminal Record Check, regardless of state of residence.
    - Note: Students will be notified on how to submit the appropriate forms.

Note: Documented history of Child Abuse, a Criminal Record, and/or FBI Record may exclude the student from participating in the program.

Students accepted to the program may need to complete clinical placements in geographic areas requiring travel and/or housing costs. Student handbooks are provided to all accepted applicants for specific policies and procedures related to academics and fieldwork.

#### **Blended Education Format**

In designing the OTD curriculum, the faculty embraces a student-centered approach to develop cohorts of learners with a focus toward critical thinking, values and social responsibility, learning goals, and experiential learning. The curriculum provides the best education in a condensed time frame through a blend of online and on-campus education. Students learn through pre-recorded didactic instruction, daily engagement with faculty, hands-on lab immersions, fieldwork experiences, and the doctoral capstone project. Classes are not bound by geography, thus, allowing students and faculty to live all over the country to coordinate optimal learning experiences.

The OTD curriculum is delivered in a blended learning format that optimizes technology and web-based teaching strategies. Distance-based education courses and the online component of blended courses are scheduled in instructional blocks that are typically seven (7) weeks in duration. Students in the Baylor University EL OTD program can anticipate devoting between 50-60 hours per week, on average, to academic study. Intensive lab immersive sessions are scheduled during each minimester within the academic term. Online active learning accounts for 43% of the total academic program; immersive laboratory with modeled clinical experiences account for 15%, and 42% of the program is based in fieldwork and doctoral capstone experiences. The program's didactic courses are completed using a combination of asynchronous and synchronous didactic instruction and activities to provide a quality, rigorous, and flexible learning experience for a diverse student body of traditional and nontraditional students.

Onsite laboratory immersion sessions conducted in Waco, Texas, emphasize intentional practice, self-reflection and peer-feedback of performance, with high- stakes practical examinations in a physically and mentally demanding environment that simulates full-time clinical practice. These sessions range from five (5) to ten (10) days depending on the number of blended courses in the minimester. These lab sessions focus on the development of professional behavior, problem solving, clinical reasoning, and psychomotor skills that are required for effective occupational therapy practice in traditional and emerging practice settings.

The overall curriculum is comprised of courses that prepare the graduate to practice as an occupational therapy generalist in current and emerging practice settings, with individuals of all age groups, and in areas of physical and mental health. This requires completion of Level I and Level II Fieldwork experiences. Level I Fieldwork occurs in year one of the program, over three (3) terms. Level II Fieldwork occurs in in year two of the program over two (2) terms. In accordance with the program's Scholarship Agenda, student learning outcomes also support the program's expectations that the OTD student performs beyond generalist-level preparation with application of in-depth knowledge in practice skills, research skills, administration, leadership, program and policy development, advocacy, education, or theory through a combination of a capstone experience and a capstone project. The Doctoral Capstone Experience and the Doctoral Capstone Project occur in year two of the program.

#### **Entry-Level OTD Academic Calendar**

Academic calendars are published for each program cohort based on the year of graduation. Key dates and activities contained in these academic calendars are subject to change. Please see the following link for additional information: https://www.baylor.edu/otd/index.php? id=966142 (https://www.baylor.edu/otd/?id=966142)

#### **Graduation Requirements**

For a student to graduate from the Entry level OTD program, the student must be in good academic standing, have had satisfactory progress in all semesters of the academic program, and satisfactorily complete the following:

- 1. Successfully complete the required 108 semester credit hours.
- Achieve a cumulative GPA of 3.0 or better across all academic courses.
- Exhibit professional behaviors as described in the Professional Behaviors, AOTA Core Values, and the Code of Ethics for the Occupational Therapist.
- Successfully complete a total of 24 weeks of supervised Level II Fieldwork and a 14-week Doctoral Capstone Experience.
- Complete all Level II Fieldwork and the Doctoral Capstone within 12 months of completing the didactic portion of the program.
- Complete all required Baylor University and OTD Program documents in preparation for graduation.
- Honor all professional and financial obligations to Baylor University, as published in the Baylor University and OTD Program Handbooks, and as specified in any written communications from the University's administrators.

### **Entry-Level OTD Curriculum**

The professional curriculum leading to the Doctor of Occupational Therapy degree requires students to complete 108 semester credit hours of coursework in 6 continuous academic semesters over a 24-month period. Students are enrolled into the EL OTD program as a cohort and complete required courses in a prescribed, sequential manner. Course sequencing within the curriculum is designed to optimize the student's ability to learn and integrate course material into future didactic and clinical education experiences, culminating in the doctoral capstone. The curriculum is dynamic to keep abreast with best evidence in both clinical and educational practice.

The OTD faculty believe that student-centered teaching promotes discovery and clinical reasoning based on scholarly inquiry and instills a sense of awareness of self and others resulting in scientifically based client-centered service delivery characterized by ethical treatment decisions. This approach challenges students to expand their understandings of the relevance of occupational therapy to include considerations about the dynamic interaction of occupational performance, social participation and Christian values. The OTD curriculum design is comprised of the OTD Practice Sequence developed to prepare students for Fieldwork II and the OTD Scholarship Sequence developed for doctoral-level preparation for research and for application of in-depth knowledge required for the Doctoral Capstone. Stemming from the program's five curricular threads the faculty have established the following curricular learning outcomes.

At the time of graduation from the program, the student will be able to:

 Utilize clinical reasoning in the occupational therapy process based on critical analysis, reflection and a dedication to excellence;

- Articulate the positive relationship between occupation and health and appreciate the occupational nature of humans as a core philosophical assumption of the profession;
- Provide client-centered care based on the principles, beliefs, and values of occupational therapy and a steadfast commitment to Christian values and identity;
- Demonstrate servant-leadership roles leading to an in-depth understanding of a specialized competency in the profession that contributes to solving problems facing people and communities worldwide;
- 5. Demonstrate a commitment to scholarly practice and research through lifelong learning and critical inquiry.

### **Entry-Level OTD Degree Plan**

#### Required:

Course	Title	Hours
Semester 1.1		
OTD 6311	Foundations of Occupational Therapy	3
OTD 6212	Scholarly Practice I	2
OTD 6215	Neuroscience in Occupational Therapy	2
OTD 6217	Analysis of Human Occupation Across the	2
	Lifespan	
	Hours	9
Semester 1.2		
OTD 6420	Mental Health Populations and Practice in Occupational Therapy	4
OTD 6225	Fieldwork Seminar IA: Mental Health	2
OTD 6122	Conditions Impacting Occupational Performance	1
OTD 6227	Occupational Therapy Process Across the Lifespan	2
OTD 6124	Professional Competencies I	1
	Hours	10
Semester 2.1		
OTD 6430	Adult & Older Adult POP & PRAC in OT	4
OTD 6238	Fieldwork Seminar IB: Adult and Older Adult	2
OTD 6333	Human Movement	3
OTD 6237	Communication and Engagement in the Therapeutic Process	2
	Hours	11
Semester 2.2		
OTD 6242	Occupational Therapy Service Delivery and Organization	2
OTD 6244	Professional Development	2
OTD 6246	Scholarly Practice II	2
OTD 6248	Occupational Performance and Theories of Practice	2
	Hours	8
Semester 3.1		
OTD 6450	Children & Youth Populations & Practice in OT	4
OTD 6256	Fieldwork Seminar IC: Children and Youth	2
OTD 6255	Management of Occupational Therapy Services	2

	Total Hours	108
	Hours	3
OTD 6309	Doctoral Capstone Project	3
Semester 6.2		
	Hours	15
OTD 6V09	Doctoral Capstone Experience	15
Semester 6.1		
	Hours	5
OTD 6285	Scholarly Practice III	2
OTD 6383	Doctoral Mentorship II	3
Semester 5.2		
	Hours	12
OTD 6V80	Level II Fieldwork II	12
Semester 5.1		
	Hours	5
OTD 6572	Doctoral Mentorship I	5
Semester 4.2		12
0.0000	Hours	12
OTD 6V75	Level II Fieldwork I	12
Semester 4.1	110413	·
וטוטעוט	Hours	8
OTD 6263	Leadership and Advocacy	1
OTD 6262	Professional Competencies II  Program Development	2
OTD 6360 OTD 6262		3
Semester 3.2	Wellness and Health Promotion	2
	Hours	10
-	Healthcare and Academic Settings	
OTD 6257	Educational Strategies and Learning in	2

## Post-Professional Doctor of Occupational Therapy, PP-OTD

Department Chair: Marian Gillard, Ph.D. OTR/L, FAOTA

Graduate Program Director: Kayla Collins, Ed.D., OTR/L

Director of Administrative Affairs: Lori McNamara

#### **Overview**

The Post-Professional Doctor of Occupational Therapy program of study provides meaningful, obtainable, and affordable post professional education to licensed occupational therapists. The Program is offered through an online format and can be completed in sixteen months.

The program is structured to facilitate the student's personal and professional development, to encourage change and adaptation, and to ensure the mastery of the discipline through advanced coursework including development as leaders and advanced scholarly practitioners in occupational therapy. Coursework is organized to prepare students to identify client's potential or actual occupational needs and to intervene with a client-centered, evidence-based approach. Student completion of the doctoral capstone project is designed to strengthen the integration of evidence and practice. Students graduate as doctoral-level practice-

scholars with the capacity to transform occupational therapy practice and to teach in the discipline.

The curriculum promotes synthesis of professional trends, occupational science, and technologies that support health and participation. Students are required to complete 30 credits of Occupational Therapy courses including the doctoral capstone series and 6 advanced practice courses focused on developing hybrid teaching and learning skills for the healthcare clinic and classroom.

#### **Mission**

To prepare practice scholars, educational innovators, and professional leaders who utilize clinically meaningful research in the implementation of best practice to meet the changing demands of the Occupational Therapy profession.

### **Admission Requirements**

The PP-OTD program is designed for qualified individuals who wish to further their academic studies in occupational therapy. Students accepted into the PP-OTD Program must meet the following criteria. All applicants will:

- Provide a current and valid license to practice occupational therapy in one of the 50 United States, the District of Columbia, Puerto Rico, or US Virgin Islands. This license must be in good standing.
- 2. Submit an online application.
- Submit official transcripts from an entry-level, accredited occupational therapy program at the master's level.
- 4. Submit a CV/resume.
- 5. Submit 2-3 letters of recommendation.
- Submit an application essay or personal statement expressing the student's professional goals and reasons for pursuing a PP-OTD degree with Baylor University.

Applicants for whom English is not a primary language must take either the TOEFL, IELTS, or Duolingo exam.

### **Student Learning Outcomes**

Graduates will:

- Demonstrate knowledge of relevant evidence, diagnostic considerations, and regulations that inform and guide best practice in the identified practice area.
- Implement instructional design and teaching and learning principles
  to provide occupational therapy education in the healthcare clinic
  or classroom while demonstrating cultural relevance; knowledge of
  current occupational therapy practice; integrating available evidence;
  and leveraging occupation-based theoretical perspectives.
- Identify ethical implications associated with the delivery of clientcentered and student-centered services and articulate a process for navigating through fiscal, regulatory, scope of practice, or organizational issues.
- Promote services for individuals, populations, or institutions in the identified practice area through education or advocacy activities.
- 5. Demonstrate a commitment to scholarly practice and research through lifelong learning and critical inquiry.

#### **Post-Professional OTD Courses**

Courses are structured to guide the student's personal and professional growth, to encourage change and adaptation, and to ensure the mastery of the discipline through synthesis of theory and research.

### **Occupational Therapy Core Courses**

Seven core courses (17 credit hours) promote synthesis of evidencebased practice, professional trends, occupational science, and technologies that support health and participation in life.

Code	Title	Hours
OTD 6310	Advances in Occupational Therapy Practice	3
OTD 6210	Evidence-Based Practice	2
OTD 6320	Occupational Therapy Conceptual Foundations	3
OTD 6220	Professional Development and Leadership	2
OTD 6230	Teaching and Educational Theory in Occupational Therapy	2
OTD 6330	Clinical Reasoning: Forms of Inquiry in Advanced Practice	3
OTD 6240	Program Evaluation & Development	2

### **Doctoral Capstone Projects**

Three doctoral capstone courses (7 credit hours) guide the student through completion of a scholarly capstone project that reflects synthesis of knowledge, reflective practice, and skills developed during post professional studies to demonstrate in-depth knowledge in a practice area that relates to the student's professional goals. Capstone projects are a faculty-mentored experience that may be completed either individually or in project teams.

Code	Title	Hours
OTD 6340	Doctoral Capstone 1	3
OTD 6272	Doctoral Capstone II	2
OTD 6280	Doctoral Capstone III	2

### **Advanced Practice Courses**

Three advanced practice courses (6 credits) develop the student's teaching skills for the healthcare clinic or classroom with a focus on incorporating digital technologies in hybrid learning environments.

Code	Title	Hours
OTD 6196	Hybrid Learning in the Healthcare Clinic and Classroom	1
OTD 6298	Hybrid Teaching Strategies for the Healthcare Clinic and Classroom	2
OTD 6396	Developing Hybrid Teaching Skills for the Healthcare Clinic and Classroom	3

### **School of Social Work**

Dean: Jon E. Singletary

Associate Dean for Academic Affairs: Melody Zuniga Associate Dean for Research and Faculty Development: Holly Oxhandler Ph.D. Co-Directors: Robin K. Rogers and T. Laine Scales

· Social Work, Ph.D. (p. 174)

### Social Work, Ph.D.

The Doctor of Philosophy degree requires a minimum of 51 hours of course work plus 9 hours of dissertation and is designed to prepare academic and professional leaders in social work. The course work schedule is sensitive to the professional demands of adult learners, making it possible for students to remain in their current location and employment, if they choose to do so. The main goal guiding the curriculum of this innovative program is to develop leaders and educators who can lead visionary social work education or service programs and conduct original research addressing the complex social issues of our world. The program provides a distinct focus on the integration of religion and faith with the ethics, values, and practices of the social work profession.

### **The Online Program Design**

The curriculum is designed to be taught primarily in an online classroom using high definition videoconferencing technology. Each cohort of students will begin classes in late May to early June with a required four-to five-day session on campus in Waco, Texas, to enable students and faculty to get to know each other and to introduce the coursework of the program. Throughout the program students will attend all of their classes in a synchronous-format, online classroom on a weekly basis. Classes will meet on Monday and Thursday evenings from 6:00 to 9:00 p.m. CST.

### **Admission to Doctoral Program**

Admission to the Graduate School of Baylor University and the PhD program in Social Work is conducted by formal application. Students are admitted every other year through a highly selective admissions process. The committee selects students who have a clear interest in developing theory, policy, and research skills in a substantive area relevant to the field of social work, a superior academic record in all previous work, and maturity, intellectual ability, and readiness for doctoral study. The doctoral committee will specifically look at the critical factors below that are deemed important for success in graduate studies. Documents with information about these factors are part of the application process.

#### **Admissions Process**

All applicants must submit an application fee to the Graduate School. Options for submitting payment will be presented when you submit your online application. When the electronic application is submitted, an email is immediately sent to the applicant with instructions about paying the application fee.

The following items must be submitted/completed as part of your online application to the Baylor University Graduate School:

- 1. Garland School of Social Work Required Statistics Exam
  - Applicants must complete the exam with an earned grade of B
    or better. There are modules that can be used as a refresher for
    students prior to taking the exam. The modules and exam are free
    for students.
  - The statistics exam is required in order for an application to be considered complete.
  - The GRE is optional.
- 2. An electronically submitted personal statement of 7-10 pages that:
  - Explains your motivation for and expectations of doctoral education in social work

- · Includes particular assets that you would bring to the school and to the profession as well as areas in which you would most like to grow academically and professionally
- · Specifies your areas of academic and research interests
- Describes briefly your understanding of integration of faith and ethical social work practice, supported by existing literature
- · Demonstrates scholarship potential
- 3. Sample of scholarly writing

One example (not exceeding 25 pages) of a recent work of scholarly writing that provides evidence of your capacity to think analytically and critically about a social welfare issue. The following are examples of appropriate submissions:

- · Published article, book chapter, or excerpt from a published work
- Unpublished research report
- · A paper written in a graduate level course
- Grant application that includes significant reflective writing
- A 7-10 page paper on a topic of interest to the applicant that is written specifically as the writing sample for the application.
- 4. Resumé or Curriculum Vitae Include a list of publications and professional presentations.
- 5. A transcript of a master's degree from an accredited university A Master of Social Work from a CSWE accredited program is preferred but not required. For those without an MSW degree, it is preferred that they have a master's degree in a related field and experience working in social service settings. Exception: Applicants from countries without university accreditation and with exceptionally strong credentials.
- 6. Three letters of recommendation At least two references should come from academic faculty who can attest to the applicant's superior ability and potential. A third

reference should come from a supervisor, director, or someone that could provide insight into the applicant's ability and achievement in social work to date.

Upon review of all the information, faculty teaching in the PhD program may contact prospective students for a personal interview. This interview will be of sufficient length to allow the applicant as well as the faculty to make an informed decision about admission.

### Ph.D. Program - Standard Plan

	Hours	6
SWO 6382	Qualitative Research for Social Work	3
SWO 6380	Quantitative Research for Social Work	3
Fall Semester		
	Hours	6
SWO 6351	Theory and Model Development for Social Work Practice	3
SWO 6384	Introduction to Doctoral Research (Proposal Seminar)	3
Summer Semeste	er	
	Hours	6
SWO 6381	Statistical Analysis for Social Work	3
SWO 6333	Religious and Cultural Diversity	3
Spring Semester		
Year 1		
Course	Title	Hours

#### Year 2

Spring Semester		
SWO 6342	Academic Leadership and Administration in Social Work Education	3
SWO 6331	Christianity, Ethics, and Social Work	3
	Hours	6
Summer Semeste	er	
SWO 6387	Research Practicum	3
SWO 6332	Social Policy and the Religious Sector	3
	Hours	6
Fall Semester		
SWO 6385	Measurement in Social Work	3
SWO 6386	Advanced Qualitative Research	3
<b>Preliminary Comp</b>	prehensive Examination	
	Hours	6
Year 3		
Spring Semester		
Elective <sup>1</sup>		3
	Hours	3
Summer Semeste	er	
SWO 6352	Higher Educational Teaching and Learning in Social Work	3
Elective <sup>1</sup>		3
	Hours	6
Fall Semester		
SWO 6353	Teaching Practicum	3

## Year 4

SWO 6343

- Diocetation	
SWO 6V99 Dissertation	9

**Program Evaluation** 

Hours

#### Research

Code	Title	Hours
SWO 6380	Quantitative Research for Social Work	3
SWO 6381	Statistical Analysis for Social Work	3
SWO 6382	Qualitative Research for Social Work	3
SWO 6384	Introduction to Doctoral Research	3
SWO 6385	Measurement in Social Work	3
SWO 6386	Advanced Qualitative Research	3
SWO 6387	Research Practicum	3

#### **Faith in Practice**

Code	Title	Hours
SWO 6331	Christianity, Ethics, and Social Work	3
SWO 6332	Social Policy and the Religious Sector	3
SWO 6333	Religious and Cultural Diversity	3
SWO 6351	Theory and Model Development for Social Work Practice	3

#### **Teaching and Leadership**

Code	Title	Hours
SWO 6342	Academic Leadership and Administration in Social Work Education	3
SWO 6343	Program Evaluation	3
SWO 6352	Higher Educational Teaching and Learning in Social Work	3
SWO 6353	Teaching Practicum	3

Students can complete their electives at any point in the program of study. Students will be required to take one elective course which focuses on enhancing their research skills (statistics or methods). The PhD Program Director must approve all electives.

#### **Dissertation**

Candidates for the Doctor of Philosophy degree must present an acceptable dissertation on a problem in the field of their major subject. The dissertation must give evidence that the candidate has pursued a program of research, the results of which reveal scholarly competence and a significant contribution to knowledge.

The PhD Dissertation will focus on a single cohesive theme, consist of one document, and have a single defense. The dissertation document consists of five chapters: an introductory chapter, three publishable articles, and a final chapter that integrates the document into a coherent whole. Each article must include a substantive review of the literature, and one of the articles may be a Systematic Research Synthesis of the literature. Two articles will incorporate data from the student's research with one article using findings from quantitative analysis and the other findings from qualitative analysis. The final article can be a theoretical or an additional research article. A key Graduate School document, *Guidelines to Preparing the Dissertation and Thesis*, contains the procedures to complete the dissertation, an explanation of necessary forms, the semester calendar, and an explanation of fees associated with the process. Additional instructions will be provided to students when they file for graduation.

## Sociology Department of Sociology

Chairperson: F. Carson Mencken

Graduate Program Director: Kevin D. Dougherty

#### **Graduate Degrees in Sociology**

The department offers two graduate degrees in sociology: Doctor of Philosophy (Ph.D.) and Master of Arts (M.A.).

Although students are admitted directly to the Doctor of Philosophy (Ph.D.) program, they will pursue a Master of Arts in sociology. The M.A. program is available only to students who are initially admitted to the Ph.D. program. Students entering the program with graduate level work or a graduate degree from an accredited institution will have that work evaluated by the admissions committee and have a maximum of nine semester hours of graduate course work applied toward their graduate work at Baylor University.

The three areas of concentration in the doctoral program are community analytics, health and society, and sociology of religion. The first two years of the program have roughly the same requirements for all areas

of emphasis. During the last three years students move into the more specialized areas.

#### **Admission Requirements**

- B.A. (or equivalent)
- GPA and GRE General Test scores predictive of success in this graduate program
- · Personal statement of interest
- · Three letters of recommendation
- · Writing Sample
- An interview with the sociology graduate admission committee, usually during recruitment event in February-March
- Expressed areas of academic/research interests compatible with those of the faculty

At the end of the second year, students are expected to have completed research resulting in a journal article or its equivalent. This paper is regarded as a Master's thesis equivalent.

- · Sociology, M.A. (p. 176)
- · Sociology, Ph.D. (p. 177)
  - · Community Analytics Concentration (Sociology, Ph.D.) (p. 177)
  - · Sociology of Religion Concentration (Sociology, Ph.D.) (p. 177)
  - · Health and Society Concentration (Sociology, Ph.D.) (p. 177)

## Sociology, M.A.

The Master of Arts degree is thirty hours comprising the core training courses in theory and research methods to prepare students for the Ph.D. degree. Students are admitted to the Ph.D. program with the requirement of earning an M.A. degree during the first two years.

At the completion of the M.A. degree, students will be evaluated by the Graduate Faculty to recommend continued funding of their education. In addition, students who fail to complete the M.A. degree by the start of the fall semester in the third year will not be considered for further financial support. Students seeking a terminal M.A. degree will not be admitted.

Code	Title	Hours
<b>Primary Courses</b>		
SOC 5312	Social Science Data Analysis	3
SOC 5391	Advanced Sociological Theory	3
SOC 5314	Regression Analysis for the Social Sciences	3
SOC 5398	Advanced Sociological Theory II: Detailed Investigations of Contemporary Theory	3
SOC 5342	Data Sources and Publishing in Sociology	3
<b>Secondary Courses</b>		
SOC 5V97	(Seminar in Teaching)	3
SOC 5390	Summer Writing Practicum in Sociology	3
SOC 5V99	Thesis	6
Electives		3
Total Hours		30

## Sociology, Ph.D. Requirements

The Ph.D. is an eighty-four semester-hour program, with fifty-four semester hours beyond the master's degree. The Ph.D. hours include twelve hours of dissertation and six hours of supervised teaching. Students must successfully complete the requirements for the M.A. degree in the process of pursuing a Ph.D. Course work includes a standard set of courses (6 hours) in research methods and theory, as well as 36 hours of core courses in the appropriate area of emphasis. There is no foreign language requirement for this program. The Department of Sociology currently offers three areas of concentration:

- · Community Analytics Concentration (Sociology, Ph.D.) (p. 177)
- Sociology of Religion Concentration (Sociology, Ph.D.) (p. 177)
- Health and Society Concentration (Sociology, Ph.D.) (p. 177)

## Community Analytics Concentration (Sociology, Ph.D.)

The curriculum in community analytics brings together substantive seminars in community, demography, regional economic development, family, and population health, as well as hands-on practical training doing applied research for local, regional and state entities. Graduates are highly trained in mail, telephone, and web-based survey methodology, need assessment, interviewing and focus group research skills, demographic modeling, GIS, and the ability to use major statistical techniques and programs to analyze and interpret the results of such research.

Students in the community analytics concentration work at the Baylor Center for Community Research and Development (CCRD). The CCRD is a multi-disciplinary/method laboratory in which sociologists perform most of the research, while experts from varying fields lend their support. Students learn to apply sociological methods to real-life settings and gain an understanding of an exceptional model for relations between community and academia.

Code	Title	Hours
<b>Primary Courses</b>		
Select nine semest	er hours from the following:	9
SOC 6303	Telephone Surveys	
SOC 6310	Mail Surveys	
SOC 5320	Seminar on the Community	
SOC 6345	Sociology of Regional Processes	
SOC 6317	Community Spatial Analysis	
<b>Secondary Courses</b>	3	
SOC 5V97	(Seminar in Teaching)	3
SOC 6314	Advanced Quantitative Analysis for Sociology	3
SOC 5390	Summer Writing Practicum in Sociology	3
Electives		24
Dissertation		
SOC 6V99	Dissertation	12
Master's Coursewo	rk	

Total Hours	84
Including 30 semester hours of M.A.	

## Sociology of Religion Concentration (Sociology, Ph.D.)

The Department of Sociology at Baylor University is recognized for its distinction in training sociologists of religion. The curriculum in the sociology of religion concentration brings together seminars of substantive interest, advanced methodological training and independent research. Students are prepared to enter the academic job market through a hands-on process of professional socialization.

Code	Title	Hours
<b>Primary Courses</b>		
Select nine seme	ester hours from the following:	9
SOC 5341	Introduction to Sociology of Religion	
SOC 6332	The Sociology of Religious Organizations	
SOC 6336	Religion, Race and Gender	
SOC 6384	Religion and Family Life	
Secondary Cours	ees	
SOC 5V97	(Seminar in Teaching)	3
SOC 5390	Summer Writing Practicum in Sociology	3
SOC 6314	Advanced Quantitative Analysis for Sociology	3
Electives		24
Dissertation		
SOC 6V99	Dissertation	12
Master's Course	vork	
Including 30 sem	nester hours of M.A.	30
Total Hours		84

## Health and Society Concentration (Sociology, Ph.D.)

The health and society concentration focuses on understanding of how social forces and structures are linked to human well-being. As a transdisciplinary area of study, health and society infuses sociological theories and principles with allied work in public health, epidemiology, and gerontology. Social mechanisms are emphasized to illuminate the roles of biology, genetics, and stress in evolving levels of mental and physical well-being across the life course. Students learn to use advanced quantitative methods to address key population health issues.

Code	Title	Hours
<b>Primary Courses</b>		
Select nine semester	r hours from the following:	9
SOC 5332	The Sociology of Health: Health Delivery Systems	
SOC 6351	Seminar in Population Health	
SOC 6357	Health Inequalities in America	
SOC 5354	Seminar in Family Sociology	
<b>Secondary Courses</b>		
SOC 5V97	(Seminar on Teaching)	3
SOC 5390	Summer Writing Practicum in Sociology	3

SOC 6314	Advanced Quantitative Analysis for Sociology	3
Electives		24
Dissertation		
SOC 6V99	Dissertation	12
Master's Coursev	vork	
Including 30 sem	ester hours of M.A.	30
Total Hours		84

## Spanish, Modern Languages and Cultures

## Department of Spanish, Modern Languages and Cultures

Graduate Program Director: Stephen Silverstein

The goals of the Master of Arts program in Spanish are

- 1. to prepare students to pursue the Ph.D. in Spanish and related fields,
- 2. to prepare students to be effective teachers, and
- 3. to prepare students to work in business and professional activities that require Spanish in this country and abroad.

Baylor's MA in Spanish provides a balanced study of canonical works in Latin American and Peninsular Literature together with a solid grounding in Hispanic Linguistics.

#### Admission

An applicant should have a bachelor's degree from an accredited university with a minimum of eighteen hours of Spanish beyond the sophomore level or the equivalent. An applicant should have a GPA in Spanish courses taken as an undergraduate that is predictive of success in this graduate program. Each candidate will be evaluated on an individual basis, and additional designated courses may be required as prerequisites for graduate work. All applicants must present the GRE General Test and, for international students, either the TOEFL, IELTS, or Duolingo exam is required.

· Spanish, M.A. (p. 178)

## Spanish, M.A. Requirements

The Master of Arts degree in Spanish requires thirty-six semester hours. The curriculum follows the options outlined below:

#### **Option I (Thesis Track)**

Option I (thesis-track) requires thirty-six semester hours, including six thesis hours. A minimum of fifteen hours, excluding the thesis, are required at the 5000-level.

Requirement	Hours
Literary Theory, Research and Writing	3
Thesis	6
Three Linguistics courses <sup>1</sup>	9
Two Peninsular Literature courses	6
Two Latin American Literature courses	6

Electives <sup>2</sup>	6
Total	36

- In the linguistics area, all students will normally take: SPA 5350 Introduction to Romance Linguistics, SPA 5351 History of the Spanish Language and SPA 5359 Seminar in Language Acquisition and Applied Linguistics. Those students who have chosen a literature emphasis may substitute one required linguistics course with a literature course (except for SPA 5359 Seminar in Language Acquisition and Applied Linguistics which is required of all students), or with another non-linguistics course that is approved by the advisor. Those students who have chosen a linguistics emphasis may substitute one required literature course with a linguistics course or a non-literature course that is approved by the advisor.
- <sup>2</sup> Electives must be approved by the graduate advisor and must fit the area of emphasis chosen by the student.

#### **Option II (Non-Thesis Track)**

Option II (non-thesis-track) requires thirty-six semester hours, A minimum of eighteen hours, must be taken at the 5000-level.

Requirement	Hours
Literary Theory, Research and Writing	3
Three Linguistics courses <sup>1</sup>	9
Three Peninsular Literature courses	9
Three Latin American Literature courses	9
Electives <sup>2</sup>	6
Total	36

- In the linguistics area, all students will normally take: SPA 5350 Introduction to Romance Linguistics, SPA 5351 History of the Spanish Language and SPA 5359 Seminar in Language Acquisition and Applied Linguistics. Those students who have chosen a literature emphasis may substitute one required linguistics course with a literature course (except for SPA 5359 Seminar in Language Acquisition and Applied Linguistics which is required of all students), or with another non-linguistics course that is approved by the advisor. Those students who have chosen a linguistics emphasis may substitute one required literature course with a linguistics course or a non-literature course that is approved by the advisor.
- <sup>2</sup> Electives must be approved by the graduate advisor and must fit the area of emphasis chosen by the student.

For both options, students must demonstrate intermediate level proficiency in a second romance language. See the Graduate School Foreign Language Requirements for a list of options available for demonstrating proficiency.

For both options, students must pass written comprehensive examinations. For those choosing a thesis, an oral defense of the thesis is also required. In selecting electives, students must declare an area of emphasis: literature or linguistics.

## **Statistical Science Department of Statistical Science**

Chairperson: James D. Stamey

Graduate Program Director: Jane L. Harvill

The Department of Statistical Science offers the Doctor of Philosophy and the Master of Science degrees in statistics. The degree program provides a balance between statistical theory and applications of statistical methods. Emphasis is placed on acquiring research, consulting, and teaching skills that are applicable to the biomedical sciences, the natural sciences, academe, business and industry, and behavioral and social sciences.

#### Admission

Applications from students with undergraduate degrees in business, computer science, engineering, mathematics, natural or life sciences, or behavioral or social sciences are welcome. Applicants should have a foundation in multivariable calculus and linear algebra. The GRE General Test (verbal and quantitative) is required.

#### **Financial Support**

The Department offers financial assistance for its doctoral degree candidates. An assistantship provides a stipend at a competitive level and tuition remission. An application to the graduate program in statistics is also considered an application for an assistantship. Special awards are available for outstanding students.

More information concerning the graduate program in statistics is available at www.baylor.edu/statistics (http://www.baylor.edu/ statistics/).

- Statistics (Ph.D.) (p. 179)
  - · Data Science Concentration (Statistics, Ph.D.) (p. 179)
  - · Biostatistics Concentration (Statistics, Ph.D.) (p. 179)
- Statistics (M.S.) (p. 180)
- · Joint Bachelor of Science in Statistics/Master of Science in Statistics (p. 180)
- · Statistics Graduate Minor (p. 180)

## **Statistics (Ph.D.)**

### Requirements

Ph.D. students must complete seventy-five semester hours. Requirements include a statistics core of twenty-seven semester hours, consulting-teaching practicum of three semester hours, elective courses of thirty-six semester hours, and nine semester hours of dissertation work. A successful dissertation defense is also required in order to earn this degree. Other requirements are computer proficiency and a preliminary examination. A foreign language is not required.

#### Curriculum

Code	Title	Hours
Statistics Core		
STA 5353	Theory of Statistics II	3
STA 5380	Methods in Statistics I	3
STA 5381	Methods in Statistics II	3
STA 6375	Computational Statistics I	3
STA 5383	Introduction to Multivariate Analysis	3
STA 5362	Time Series Analysis	3
STA 6382	Theory of Linear Models	3
STA 6352	Bayesian Theory	3
STA 6351	Large Sample Theory	3

**Practicum Courses** 

Total Hours		67-72
The elective courses are selected from approved STA courses or from approved courses in MTH, CSI, ECO, QBA, ISY, BIO, or PSY. <sup>1</sup>		36
Electives Courses		
STA 6V99	Dissertation	1-6
Dissertation		
STA 5V85	Practice in Statistics	3

Note that STA 5V85 Practice in Statistics does not count as an elective course.

## **Data Science Concentration** (Statistics, Ph.D.)

The Department offers a concentration in Data Science for the Ph.D. in Statistics. This concentration will allow students to focus on specific areas in statistics related to data science.

Code	Title	Hours
Course Requirement	s	
STA 5363	Advanced Data-Driven Methods	3
STA 6376	Computational Statistics II	3
STA 6380	Modern Trends in Data Science Computing	3
Any graduate level course, approved by the Graduate Program Director, in any of data analytics, data science, data base management, or data mining offered at Baylor. Such courses include, but are not limited to the following:		3
CSI 5325	Introduction to Machine Learning	

ECO 5352	Data Science II
ELC 5396	Special Topics in Engineering
CSI 5325	Introduction to Machine Learning

**Total Hours** 12

Students in the program must also complete the Ph.D. in Statistics to be awarded the concentration in Data Science upon graduation.

## **Biostatistics Concentration** (Statistics, Ph.D.)

The Department offers a concentration in Biostatistics for the Ph.D. in Statistics. This concentration will allow students to focus on specific areas in statistics related to the analysis of data related to pharma, clinical trials, and other medical applications of statistics.

Code	Title	Hours
Course Requirement	s	
Students will earn a concentration in Biostatistics by taking any four of the following courses:		12
STA 5364	Survival and Reliability Theory	
STA 5365	Design of Experiments and Clinical Trials	
STA/HPA 5367	Managerial Epidemiology	
STA 5377	Spatial Statistics	
STA 6366	Statistical Bioinformatics	
STA 6384	Analysis of Categorical Responses	
Total Hours		12

Students in the program must also complete the Ph.D. in Statistics to be awarded the concentration in Biostatistics upon graduation.

## Statistics (M.S.) Requirements

M.S. students must complete thirty-six semester hours. Requirements include a statistics core (twelve semester hours), consulting-teaching practicum (three semester hours), and elective courses (twenty-one semester hours). For the M.S.-Ph.D. Masters, students must pass an oral exam. For the professional track, students must complete a capstone project. The Professional Masters may also be completed as part of a 4+1 undergraduate-graduate program with either the B.S. in Statistics from Baylor or a B.A. or B.S. in Mathematics or Applied Mathematics from Baylor.

#### Curriculum - M.S.-Ph.D. Track

Code	Title	Hours
Statistics Core		
STA 5380	Methods in Statistics I	3
STA 5381	Methods in Statistics II	3
STA 5353	Theory of Statistics II	3
STA 5383	Introduction to Multivariate Analysis	3
<b>Practicum Courses</b>		
STA 5V85	Practice in Statistics	3
<b>Elective Courses</b>		
The elective courses are selected from any approved STA course or from approved courses in MTH, CSI, ECO, QBA, MIS, BIO, or PSY.		21

#### **Curriculum - Professional Track**

**Total Hours** 

Code	Title	Hours
Statistics Core		
STA 5300	Statistical Methods	3
STA 5301	Introduction to Experimental Design	3
STA 5303	Applied Regression Analysis	3
STA 5384	Multivariate Statistical Methods	3
<b>Practicum Courses</b>		
STA 5V85	Practice in Statistics	3
<b>Elective Courses</b>		
The elective courses are selected from any approved STA course or from approved courses in MTH, CSI, ECO, QBA, MIS, BIO, or PSY.		21

# Joint Bachelor of Science in Statistics/Master of Science in Statistics

#### Overview

**Total Hours** 

This terminal degree is intended to prepare students for careers as professional statisticians. The emphasis of the degree is in statistical

computing and statistical modeling with electives designed to meet individual student's goals.

#### Admission

Students interested in the program should engage in early planning and may apply for the joint program after completing 90 semester hours of credit. Admissions decisions will be based on prior undergraduate record and letters of recommendation.

### Requirements

Joint degree students fulfill the requirements of all undergraduate statistics majors. The degree requires 36 hours of approved graduate courses including 15 hours of STA courses and 21 hours of approved graduate electives. Students enrolled in the 4+1 B.S./M.S. program will complete a total of 151 hours.

#### **Curriculum**

36

Joint degree students fulfill the requirements of all undergraduate statistics majors. The 36-hour M.S. requirement for the joint degree is typically completed during the senior and +1 year. However, students will construct an individual coursework plan with their advisor. For the joint degree, students must complete a capstone project.

#### Curriculum for the M.S. Portion of the Joint Degree <sup>1</sup>

Code	Title	Hours
Statistics Core		
STA 5300	Statistical Methods	3
STA 5301	Introduction to Experimental Design	3
STA 5303	Applied Regression Analysis	3
STA 5384	Multivariate Statistical Methods	3
<b>Practicum Courses</b>		
STA 5V85	Practice in Statistics	3
<b>Elective Courses</b>		
The elective courses are selected from any approved STA course or from approved courses in MTH, CSI, ECO, QBA, MIS, BIO, or PSY.		21
Total Hours		36

<sup>&</sup>lt;sup>1</sup> This is the same as the curriculum for the professional track.

## Statistics Graduate Minor Requirements

For a graduate minor in statistics, students must complete twelve hours of course work. The following two courses are required:

Code	Title	Hours
<b>Required Courses</b>		
STA 5300	Statistical Methods	3
or STA 5380	Methods in Statistics I	
STA 5384	Multivariate Statistical Methods	3
Two additional graduate statistics courses are selected with the approval of the department.		6
Total Hours		12

## Theatre Arts Department of Theatre Arts

Chairperson: Stan C. Denman

Graduate Program Director: DeAnna M. Toten Beard

The Department of Theatre Arts is committed to providing quality training in advanced theatre studies (theory, criticism, theatre history, and dramatic literature) and directing for the stage. The Master of Arts degree is a pre-doctoral program requiring 31 hours. The M.A. prepares students for Ph.D. programs in theatre history, theatre theory and criticism, performance studies, and related disciplines. Each M.A. student will be closely mentored by a practicing theatre scholar and will be directed to produce original, meaningful research in the discipline. The Master of Fine Arts degree in Directing is a terminal degree requiring sixty-one semester hours. The M.F.A. Directing program is intended for the artist-scholar who plans to direct professionally, work as an artistic director, and/or pursue a career in university theatre education. Each M.F.A. student will undertake a range of directing projects during his or her three years at Baylor. As Graduate Assistants, M.F.A. students will also be assigned various production and teaching responsibilities.

#### Admission

To qualify for admission into the graduate program, a student must have completed a minimum of eighteen semester hours of undergraduate study in theatre arts. The M.A. and M.F.A. degrees do not have a foreign language requirement.

Students applying for admission to the M.A. Theatre program are expected to

- meet all requirements for admission to the Baylor University Graduate School:
- 2. submit three letters of recommendation:
- 3. submit a statement of purpose and professional goals;
- 4. submit an academic writing sample; and
- 5. submit scores from the GRE General Test.

The faculty reserves the right to require certain foundation courses, as well as advanced courses, according to the needs and specialization of the individual student. For further requirements, see the general graduate admission section of this catalog.

Students applying for admission to the M.F.A. Directing program are expected to

- meet all requirements for admission to the Baylor University Graduate School;
- 2. submit three letters of recommendation;
- 3. submit a resume which lists the plays he or she has directed, roles he or she has played, and technical/design activity in theatre;
- 4. submit a statement of purpose and professional goals; and
- submit a director's analysis and conceptual statement of a selected play.

Selected applicants will be asked to conduct a personal interview with a committee of faculty members from the Department of Theatre Arts. The faculty reserves the right to require certain foundation courses, as well as advanced courses, according to the needs and specialization of

the individual student. For further requirements, see the general graduate admission section of this catalog.

- Theatre, M.A. (p. 181)
- Theatre, M.F.A. (p. 181)

## Theatre, M.A.

#### M.A. Curriculum

M.A. students must complete 31 semester hours of graduate course work including:

Code	Title	Hours
THEA 5101	Introduction to Graduate Theatre Studies	1
THEA 5307	Contemporary Performance Theory	3
THEA 5308	Dramatic Theory and Criticism	3
THEA 5351	Theatre Scholarship and Research Methods	3
THEA 5V99	Thesis	6

#### M.A. Thesis Proposal

M.A. students must prepare a written thesis proposal in consultation with an advisor. The proposal will be reviewed by a committee of faculty. Students must pass the thesis proposal before being eligible to register for thesis hours.

#### M.A. Thesis

M.A. students must prepare a written thesis presenting original and substantial theatre arts research. Each student must pass an oral defense of the thesis to graduate from the program.

## Theatre, M.F.A.

#### M.F.A. Curriculum

M.F.A. students must complete 61 semester hours of graduate course work including:

Code	Title	Hours
THEA 4379	Advanced Studies in Contemporary Theatre and Drama	3
THEA 5101	Introduction to Graduate Theatre Studies	1
THEA 5301	Contemporary Directing Styles	3
THEA 5304	History and Theory of Directing	3
THEA 5306	Play Analysis for Directors	3
THEA 5307	Contemporary Performance Theory	3
THEA 5308	Dramatic Theory and Criticism	3
THEA 5310	Seminar in Classical Drama	3
THEA 5311	Directing Modern Plays	3
THEA 5312	Directing Classical Plays	3
THEA 5313	Production Design	3
THEA 5315	Seminar in Modern Drama	3
THEA 5335	Director's Workshop	3
THEA 5351	Theatre Scholarship and Research Methods	3
THEA 5373	Dramaturgy	3
THEA 5375	Actor-Director Collaboration	3

THEA 5376	Playwriting	3
THEA 5398	Thesis Production and Research	3
THEA 5V99	Thesis	6

### **Required Productions**

In addition to the directing projects generated in required courses, each M.F.A. student is responsible for directing and designing a full-length play during the summer following his or her first year of residency. This project serves as a qualifying exam for entry into the second year of study. During the second year, each student must satisfactorily serve as Assistant Director for a production in the regular season of Baylor University Theatre. As part of the thesis project, each third-year M.F.A. student will direct a full-length play as part of the regular season of Baylor University Theatre.

#### M.F.A. Examination

A written comprehensive examination is administered to M.F.A. students at the end of the second year. The examination will be reviewed by a committee of faculty. The student must pass the comprehensive examination before being eligible to register for thesis hours.

#### M.F.A. Thesis

M.F.A. students must direct a full-length play as part of the regular season of Baylor University Theatre and write a rigorous academic thesis on the play and production. Each student must pass an oral defense of the thesis to graduate from the program.

## **Affiliated Programs**

- · Health Care Administration (p. 182)
- · Nursing Anesthesia (p. 185)
- · Nutrition (p. 187)
- · Physician Assistant (p. 188)
- · Physical Therapy, D.P.T. (p. 191)
- · Occupational Therapy, DSc.O.T. (p. 192)
- · Orthopaedic Physical Therapy, DSc.P.T. (p. 193)
- · Doctor of Occupational Therapy, OTD (p. 195)

### **Health Care Administration**

Program Director: Teresa S. Hinnerichs

- Master of Health Administration, M.H.A. (p. 182)
- Joint Master of Health Administration/Master of Business Administration, M.H.A./M.B.A. (p. 183)
- Executive Clinical Leadership (ECL), M.H.A. (p. 184)
- Executive Clinical Leadership (ECL) Joint Master of Health Administration/ Master of Business Administration, M.H.A./M.B.A. (p. 185)

## Master of Health Administration, M.H.A.

The Master of Health Administration degree is awarded after sixtysix semester hours of study which includes five semesters of graduate courses, a comprehensive oral examination, a twelve-month administrative residency, and a graduate management portfolio (GMP). The objective of this program is to prepare students for a professional career in health services administration, with particular emphasis on middle and senior level management in federal health care systems. Through the course of study, students gain a broad knowledge of the theories, concepts, managerial tenets and techniques fundamental to effective administration of health care delivery.

### **Prerequisites and Admission Screening**

Candidates for admission must hold either a baccalaureate degree or the first professional degree from an accredited college or university acceptable to Baylor University. Candidates must also demonstrate a capacity for rigorous graduate study. Applicants must present both a grade point average and current (i.e., within the past 5 years) score on the GRE (minimum score of 300) or GMAT (minimum score of 525) that are predictive of success in this program. For further information regarding admission requirements and waivers, contact the Program Administrator at (210) 221-6443.

The Master of Health Administration degree will be granted upon completion of graduate course work (one year), the comprehensive oral examination, the administrative residency (one year), and the GMP.

### **Class Composition and Curriculum**

Each class is tri-service in composition, and most classes include Coast Guard, Department of Veterans Affairs, and Bureau of Medicine and Surgery Navy civil servants. Class members typically include physicians, dentists, nurses, allied health professionals, and administrators, making the year an invaluable, multidisciplinary learning experience. The M.H.A. program of study consists of 18 core courses and one required elective.

#### **Curriculum**

The sequence for the program is:

Course	Title	Hours
First Semester		
HCA 5105	Ethics in Health Care	1
HCA 5106	Fundamentals in Graduate Studies	1
HCA 5213	Health Policy (Health Policy)	2
HCA 5301	U. S. Health Care Systems	3
HCA 5310	Quantitative Analysis I: Statistics & Research Methods (Quantitative Analysis I)	3
MECO 5331	Managerial Economics	3
	Hours	13
Second Semeste	r	
HCA 5358	Quantitative Methods II: Modern Data Science	3
HCA 5359	Seminar in Human Resources Management	3
HCA 5389	Population Health & Homeland Security	3
HCA 5450	Finance I: Financial and Managerial Accounting in Healthcare Organizations	4
HCA 5336	Health Care Jurisprudence	3
	Hours	16
Third Semester		
HCA 5306	Current Issues in Healthcare Quality	3
HCA 5329	Leadership in Complex Organizations	3
HCA 5322	Organizational Behavior and Theory	3

MMGT 5460	Operations Management and Research	4
	Hours	13
Fourth Semester		
HCA 5309	Health Economics	3
MMKT 5371	Marketing Management	3
HCA 5317	Health Management Information Systems	3
	Hours	9
Fifth Semester		
HCA 5218	Finance III: Financial Applications	2
MMGT 5325	Strategic Management	3
	Hours	5
	Total Hours	56

<b>Code</b> Required Elective Hol	<b>Title</b> urs for Didactic Year	Hours 1
Code Residency	Title	Hours
HCA 5961	Administrative Residency	9

#### **Electives**

Electives are subject to change based on instructor availability. Students enrolled in the Army-Baylor M.H.A. program may take electives from both the H.C.A. and the M.B.A. courses.

Code	Title	Hours
HCA 5211	Quantitative Analysis III: Decision Making with Statistics and Research	2
HCA 5308	Lean Six Sigma	3
HCA 5356	Organizational Ethics	3
HCA 5357	MEDCOM Analytics	3
MENT 5137	Entrepreneurship and Corporate Innovation	1
MINB 5450	International Business	4
MBL 5310	Selected Topics in Business Law	3
MECO 5132	Macroeconomic Analysis in the Global Economy	1
MECO 5133	Seminar in World Economic Systems	1
MMGT 5162	Seminar in International Management	1
MMKT 5171	Seminar in International Marketing	1
HCA 5V92	Special Studies in Health Care Administration <sup>1</sup>	1-3

<sup>1</sup> May be repeated with a different topic for up to 12 credit hours

## Residency

Degree candidates are required to serve an administrative residency in a selected health care institution. During this residency, performed under the guidance of a qualified preceptor, students study and analyze all the functional elements of the organization. They develop managerial skills through experience in the performance of administrative tasks and through direct participation in the problem-solving process. Additionally, students perform special studies as directed and conduct a portfolio of graduate management projects. Approval of proposed projects must be secured from the preceptor and the student's faculty advisor at the Medical Center of Excellence.

## Joint Master of Health Administration/Master of Business Administration, M.H.A./M.B.A.

**Program Directors:** Patsy Norman, Associate Dean for Graduate Business Programs; Teresa S. Hinnerichs, Director for the Army-Baylor Graduate Program in Health and Business Administration, JBSA Fort Sam Houston, TX.

Note: This M.B.A. program is only open to eligible students enrolled in the Army-Baylor HCA graduate program.

### **Admissions**

Students can take either the GRE or GMAT. The minimum required score is 310 for the GRE or 575 for the GMAT. Candidates for admission must hold either a baccalaureate degree or the first professional degree from an accredited college or university acceptable to Baylor University. Candidates must also demonstrate a capacity for rigorous graduate study. Applicant's grade point average and GRE/GMAT scores must be predictive of success in this program. Applications must be submitted directly to the Army-Baylor Graduate Program. For further information regarding admission requirements and waivers, contact the Program Administrator at (210) 221-6443.

### Requirements

Candidates must complete all degree requirements for the M.B.A. and the M.H.A. The M.H.A. requires the successful (passing) completion of 66 semester hours; the M.B.A. program requires the successful completion of an additional 21 semester hours (for a total of 87 semester hours). The joint program requires a one-year residency and the successful completion of a portfolio of graduate management projects. Since M.H.A./M.B.A. degrees are awarded simultaneously, all requirements in both programs must be completed in order to receive both degrees.

#### Curriculum

Course	Title	Hours
First Semester		
HCA 5105	Ethics in Health Care	1
HCA 5106	Fundamentals in Graduate Studies	1
HCA 5213	Health Policy	2
HCA 5301	U. S. Health Care Systems	3
HCA 5310	Quantitative Analysis I: Statistics & Research Methods	3
MBL 5310	Selected Topics in Business Law	3
MECO 5331	Managerial Economics	3
	Hours	16
Second Semeste	r	
HCA 5336	Health Care Jurisprudence	3
HCA 5356	Organizational Ethics	3
HCA 5358	Quantitative Methods II: Modern Data Science	3
HCA 5359	Seminar in Human Resources Management	3
HCA 5389	Population Health & Homeland Security	3
HCA 5450	Finance I: Financial and Managerial Accounting in Healthcare Organizations	4
	Hours	19

Third Semester		
HCA 5306	Current Issues in Healthcare Quality	3
HCA 5322	Organizational Behavior and Theory	3
HCA 5329	Leadership in Complex Organizations	3
MMGT 5460	Operations Management and Research	4
MECO 5330	Principles of Macroeconomics	3
	Hours	16
Fourth Semester		
HCA 5211	Quantitative Analysis III: Decision Making with Statistics and Research	2
HCA 5317	Health Management Information Systems	3
HCA 5450	Finance I: Financial and Managerial Accounting in Healthcare Organizations	4
MINB 5450	International Business	4
MMKT 5371	Marketing Management	3
	Hours	16
Fifth Semester	Hours	16
Fifth Semester HCA 5218	Hours Finance III: Financial Applications	16
HCA 5218	Finance III: Financial Applications	2
HCA 5218 MMGT 5325	Finance III: Financial Applications Strategic Management Macroeconomic Analysis in the Global	2
HCA 5218 MMGT 5325 MECO 5132	Finance III: Financial Applications Strategic Management Macroeconomic Analysis in the Global Economy 1	2 3
HCA 5218 MMGT 5325 MECO 5132 MECO 5133	Finance III: Financial Applications Strategic Management Macroeconomic Analysis in the Global Economy <sup>1</sup> Seminar in World Economic Systems <sup>1</sup>	2 3 1
HCA 5218 MMGT 5325 MECO 5132 MECO 5133 MMGT 5162	Finance III: Financial Applications Strategic Management Macroeconomic Analysis in the Global Economy Seminar in World Economic Systems Seminar in International Management	2 3 1 1
HCA 5218 MMGT 5325 MECO 5132 MECO 5133 MMGT 5162 MMKT 5171	Finance III: Financial Applications Strategic Management Macroeconomic Analysis in the Global Economy  Seminar in World Economic Systems  Seminar in International Management  Seminar in International Marketing  Seminar in International Marketing	2 3 1 1 1

Students are required to take 4 out of the five seminar courses listed.

Code	Title	Hours
Required Elective Hou	rs for Didactic year	3
Code	Title	Hours
Residency		
HCA 5961	Administrative Residency	9

## **Executive Clinical Leadership (ECL),** M.H.A.

### **Master of Health Administration**

**Program Director.** Teresa S. Hinnerichs, Director for the Army-Baylor Graduate Program in Health and Business Administration, JBSA Fort Sam Houston, TX.

#### Admissions

The Executive Clinical Leadership (ECL) M.H.A. track in a program that entails a 54-week didactic phase in which the student completes 66 credit hours, including a Graduate Management Project (GMP). Since the administrative residency year required for the traditional M.H.A. is waived, substantial clinical experience is a prerequisite (generally 10 years). Students are either a senior Major or junior Lieutenant Colonel. Additional requirements include the following: advanced clinical degree; minimum 3.2 undergraduate GPA (on a 4.0 scale); minimum of four years from

Mandatory Retirement Date; research topic proposal (GMP). Candidates must have a current GRE (300 for M.H.A.; 310 for joint ECL) or GMAT (525 for M.H.A.; 575 for joint ECL) score. Applications must be submitted directly to the Army-Baylor Graduate Program. For further information regarding admission requirements and waivers, contact the Program Administrator at (210) 221-6443.

### Requirements

Candidates must complete all degree requirements of the M.H.A. The M.H.A. requires the successful (passing) completion of 66 semester hours including successful completion of residency rotations and GMP.

#### Curriculum

Course	Title	Hours
First Semester		
HCA 5105	Ethics in Health Care	1
HCA 5106	Fundamentals in Graduate Studies	1
HCA 5213	Health Policy	2
HCA 5301	U. S. Health Care Systems	3
HCA 5310	Quantitative Analysis I: Statistics & Research Methods	3
MECO 5331	Managerial Economics	3
	Hours	13
Second Semester		
HCA 5101	Graduate Management Study Development	1
HCA 5336	Health Care Jurisprudence	3
HCA 5358	Quantitative Methods II: Modern Data Science	3
HCA 5359	Seminar in Human Resources Management	3
HCA 5389	Population Health & Homeland Security	3
HCA 5450	Finance I: Financial and Managerial Accounting in Healthcare Organizations	4
	Hours	17
Third Semester		
HCA 5201	Residency Rotation	2
HCA 5306	Current Issues in Healthcare Quality	3
HCA 5322	Organizational Behavior and Theory	3
HCA 5329	Leadership in Complex Organizations	3
MMGT 5460	Operations Management and Research	4
	Hours	15
Fourth Semester		
HCA 5102	Graduate Management Study Development 2	1
HCA 5307	Residency Rotation 2	3
HCA 5309	Health Economics	3
HCA 5317	Health Management Information Systems	3
MMKT 5371	Marketing Management	3
	Hours	13
Fifth Semester		
HCA 5103	Graduate Management Study Development 3	1
HCA 5218	Finance III: Financial Applications	2

MMGT 5325	Strategic Management	3
	Hours	6
	Total Hours	64
Code	Title	Hours
Required Elective Hours for Didactic Year		2

# Executive Clinical Leadership (ECL) - Joint Master of Health Administration/ Master of Business Administration, M.H.A./M.B.A.

#### Curriculum

Course	Title	Hours
First Semester		
HCA 5105	Ethics in Health Care	1
HCA 5106	Fundamentals in Graduate Studies	1
HCA 5213	Health Policy	2
HCA 5301	U. S. Health Care Systems	3
HCA 5310	Quantitative Analysis I: Statistics & Research Methods	3
MBL 5310	Selected Topics in Business Law	3
MECO 5331	Managerial Economics	3
	Hours	16
Second Semeste	r	
HCA 5101	Graduate Management Study Development 1	1
HCA 5336	Health Care Jurisprudence	3
HCA 5356	Organizational Ethics	3
HCA 5358	Quantitative Methods II: Modern Data Science	3
HCA 5359	Seminar in Human Resources Management	3
HCA 5389	Population Health & Homeland Security	3
HCA 5450	Finance I: Financial and Managerial	4
	Accounting in Healthcare Organizations	
	Hours	20
Third Semester		
HCA 5201	Residency Rotation	2
HCA 5306	Current Issues in Healthcare Quality	3
HCA 5322	Organizational Behavior and Theory	3
HCA 5329	Leadership in Complex Organizations	3
MMGT 5460	Operations Management and Research	4
MECO 5330	Principles of Macroeconomics	3
	Hours	18
Fourth Semester		
HCA 5102	Graduate Management Study Development 2	1
HCA 5211	Quantitative Analysis III: Decision Making with Statistics and Research	2
HCA 5307	Residency Rotation 2	3
HCA 5309	Health Economics	3
HCA 5317	Health Management Information Systems	3

MINB 5450	International Business	4
MMKT 5371	Marketing Management	3
	Hours	19
Fifth Semester		
HCA 5103	Graduate Management Study Development 3	1
HCA 5218	Finance III: Financial Applications	2
MMGT 5325	Strategic Management	3
Select four cours	es from the following:	4
MECO 5132	Macroeconomic Analysis in the Global Economy <sup>1</sup>	
MECO 5133	Seminar in World Economic Systems <sup>1</sup>	
MMGT 5162	Seminar in International Management <sup>1</sup>	
MMKT 5171	Seminar in International Marketing <sup>1</sup>	
MENT 5137	Entrepreneurship and Corporate Innovation	
	Hours	10
	Total Hours	83
Code	Title	Hours

## **Nursing Anesthesia**

Required Elective Hours for Didactic Year

 Doctor of Nursing Practice in Anesthesia Nursing, BSN to DNP Program (p. 185)

## Doctor of Nursing Practice in Anesthesia Nursing, BSN to DNP Program

Program Director: COL Steven Kertes, DNP, CRNA

The D.N.P. in Nurse Anesthesia is a U.S. Army affiliated program. The U.S. Army has prepared Certified Registered Nurse Anesthetists (CRNAs) for nearly 50 years and their students have earned graduate degrees through university-based affiliations since 1981. The U.S. Army Graduate Program in Anesthesia Nursing (USAGPAN) produces virtually all active duty CRNAs and has averaged 28 graduates per year for the past ten years. The USAGPAN program is fully accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs (COA) and will be included in the LHSON D.N.P. program accreditation currently held by the Commission on Collegiate Nursing Education (CCNE). The USAGPAN historically ranks among the nation's top nursing anesthesia programs and is currently ranked 8th out of 113 accredited programs by U.S. News & World Report.

The USAGPAN is a rigorous 2-phase 36-month program, with phase 1 consisting of 52 weeks of didactic instruction at the U.S. Medical Center of Excellence (MEDCoE), Joint Base San Antonio, Fort Sam Houston, Texas. Phase 2 consists of 97 weeks of didactic and clinical instruction conducted at select Medical Treatment Facilities affiliated with the Army, Department of Defense, Veterans Administration, and private sector. Among the current sites utilized for clinical instruction are Brooke Army Medical Center, Carl R. Darnall Army Medical Center, William Beaumont Army Medical Center, Dwight D. Eisenhower Army Medical Center, Tripler Army Medical Center, and Memphis VA Medical Center. The overall

program credit hours total 122 taught by a combined cadre of 37 highly qualified faculty.

The U.S. Army Graduate Program in Anesthesia Nursing matriculates Army and VA registered nurses. Graduates of the Baylor-USAGPAN will serve as Certified Registered Nurse Anesthetists, CRNAs, in their respective agency. The U.S. Army Graduate Program in Anesthesia Nursing students are educated in a manner that encourages independent thought and critical decision-making skills during times of great stress, both physical and emotional. As the sole providers of anesthesia under many circumstances in the Army, CRNAs need to rely on their skills and training to save the lives of soldiers and beneficiaries.

## **Admission Requirements**

Candidates seeking admission to the USAGPAN must meet the following minimum qualifications:

- BSN or MSN degree from a CCNE, ACEN or NLN CNEA accredited program (U.S. programs only); Official transcripts must be submitted for all degrees and course work
- GRE within five years: competitive combined score, writing 3.5
  required, submit official score reports to Baylor Graduate School,
  Waco, TX, CEEB code: 6032 or select Baylor University in Waco, Texas
  in the "Graduate" category
- 3. BSN or MSN GPA of 3.0 and an overall science GPA of 3.0
- 4. Undergraduate or graduate statistics course
- Current Within 5 Years Undergraduate or graduate course in Biochemistry or Organic Chemistry; online or in-residence programs are accepted (no lab required)
- At least one year of experience as a Registered Nurse in a critical care setting<sup>1</sup>
- 7. An essay or formal letter on your Goals and Objectives
- 8. Curriculum Vitae or Resume
- 9. Letters of recommendation: three required<sup>2</sup>
- Interview: Qualified applicants must attend a 2-3-day shadow/ interview before August 1st. Coordinated through your Army Medical Recruiter or VA liaison
- Direct Accessions: Direct Accession Applicants must work with an Active Duty U.S. Army Medical (AMEDD) Recruiter to be considered for an appointment onto active duty. To locate a Medical Recruiter near you go to: https://www.goarmy.com/locate-a-recruiter.html
- Critical Care experience As defined by the Council on Accreditation (COA), Critical care experience must be obtained in a critical care area within the United States, the territories, or a U.S. Military hospital outside of the United States. During this experience, the registered nurse is to have developed critical decision making and psychomotor skills, competency in patient assessment, and the ability, to use and interpret advanced monitoring techniques. A critical care area is defined as one where, on a routine basis, the registered professional nurse manages one or more of the following: invasive hemodynamic monitors (such as pulmonary artery catheter, CVP, arterial); cardiac assist devices; mechanical ventilation; and vasoactive drips. The critical care areas are typically intensive care units. Examples of critical care units may include but are not limited to: surgical intensive care, cardiothoracic intensive care, coronary intensive care, medical intensive care, pediatric intensive care, and neonatal intensive care. (COA Standards pg. 35) Those who have experience in other areas may be considered provided they can demonstrate competence with invasive monitoring, ventilators, and critical care pharmacology.

- <sup>2</sup> Letters of Recommendation, three required processed through the application portal
  - 1. Supervisor
  - 2. Peer / professional colleague
  - Post Shadow/Interview Letter from CRNA Faculty (sent internally by the writer)

CCRN is preferred, but not required.

#### **Additional Application Details**

Transcripts - Official copies required from all schools attended as noted below:

- · All degree-earned transcripts
- Transferred coursework applied to Nursing Degree(s) (submit transcript from original school)
  - Electronically sent to Baylor Graduate School at: Grad\_Transcripts@baylor.edu, or
  - official copies by U.S. Mail to: Baylor University Graduate Admissions One Bear Place #97264 Waco, Texas 76798-7264

Direct Accession applicants: Baylor University Louise Herrington School of Nursing (LHSON) admission is a separate and distinct admission process. You must be selected for both an Army active duty appointment (Direct Accession) and selected for admission to the USAGPAN program by Baylor University LHSON.

#### **Curriculum**

The sequence for the program is:

Course Phase 1/Year 1	Title	Hours
Summer		
MNUR 6411	Biochemistry for Nurse Anesthesia	4
MNUR 6612	Advanced Anatomy and Physiology I for Nurse Anesthesia	6
MNUR 6513	Advanced Pharmacology for Nurse Anesthesia I	5
MNUR 6321	Health Care Informatics	3
	Hours	18
Fall		
MNUR 6514	Advanced Anatomy and Physiology II for Nurse Anesthesia	5
MNUR 6631	Introductory Concepts and Principles of Anesthesia Practice	6
MNUR 6422	Research and Statistical Methods	4
MNUR 6132	Clinical Concepts of Nurse Anesthesia Practice I	1
MNUR 6233	Regional Anesthesia and Ultrasound Science I	2
	Hours	18
Spring		
MNUR 6415	Advanced Pharmacology for Nurse Anesthesia 2	4

	Total Hours	122
	Hours	11
MNUR 6V04	Clinical Practicum and Role Development 4	11
Spring		
	Hours	14
MNUR 6373	DNP Scholarly Project 3 (Dissemination of Practice Inquiry)	3
MNUR 6V03	Clinical Practicum and Role Development 3	11
Fall		
	Hours	3
	Knowledge Implementation/Outcomes)	
MNUR 6372	DNP Scholarly Project 2 (Applying Practice	3
Summer		
Phase 2/Year 3		
	Hours	17
MNUR 6V02	Clinical Practicum and Role Development 2	11
MNUR 6343	Health Policy and Law	3
Spring MNUR 6341	Professional Aspects of Nursing Anesthesia	3
Spring	Hours	14
MNUR 6V01	Clinical Practicum and Role Development 1	11
MNUR 6342	Healthcare Management	3
Fall		
	Hours	6
I 1 CO HOMINI	Ethical Consideration of Practice Application)	
MNUR 6344 MNUR 6371	Leadership in Advanced Practice Nursing DNP Scholarly Project 1 (Design and	3
Summer	Loadership in Advanced Dreaties Nursing	2
Phase 2/Year 2		
	Hours	21
MNUR 6237	Regional Anesthesia and Ultrasound Science 2	2
MNUR 6136	Clinical Concepts for Nurse Anesthesia II	1
MNUR 6323	Research Evidence into Practice	3
MNUR 6434	Advanced Health Assessment and Diagnosis	4
	Special Populations	,
MNUR 6735	Anesthesia for Surgical Procedures and	7

### **Nutrition**

Nutrition, M.S. (p. 187)

## **Nutrition, M.S.**

Program Director: Nicholas Barringer

The U.S. Military-Baylor University Master's Program in Nutrition is responsible for preparing innovative dietitians for current and future military roles, with an emphasis on military readiness. The program lasts approximately 24 months and consists of 66 core hours (includes integrated supervised experiental-learning (SEL hours)). Upon successful program completion, graduates receive a Master of Science from

Baylor University and are eligible to sit for the Commission of Dietetics Registration (CDR) exam.

#### **Admission**

Candidates for admission must hold a baccalaureate degree from an accredited college/university and complete a minimum of 27 hours of prerequisite coursework with a 3.25 GPA. Candidates must also demonstrate a capacity for rigorous graduate study. Applicants must present a grade point average and scores on the GRE that are predictive of success in this program. For further information regarding admission requirements and waivers, visit the program website at https://www.baylor.edu/graduate/nutrition/. Candidates must also meet the entrance requirements of the Graduate School of Baylor University. In addition, they must be a U.S. citizen and meet military medical fitness standards. Admissions is contingent upon selection and commissioning as an officer in the US Army. Applicants must demonstrate a capacity for graduate study as well as leadership qualities and values requisite of US Army officers.

The Master of Science degree will be granted upon completion of the program of graduate course work, the written and oral comprehensive examination, and the research project completed in conjunction with the Supervised Experiential Learning.

#### Curriculum

The sequence for the program is:

Course	Title	Hours
First Semester		
MPN 5106	MPN 5106::Scientific Writing	1
MPN 5210	MPN 5210::Research Methods I	2
MPN 5309	MPN 5309::Advanced Energy Metabolism	3
MPN 5314	MPN 5314::Nutrition Care Process w/Lab	3
MPN 5407	MPN 5407::Medical Nutrition Therapy w/	4
	Lab	
	Hours	13
Second Semester		
MPN 5121	MPN 5121::Research Project I	1
MPN 5217	MPN 5217::Medical Nutrition Therapy II	2
MPN 5220	MPN 5220::Research Methods II	2
MPN 5315	MPN 5315::Public Health I w/Lab	3
MPN 5522	MPN 5522::Food Service Management	5
	Hours	13
Third Semester		
MPN 5110	MPN 5110::Leadership I	1
MPN 5216	MPN 5216::Exercise Physiology	2
MPN 5231	MPN 5231::Research Project II	2
MPN 5527	MPN 5527:: Advanced MNT I w/Lab	5
	Hours	10
Fourth Semester		
MPN 5120	MPN 5120::Leadership II	1
MPN 5225	MPN 5225::Public Health II w/Lab	2
MPN 5241	MPN 5241::Research Project III w/Lab	2
MPN 5336	MPN 5336::Performance Nutrition w/Lab	3
MPN 5337	MPN 5337::Advanced MNT II w/Lab	3
	Hours	11

Fifth Semester		
MPN 5130	MPN 5130::Leadership III	1
MPN 5245	MPN 5245::Military Nutrition Operations w/ Lab	2
MPN 5240	MPN 5240::Experiential Practice I Lab	2
MPN 5251	MPN 5251::Research Project IV w/Lab	2
MPN 5346	MPN 5346::Human Performance Optimization	3
	Hours	10
Sixth Semester		
MPN 5361	MPN 5361::Research Project V w/Lab	3
MPN 5361 MPN 5450	MPN 5361::Research Project V w/Lab MPN 5450::Experiential Practice II Lab	3 4
	· ·	
MPN 5450	MPN 5450::Experiential Practice II Lab MPN 5235::Organizational Stewardship w/	4

## **Physician Assistant**

- Emergency Medicine, DSc.P.A. (p. 188)
- · Orthopaedics, DSc.P.A. (p. 189)
- · General Surgery, DSc.P.A. (p. 190)

# Emergency Medicine, DSc.P.A. Doctor of Science in Physician Assistant Studies-Emergency Medicine

**Director, Postgraduate Physician Assistant Education**: Brian E. Burk **Army/Baylor Program Director.** Ryan Curtis

In Fall 2007 Baylor University, in affiliation with the U.S. Army, established a new degree program, the Doctor of Science in Physician Assistant Studies (DSc.P.A.), with the major in Emergency Medicine. This professional doctoral degree is new to the discipline of physician assistant studies. The program of study consists of 18 months of didactic study, clinical experience, and clinically oriented research conducted in a professional residency setting. The Baylor-Army DSc.P.A. is offered at Brooke Army Medical Center (BAMC), Fort Sam Houston in San Antonio, Texas, Madigan Army Medical Center, Fort Lewis in Tacoma, Washington, Carl R. Darnall Army Medical Center, Fort Hood in Killeen, Texas, and William Beaumont Army Medical Center, Fort Bliss in El Paso, Texas.

#### **Objectives**

The vision of the U.S. Army Emergency Medicine Physician Assistant Residency is to create the benchmark for postgraduate emergency medicine Physician Assistant education through the pursuit of academic and clinical excellence. The program achieves this vision by developing clinical scientists who are prepared to conduct advanced scientific research as well as to provide quality emergency care for patients with a wide variety of illnesses and injuries in the emergency department and in any world-wide contingency. The clinical scientists graduating from this program will become future leaders and mentors by establishing scholarly excellence for the physician assistant profession.

The U.S. Army Emergency Medicine Physician Assistant Residency provides advanced education and training, further enhancing the abilities of clinicians to save soldiers' lives on the battlefield, to serve

Military Health System beneficiaries, to augment and extend physicians, and to improve recruiting and retention through unique professional development opportunities. The program produces graduates with expertise in evidence-based emergency care for examining, diagnosing, and managing a variety of life-threatening injuries and illnesses. The curriculum is structured to develop competency in research design, production, analysis, and critical review. Graduates will use competencies in triage and management of emergency medical conditions and injuries to stabilize critically ill or injured soldiers on the battlefield and prepare them for transportation to higher echelons of care.

#### Admission

Candidates for admission must hold a master's degree in physician assistant studies and be active-duty members of the U.S. military for a minimum of four years upon beginning the program. Applicants must have a grade point average 3.0 or above and obtain a minimum score of 300 on the GRE general exam. Candidates must have a minimum of two years of time on station prior to the start date of the residency or if Outside the Continental United States (OCONUS), the applicants must have served to within 60 days of their prescribed tour. Applicants must also agree to incur a 3.5 year Active Duty Service Obligation (ADSO). Candidates must also meet the entrance requirements of the Graduate School of Baylor University. Uniformed-services candidates are selected by a competitive board process by their respective uniformed service.

#### **Curriculum**

The 18-month curriculum totals 88 semester credit hours and consists of 16 didactic sections (representing approximately 740 hours of classroom instruction), 20 clinical rotations (4,300 clinical training hours), and a research project. Midterm and final board examinations, including both written and oral evaluation, are based on the standards set by the American Board of Emergency Medicine.

The didactic portion accounts for 32 credit hours and consists of 16 courses on an array of emergency-medicine topics. Each course carries two semester hours of credit:

Code	Title	Hours
MEM 6210	Introduction to Emergency Medicine Resuscitation, Shock, and Anesthesia	2
MEM 6211	Emergency Treatment of Orthopedic Injuries, Emergency Ultrasounds, and Emergency Radiology	2
MEM 6212	Toxicology and Oral Maxillary Facial Disorders	2
MEM 6213	Cardiovascular, Pulmonary, Hematologic, Oncologic, and Psychosocial Diseases and Disorders	2
MEM 6214	Gastrointestinal, Genitourinary, Obstetrics, and Gynecology Diseases	2
MEM 6215	Pediatric Non-Traumatic Musculoskeletal Disorders, Abuse, and Assault	2
MEM 6216	Emergency Wound Management, Environmental Injuries, and Trauma	2
MEM 6217	Infectious Disease, Endocrinology, and Neurology	2
MEM 6220	Advanced Emergency Medicine, Resuscitation, Shock, and Anesthesia	2

MEM 6221	Advanced Emergency Treatment of Orthopedic Injuries, Emergency Ultrasounds, and Emergency Radiology	2
MEM 6222	Advanced Toxicology and Oral Maxillary Facial Disorders	2
MEM 6223	Advanced Cardiovascular, Pulmonary, Hematologic, Oncologic, and Psychosocial Disorders	2
MEM 6224	Advanced Gastrointestinal, Genitourinary Obstetrics, and Gynecology Diseases	2
MEM 6225	Advanced Pediatrics Non-Traumatic Musculoskeletal Disorders, Abuse, and Assault	2
MEM 6226	Advanced Emergency Wound Management, Environmental Injuries, and Trauma	2
MEM 6227	Advanced Infectious Disease, Endocrinology, and Neurology	2

The remaining 56 credit hours are earned through clinical rotations. These consist of eight emergency department rotations (1472 clinical hours), four intensive-care rotations (1280 clinical hours), one trauma surgery rotation (320 clinical hours), two pediatric rotations (640 clinical hours), one toxicology rotation (80 clinical hours), one radiology/ ultrasound rotation (160 clinical hours), one oral maxillofacial rotation (80 clinical hours), two elective rotations (240 clinical hours), and a dedicated research block (240 clinical hours):

Code	Title	Hours
MEM 6330	Orientation to Emergency Medicine	3
MEM 6231	Emergency Department 1	2
MEM 6232	Emergency Department 2	2
MEM 6233	Emergency Department 3	2
MEM 6234	Emergency Department 4	2
MEM 6235	Emergency Department 5	2
MEM 6336	Emergency Department 6	3
MEM 6337	Emergency Department 7	3
MEM 6338	Emergency Department 8	3
MEM 6439	Pediatrics Emergency Department	4
MEM 6440	Pediatrics Emergency Department and Pediatric Intensive Care Unit	4
MEM 6142	Radiology	1
MEM 6143	Oral-Maxillary Facial Surgery	1
MEM 6144	Toxicology	1
MEM 6445	Emergency Ultrasound	4
MEM 6346	Clinical Research	3
MEM 6447	Surgical Intensive Care Unit (SICU)	4
MEM 6448	Medical Intensive Care Unit (MICU)	4
MEM 6449	Cardiac Care Unit (CCU)	4
MEM 6450	Trauma Surgery	4

Each physician assistant resident is required to initiate and complete an Internal Review Board (IRB) approved research project during the 18-month residency. During the final month of the residency, each resident will present the results of the research project in written and oral form and defend the project before a doctoral examining committee. The examining committee is chaired by the program director and includes three additional program faculty and a faculty member from the

Baylor-Waco campus. A manuscript from the completed project will be submitted to a peer-reviewed journal for publication.

## Orthopaedics, DSc.P.A.

## **Doctor of Science in Physician Assistant Studies-Orthopedics**

**Associate Dean, Hospital Based Education:** Matthew S. Douglas, Lieutenant Colonel, U.S. Army

Army/Baylor Program Chair Person: Robyn Chalupa, Major, U.S. Army

In the Fall 2008, Baylor University, in affiliation with the U.S. Army, established a new degree program, the Doctor of Science in Physician Assistant Studies, with the major in Orthopaedics (DSc.P.A.S.). The program of study consists of 18 months of didactic study, clinical experience, and clinically oriented research conducted in a professional residency setting. The Baylor-Army DScPAS residency in Orthopaedics is offered at William Beaumont Army Medical Center, Ft. Bliss in El Paso, Texas; Brooke Army Medical Center, Ft. Sam Houston in San Antonio, Texas; Madigan Army Medical Center, Ft. Lewis in Tacoma, Washington; and David Grant USAF Medical Center, Travis AFB, in Fairfield, CA.

This residency provides physician assistants the opportunity to develop advanced competencies in both operative assistance and non-operative management of musculoskeletal conditions. Graduates of the program will possess expertise in evidence-based orthopaedic care and advanced skills in history taking and physical examination, diagnostics, special testing, and management of a variety of non-operative musculoskeletal injuries and conditions in an outpatient setting and on the battlefield. Residents will demonstrate competency in research design, methods, analysis and critical review. Graduates will be prepared to function as clinical scientists and become future leaders and mentors by setting the standard of scholarly excellence for physician assistants worldwide.

#### **Admission**

Candidates for admission must hold a Master's Degree in Physician Assistant Studies and be active-duty members of the U.S. Armed Services. Applicants must present a competitive undergraduate grade point average and scores on the GRE General Exam predictive of success in this program. Candidates must also meet all Baylor University Graduate School entrance requirements. Fully qualified candidates are competitively board-selected for a limited number of program spots.

### **Curriculum**

The 18-month curriculum totals 85 semester credit hours. The 19 clinical rotations (71 credit hours representing more than 4,900 training hours in academic hospitals), and 4 research courses (14 credit hours) used to develop and execute a research project. Both written and oral exams, preceptor evaluations, article reviews and presentations are used for assessment and parallel the standards set by the Accreditation Council for Graduate Medical Education (ACGME).

Each physician assistant resident is required to initiate and complete a research project, approved by the Institutional Review Board (IRB), during their 18-month curriculum. The initial two weeks of program instruction focus on preparing new residents for this project; introduction to statistical analysis, developing a research question, and submitting a research protocol are just a few topics discussed in detail. During the final month of the course of study, each resident will present the results of research project in written and oral form and defend the project before a doctoral examining committee. The examining committee is chaired by

the Program Director and includes three additional program faculty and a faculty member from the Baylor-Waco campus. A manuscript from the completed project will be submitted to an indexed, peer-reviewed journal for publication.

The curriculum includes the following courses:

Code	Title	Hours
MCO 6350	Introduction to Orthopaedic Clinical Evaluation and Procedures	3
MCO 6410	Introduction to Upper Extremity Sports Injury Management	4
MCO 6411	Introduction to Lower Extremity Sports Injury Management	4
MCO 6412	Evaluation and Management of Hand and Elbow Disorders	4
MCO 6413	Evaluation and Management of Foot and Ankle Disorders	4
MCO 6352	Orthopaedic Evaluation and Management of Spine Disorders	3
MCO 6353	Evaluation and Management of Neurologic Disorders	3
MCO 6354	Evaluation and Management of Pediatric Orthopaedic Disorders	3
MCO 6414	Evaluation and Management of Complex Wounds	4
MCO 6415	Evaluation of Joint Arthritis and Trauma Managed with Joint Reconstruction	4
MCO 6416	Musculoskeletal Oncology Evaluation and Management	4
MCO 6417	Introduction to Evaluation and Management of Orthopaedic Trauma	4
MCO 6418	Introduction to Evaluation and Management of General Trauma	4
MCO 6419	Introduction to Critical Care Management	4
MCO 6420	Advanced Sports Injury Management	4
MCO 6421	Advanced evaluation and management of orthopaedic trauma	4
MCO 6422	Advanced Critical Care Management	4
MCO 6355	Advanced Orthopaedic Clinical Evaluation and Procedures	3
MCO 6425	Urgent Orthopaedic Evaluation	4
MCO 6351	Evidence Based Orthopaedic Care	3
MCO 6423	Medical Research Design	4
MCO 6424	Approaches to Medical Data Collection and Analysis	4
MCO 6356	Techniques for Medical Research Presentation	3

## **General Surgery, DSc.P.A.**

## **Doctor of Science in Physician Assistant Studies-General Surgery**

**Associate Dean, Hospital Based Education:** Matthew S. Douglas, Lieutenant Colonel, U.S. Army

Army/Baylor Program Chair Person: Chanise K. Cyrus, Captain, U.S. Air Force

In the Fall 2012, Baylor University, in affiliation with the U.S. Army Medical Center of Excellence (MEDCoE) established the Doctor of Science in Physician Assistant in General Surgery degree (DSc.P.A.S.). The Army/Baylor Doctorate of Science Physician Assistant-General Surgery (DSc.P.A.S.-GS) Program serves as the benchmark for post-graduate PA education and research through the pursuit of clinical excellence, academic rigor, and scholarly activity. The program will challenge the graduate student through a strenuous clinical and academic schedule with the overall goals of improving quality of care, patient safety, and medical knowledge through education and research.

The DSc.P.A.S.-GS Program provides physician assistants an opportunity to develop advanced competencies in clinical research as well as in both operative assistance, and clinical management of General Surgery/ Trauma Surgery/ and Critical Care patients. This rigorous comprehensive training is conducted at Joint Base San Antonio Military Medical Center, Texas. Graduates will use the surgical and critical care skills acquired during the program to assist General Surgeons in the operative treatment of injured and critically wounded warriors on and off the battlefield, perform Critical Care for post-operative trauma/surgical patients, provide surgical care to military dependents and enhance the knowledge of medicine through education and research.

#### Admission

Candidates for admission must hold a Master's Degree in Physician Assistant Studies and be currently on active-duty as a member of the U.S. Military. Applicants must meet all service specific requirements prior to beginning the program. Applicants must have an overall minimum grade point average of 3.0 and obtain a score on the GRE general exam that is predictive of successful completion of the program. Candidates must also meet the entrance requirements of the Graduate School of Baylor University. Uniformed-services candidates will be selected by a competitive board process by their respective uniformed service.

#### Curriculum

The Doctor of Science in Physician Assistant in General Surgery degree (DSc.P.A.S.) is an 18 month, 86 semester hours, Doctorate of Science Program. The DSc.P.A.S.-GS program is taught by U.S. Military personnel under the supervision of the U.S. Army General Surgery Physician Assistant Program Director and General Surgery Physician Assistant Medical Director at Brooke Army Medical Center, Joint Base San Antonio Fort Sam Houston Texas. The program consists of approximately 4,000 clinical training hours, approximately 800 hours of classroom instruction, lectures, substantial reading assignments, oral presentations, monthly end of rotation exams (written and oral), bi-monthly high and low fidelity SIM, monthly procedure labs, and a research requirement. The D.Sc.P.A.S.-GS Program requires the completion of an evidence-based research project. During the final portion of the course of study, each resident will defend their research study and submit the results in a written format. The results of the project will be presented at an appropriate national conference and the manuscript will be submitted to a peer-reviewed journal for publication.

The curriculum is structured as follows:

Code	Title	Hours
MGS 6210	Surgical Basic Principles	2
MGS 6211	Perioperative Management	2

MGS 6212	The Abdomen	2
MGS 6213	Surgery of the Esophagus and Stomach	2
MGS 6214	Surgery of the Small Intestine, Large Intestine, Rectum, and Anus	2
MGS 6215	Surgery of the Liver and Biliary Tract	2
MGS 6216	Surgery of the Pancreas and Spleen	2
MGS 6217	Endocrine Surgery	2
MGS 6218	Breast Surgery	2
MGS 6219	Neurosurgery, Pediatric Surgery	2
MGS 6220	Burn/Critical Care Surgery	2
MGS 6221	Trauma Surgery	2
MGS 6222	Surgical Critical Care	2
MGS 6223	Surgery on the Lung, Chest Wall, and Mediastinum	2
MGS 6224	Surgical Oncology	2
MGS 6225	Vascular Surgery	2

#### **Practical Clinical Rotations**

Code	Title	Hours
MGS 6330	Orientation to General Surgery	3
MGS 6331	General Surgery Team A (Colorectal, General Surgery, Pediatric)	3
MGS 6332	General Surgery Team B (Minimally Invasive Surgery)	3
MGS 6333	General Surgery Team C (General Surgery)	3
MGS 6334	General Surgery (WH)	3
MGS 6335	General Surgery Team D (Surgical Oncology)	3
MGS 6336	Interventional Radiology	3
MGS 6337	Trauma Surgery (Rotation 1)	3
MGS 6338	Vascular Surgery	3
MGS 6339	Burn Surgery/Burn Critical Care (Rotation 2)	3
MGS 6340	Plastic Surgery	3
MGS 6341	Neurosurgery	3
MGS 6342	Trauma Surgery (Rotation 2)	3
MGS 6343	Trauma/Surgical Intensive Care Unit (Rotation 1)	3
MGS 6344	Trauma/Surgical Intensive Care Unit (STICU) (Rotation 2)	3
MGS 6345	Burn Surgery/Burn Critical Care (Rotation 1)	3
MGS 6346	Elective Concentration	3
MGS 6347	Clinical Research	3

## Physical Therapy, D.P.T. Doctoral Entry-Level Program (D.P.T.)

Program Director: Carrie W. Hoppes

Through an affiliation with Baylor University, students enrolled in the U.S. Army-Baylor University D.P.T. Program at the U.S. Army Medical Center of Excellence may qualify for a Doctor of Physical Therapy degree. The program is located at Joint Base San Antonio-Fort Sam Houston, Texas and is 30 months in length and includes 18 months of didactic

coursework, a clinical affiliation during Semester II, and 12 months of clinical internship. Students are commissioned officers in one of the three uniformed services: Army, Navy, or Air Force. Due to the students' active duty obligations and association with the uniformed services, certain policies and procedures governing students are unique to this program and may be found in the current DPT Program Manual or the Individual Student Assessment Plan (ISAP) published by this graduate program. The program is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE). Graduates of this program are eligible to take the National Physical Therapy Licensure Examination offered by The Federation of State Boards of Physical Therapy (FSBPT).

#### Mission

To produce active duty, commissioned physical therapists who are clinician scientists and leaders prepared for worldwide military health system practice.

Uniformed service physical therapists are generalist practitioners who might be assigned across the continuum of care in a variety of practice settings, including the deployed environment. However, the majority of physical therapists are working in a primary care role with an emphasis in prevention, examination, diagnosis, and intervention for patients with neuromusculoskeletal conditions. Our program focuses on academic, clinical, and research excellence to provide students with the knowledge, skills, evidence, problem solving ability, duties, responsibilities, and ethics to deliver high quality physical therapy patient care. Our program educates and develops physical therapy officers by providing those concepts, principles, methods, and role models which will inspire continuous personal and professional growth and service.

#### Admission

Applicants for admission to the program must hold a baccalaureate degree in either the arts or sciences from a college or university acceptable to Baylor University and the applicant must submit an application through the Physical Therapy Centralized Application Service (PTCAS). Applicants must present a grade point average and scores on the Graduate Record Examination that are predictive of success in this program. Prerequisite laboratory components must be taken in person. Hybrid formats that deliver didactics online and labs in person are acceptable. Prerequisite courses are listed in semester hour requirements. Course credits awarded in different formats must be equivalent to the semester hour requirement.

Required prerequisites include:

- 1. Human Anatomy with Lab: 4 semester hours
- 2. Human Physiology: 3 semester hours

Substitution for 1 and 2: Anatomy and Physiology 1 & 2 series with labs - 8 total semester hours.

- General Biology with Lab or Exercise Physiology with Lab: 4 semester hours or equivalent
- 4. Additional Biology: 3 semester hours

Note: If Exercise Physiology with lab is taken, then General Biology can be used for Additional Biology. Exercise Physiology "without lab" cannot substitute for the Additional Biology prerequisite.

- 5. Chemistry 1 with lab: 4 semester hours
- 6. Chemistry 2 with lab: 4 semester hours
- 7. Physics 1 with lab: 4 semester hours

- 8. Physics 2 with lab: 4 semester hours
- 9. General Psychology: 3 semester hours
- 10. Additional Psychology: 3 semester hours
- 11. Statistics: 3 semester hours

Specific courses which are accepted to meet the prerequisite course requirements are listed on the program website at www.baylor.edu/graduate/pt (http://www.baylor.edu/graduate/pt/).

Candidates must meet the entrance requirements of the Graduate School of Baylor University. In addition, they should be less than 42 years of age, be a U.S. citizen, and meet the medical fitness standards as prescribed by the Departments of the Army, Air Force, and the Navy. They must demonstrate a capacity for graduate study as well as the interest necessary to ensure productive scholarship. This program does not have a foreign language requirement.

#### **Graduate Requirements**

Matriculated students must achieve a grade of "C" or better in each course and maintain a grade point average of 3.0 or above. Students must complete a clinical affiliation at the end of Semester II and pass a comprehensive oral examination following the 18-month didactic portion of the course in order to transition to the 12-month clinical internship. Students must achieve entry level competence as a physical therapist, as demonstrated on the Physical Therapist Clinical Performance Instrument (PT CPI.) Students must also exhibit professional behaviors consistent with clinical practice as described by the Army Values and APTA Values within the D.P.T. Program Manual.

#### **Curriculum**

The four-semester curriculum includes outlined academic courses and clinical experience, a research project, and a comprehensive oral examination.

Course Semester I	Title	Hours
PT 6120	Evidence Based Practice I	1
PT 6131	Clinical Pathophysiology	1
PT 6204	Diagnostic Imaging and Procedures	2
PT 6209	Primary Care Musculoskeletal Physical Therapy	2
PT 6230	Neuromuscular Physiology	2
PT 6240	Clinical Medicine I	2
PT 6250	Therapeutic Interventions	2
PT 6253	Orthotic and Prosthetic Interventions	2
PT 6270	Research Methods I	2
PT 6300	Physical Therapy Fundamentals	3
PT 6410	Anatomy I	4
PT 6601	Musculoskeletal Physical Therapy I - Lower Member	6
	Hours	29
Semester II		
PT 6121	Evidence Based Practice II	1
PT 6151	Pharmacology for Physical Therapists	1
PT 6241	Clinical Medicine II	2
PT 6271	Research Methods II	2
PT 6352	Physical Agent Interventions	3

	Total Hours	124
	Hours	36
PT 6V98	Physical Therapy Internship	36.000
Semester IV	Hours	30
	Hours	30
PT 6405	Neuromuscular Physical Therapy	4
PT 6354	Advanced Therapeutic Interventions	3
PT 6333	Clinical Exercise Physiology	3
PT 6313	Neuroscience	3
PT 6308	Lifespan Physical Therapy	3
PT 6306	Cardiopulmonary Physical Therapy	3
PT 6282	Injury Control and Prevention	2
P1 0281	Physical Therapy in Deployed Environments	2
PT 6280 PT 6281	Executive Leadership and Management	2
PT 6212	Neuroanatomy	2
PT 6172	Research Methods III	1
PT 6142	Clinical Medicine III	1
PT 6107	Emerging Topics in Physical Therapy	1
Semester III	- · · · · · · · · · · · · · · · · · · ·	
	Hours	29
PT 6660	Physical Therapy Practice I	6
PT 6511	Anatomy II	5
PT 6503	Musculoskeletal Physical Therapy III - Upper Member	5
PT 6402	Musculoskeletal Physical Therapy II - Spine	4

# Occupational Therapy, DSc.O.T. Doctor of Science in Occupational Therapy

Program Director: Brian T. Gregg, Lieutenant Colonel, U.S. Army Deputy Program Director: Elaina J. DaLomba, Ph.D., OTR/L, MSW

In the Fall of 2009, Baylor University, in affiliation with the U.S. Army Medical Center of Excellence (MEDCoE) established the Doctor of Science in Occupational Therapy degree (DSc.O.T.). This degree is an advanced-practice post-professional clinical doctorate designed to meet Army occupational therapists' professional development and specialty needs. The program focuses on four pillars of foundational content: Behavioral Health, Upper Extremity Rehabilitation, Advanced Occupational Therapy Practice, and Research. Graduates of this program will be able to advance the practice of occupational therapy and expand the scope of care provided to warriors and military healthcare beneficiaries through the application of evidence-based practice and research.

#### **Admission**

Candidates for admission must hold a master's degree or entry-level doctoral degree in occupational therapy from a program accredited by the Accreditation Commission on Occupational Therapy Education.

Applicants must present a grade point average and scores on the GRE General Exam that are predictive of success in this program. Candidates must also meet the entrance requirements of the Graduate School of

Baylor University. Fully qualified candidates are competitively boardselected for a limited number of program spots.

#### Curriculum

Course

The 18-month curriculum totals 62 semester-credit hours of didactic study and clinical rotations. The program is offered at Joint Base San Antonio, Fort Sam Houston, Texas, and Brooke Army Medical Center, in San Antonio, Texas. The 18-month curriculum begins in January, with graduation in June of the following year. The DScOT program requires the completion of an evidence-based research project. During the final portion of the course of study, each resident will defend their research study and submit the results in a written manuscript. The results of the project will be presented at an appropriate national conference and the manuscript will be submitted to a peer-reviewed journal for publication.

The curriculum is structured as follows: Title

Course	Title	Hours
Semester I		
January-June		
MOT 6311	Evaluation and Intervention: Behavioral Health	3
MOT 6212	Behavioral Health Residency	2
MOT 6322	Differential Diagnosis in Occupational Therapy	3
MOT 6327	Quantitative Methods	3
MOT 6325	Evaluation and Intervention: Ergonomics	3
MOT 6319	Essentials of Evidence-Based Practice and Clinical Research	3
	Hours	17
Semester II		
June-October		
MOT 6116	Management of Combat and Operational Stress Control Residency	1
MOT 6223	Critical Research Appraisal	2
MOT 6315	Management of Combat and Operational Stress Control	3
MOT 6328	Quantitative Methods II	3
MOT 6341	Evaluation and Treatment of Upper- Extremity Conditions	3
MOT 6242	Upper Extremity Conditions Residency	2
	Hours	14
Semester III		
October-February	/	
MOT 6331	Evaluation and Intervention: Burn and Trauma Rehabilitation	3
MOT 6132	Burn and Trauma Rehabilitation Residency	1
MOT 6228	UE Occupation Centered Intervention & Cultural Awareness	2
MOT 6221	UE Occupation Centered Intervention & Cultural Awareness Residency	2
MOT 6337	Field Research for Occupational Therapy	3
MOT 6317	Qualitative Methods	3
MOT 6213	Evaluation and Intervention: Post- Traumatic Stress & Polytrauma	2

MOT 6214	Post-Traumatic Stress & Polytrauma Residency	2
-	Hours	18
Semester IV		
February-June		
MOT 6336	Aspects of Pharmacology, Complementary and Alternative Medicine, & Nutrition in Occupational Therapy	3
MOT 6243	Advanced Hand Surgery Outcomes for Occupational Therapists	2
MOT 6344	Advanced Professional Paper Product	3
MOT 6128	Clinical Management in Army Occupational Therapy	1
MOT 6441	Upper Extremity & Behavioral Health Conditions Residency	4
	Hours	13
	Total Hours	62

## Orthopaedic Physical Therapy, DSc.P.T.

Hours

## **Post-Professional Doctoral Fellowship/ Residency Programs (DSc.P.T.)**

Baylor University offers the Doctor of Science in Physical Therapy (DSc.P.T.) degree, with a major in Orthopaedics, in affiliation with the U.S. Army at two locations. The concentration for the program offered at Brooke Army Medical Center, Fort Sam Houston in San Antonio, Texas, is Orthopaedic Manual Physical Therapy (p. 193). For the program offered at Keller Army Community Hospital at the United States Military Academy, West Point, New York, the concentration is Sports Medicine and Primary Care (p. 194).

At both sites the curriculum lasts approximately 18 months. Cohorts enter the program at Brooke Army Medical Center in January of oddnumbered years and, at West Point, in July of even-numbered years.

## **Orthopaedic Manual Physical** Therapy, DSc.P.T.

## **Brooke Army Medical Center Fort Sam Houston, Texas**

Program Director: Bryan Pickens

Through an affiliation with Baylor University, students enrolled in the Army-Baylor University Doctoral Fellowship in Orthopaedic Manual Physical Therapy at Brooke Army Medical Center, Fort Sam Houston, Texas, complete additional requirements and may qualify for a Doctor of Science in Physical Therapy degree. The Graduate School of Baylor University provides academic oversight for the program. The uniqueness of this program necessitates significant differences in policies and procedures. Please refer to the most current Student Handbook published by this graduate program for details.

### **Objectives**

Our mission is to produce postgraduate-level, specialty-trained orthopaedic manual physical therapists who provide state-of-the-art, advanced care and clinically relevant research to benefit the Military Health System. We accomplish this through the advanced training and education of clinical experts, mentors, adult educators, and researchers. Our goal is to continue the U.S. Army's legacy as a leader in orthopaedic manual physical therapy and neuromusculoskeletal evaluation, and to promote evidenced-based clinical practice and research that benefits patients and the physical therapy profession.

#### **Admission**

Candidates for admission to the program must hold a master's degree (M.P.T.) or entry level doctoral degree (D.P.T.) in physical therapy from a program accredited by the Commission on the Accreditation of Physical Therapy Education. They must have a minimum of four years experience in orthopaedic physical therapy upon entry into the program and be a board-certified specialist through the APTA in Orthopaedics, Sports, or Electromyography. Applicants must present a grade point average and scores on the GRE General Exam that are predictive of success in this program. Candidates must also meet the entrance requirements of the Graduate School of Baylor University. Uniformed services candidates are selected by a competitive board process by their respective uniformed service.

#### **Curriculum**

The curriculum was developed as a clinical fellowship in orthopaedic manual physical therapy based on the Description of Advanced Specialty Practice (DASP) in Orthopaedic Manual Physical Therapy by the American Academy of Orthopaedic Manual Physical Therapists.

The training focuses on an advanced clinical reasoning model with emphasis on a patient-focused, hypothesis-based examination and careful observation of the effects of physical therapy intervention. The academic curriculum emphasizes anatomy, biomechanics, and physiology, with a foundation in clinical research and critical review of the literature. The program was credentialed as a residency by the American Physical Therapy Association in September of 1999, and as a fellowship in 2004. It is recognized by the American Academy of Orthopaedic Manual Physical Therapists. The sixty semester-hour program is divided into four semesters. Fellows are required to complete an individual research project, approved by an institutional review board, and submit the study for publication in an indexed peer-reviewed journal. The Doctor of Science in Physical Therapy (DSc.P.T.) degree will be granted upon successful completion of all credit courses, plus successful completion of an oral defense of their research project.

Course	Title	Hours
Semester I		
PHT 6191	Independent Study I	1
PHT 6391	Clinical Fellowship I	3
PHT 5241	Differential Diagnosis in Orthopaedic Physical Therapy	2
PHT 5326	Functional Physical Therapy Anatomy and Biomechanics: Lower Quarter	3
PHT 5382	Evaluation and Mobilization: Lower Quarter	3
PHT 5230	Essentials of Evidence-Based Practice and Clinical Research	2
PHT 5191	Special Topics: Seminar I	1
	Hours	15
Semester II		
PHT 6192	Independent Study II	1

Biomechanics: Upper Quarter PHT 5383 Evaluation and Mobilization: Upper Quarter PHT 5323 Pathophysiology of Therapeutic Exercise Hours  Semester III PHT 6193 Independent Study III PHT 6393 Clinical Fellowship III PHT 6332 Field Research in Physical Therapy PHT 5321 Aspects of Pharmacology and Nutrition in Physical Therapy PHT 5392 Evaluation and Mobilization: Advanced Lower Quarter Hours  Semester IV PHT 6194 Independent Study IV PHT 6394 Clinical Fellowship IV PHT 6393 Advanced Professional Paper Project PHT 5393 Evaluation and Mobilization: Advanced Upper Quarter PHT 5349 Radiology for Physical Therapists PHT 6101 Advanced Practicum in Physical Therapy PHT 6111 Advanced Orthopaedic/Sports Medicine and Surgery for Physical Therapists PHT 5192 Special Topics: Seminar II Hours	16
PHT 5383 Evaluation and Mobilization: Upper Quarter PHT 5323 Pathophysiology of Therapeutic Exercise  Hours  Semester III PHT 6193 Independent Study III PHT 6393 Clinical Fellowship III PHT 6332 Field Research in Physical Therapy PHT 5321 Aspects of Pharmacology and Nutrition in Physical Therapy PHT 5392 Evaluation and Mobilization: Advanced Lower Quarter  Hours  Semester IV PHT 6194 Independent Study IV PHT 6394 Clinical Fellowship IV PHT 6393 Advanced Professional Paper Project PHT 5393 Evaluation and Mobilization: Advanced Upper Quarter PHT 5349 Radiology for Physical Therapists PHT 6101 Advanced Practicum in Physical Therapy PHT 6111 Advanced Orthopaedic/Sports Medicine and Surgery for Physical Therapists	
PHT 5383 Evaluation and Mobilization: Upper Quarter PHT 5323 Pathophysiology of Therapeutic Exercise  Hours  Semester III PHT 6193 Independent Study III PHT 6393 Clinical Fellowship III PHT 6332 Field Research in Physical Therapy PHT 5321 Aspects of Pharmacology and Nutrition in Physical Therapy PHT 5392 Evaluation and Mobilization: Advanced Lower Quarter  Hours  Semester IV PHT 6194 Independent Study IV PHT 6394 Clinical Fellowship IV PHT 6393 Advanced Professional Paper Project PHT 5393 Evaluation and Mobilization: Advanced Upper Quarter PHT 5349 Radiology for Physical Therapists PHT 6101 Advanced Practicum in Physical Therapy PHT 6111 Advanced Orthopaedic/Sports Medicine	1
PHT 5383 Evaluation and Mobilization: Upper Quarter PHT 5323 Pathophysiology of Therapeutic Exercise  Hours  Semester III  PHT 6193 Independent Study III  PHT 6393 Clinical Fellowship III  PHT 6332 Field Research in Physical Therapy  PHT 5321 Aspects of Pharmacology and Nutrition in Physical Therapy  PHT 5392 Evaluation and Mobilization: Advanced Lower Quarter  Hours  Semester IV  PHT 6194 Independent Study IV  PHT 6394 Clinical Fellowship IV  PHT 6333 Advanced Professional Paper Project  PHT 5393 Evaluation and Mobilization: Advanced Upper Quarter  PHT 5349 Radiology for Physical Therapists	1
PHT 5383 Evaluation and Mobilization: Upper Quarter PHT 5323 Pathophysiology of Therapeutic Exercise  Hours  Semester III  PHT 6193 Independent Study III  PHT 6393 Clinical Fellowship III  PHT 6332 Field Research in Physical Therapy  PHT 5321 Aspects of Pharmacology and Nutrition in Physical Therapy  PHT 5392 Evaluation and Mobilization: Advanced Lower Quarter  Hours  Semester IV  PHT 6194 Independent Study IV  PHT 6394 Clinical Fellowship IV  PHT 6393 Advanced Professional Paper Project  PHT 5393 Evaluation and Mobilization: Advanced Upper Quarter	1
PHT 5383 Evaluation and Mobilization: Upper Quarter PHT 5323 Pathophysiology of Therapeutic Exercise  Hours  Semester III  PHT 6193 Independent Study III  PHT 6393 Clinical Fellowship III  PHT 6332 Field Research in Physical Therapy  PHT 5321 Aspects of Pharmacology and Nutrition in Physical Therapy  PHT 5392 Evaluation and Mobilization: Advanced Lower Quarter  Hours  Semester IV  PHT 6194 Independent Study IV  PHT 6394 Clinical Fellowship IV  PHT 6333 Advanced Professional Paper Project  PHT 5393 Evaluation and Mobilization: Advanced	3
PHT 5383 Evaluation and Mobilization: Upper Quarter PHT 5323 Pathophysiology of Therapeutic Exercise  Hours  Semester III  PHT 6193 Independent Study III  PHT 6393 Clinical Fellowship III  PHT 6332 Field Research in Physical Therapy  PHT 5321 Aspects of Pharmacology and Nutrition in Physical Therapy  PHT 5392 Evaluation and Mobilization: Advanced Lower Quarter  Hours  Semester IV  PHT 6194 Independent Study IV  PHT 6394 Clinical Fellowship IV	3
PHT 5383 Evaluation and Mobilization: Upper Quarter PHT 5323 Pathophysiology of Therapeutic Exercise  Hours  Semester III  PHT 6193 Independent Study III  PHT 6393 Clinical Fellowship III  PHT 6332 Field Research in Physical Therapy  PHT 5321 Aspects of Pharmacology and Nutrition in Physical Therapy  PHT 5392 Evaluation and Mobilization: Advanced Lower Quarter  Hours  Semester IV  PHT 6194 Independent Study IV	3
PHT 5383 Evaluation and Mobilization: Upper Quarter PHT 5323 Pathophysiology of Therapeutic Exercise  Hours  Semester III PHT 6193 Independent Study III PHT 6393 Clinical Fellowship III PHT 6332 Field Research in Physical Therapy PHT 5321 Aspects of Pharmacology and Nutrition in Physical Therapy PHT 5392 Evaluation and Mobilization: Advanced Lower Quarter  Hours  Semester IV	3
PHT 5383 Evaluation and Mobilization: Upper Quarter PHT 5323 Pathophysiology of Therapeutic Exercise  Hours  Semester III PHT 6193 Independent Study III PHT 6393 Clinical Fellowship III PHT 6332 Field Research in Physical Therapy PHT 5321 Aspects of Pharmacology and Nutrition in Physical Therapy PHT 5392 Evaluation and Mobilization: Advanced Lower Quarter  Hours	1
PHT 5383 Evaluation and Mobilization: Upper Quarter PHT 5323 Pathophysiology of Therapeutic Exercise  Hours  Semester III  PHT 6193 Independent Study III  PHT 6393 Clinical Fellowship III  PHT 6332 Field Research in Physical Therapy  PHT 5321 Aspects of Pharmacology and Nutrition in Physical Therapy  PHT 5392 Evaluation and Mobilization: Advanced	13
PHT 5383 Evaluation and Mobilization: Upper Quarter PHT 5323 Pathophysiology of Therapeutic Exercise  Hours  Semester III PHT 6193 Independent Study III PHT 6393 Clinical Fellowship III PHT 6332 Field Research in Physical Therapy PHT 5321 Aspects of Pharmacology and Nutrition in	3
PHT 5383 Evaluation and Mobilization: Upper Quarter PHT 5323 Pathophysiology of Therapeutic Exercise Hours  Semester III PHT 6193 Independent Study III PHT 6393 Clinical Fellowship III	3
PHT 5383 Evaluation and Mobilization: Upper Quarter PHT 5323 Pathophysiology of Therapeutic Exercise  Hours  Semester III PHT 6193 Independent Study III	3
PHT 5383 Evaluation and Mobilization: Upper Quarter PHT 5323 Pathophysiology of Therapeutic Exercise Hours Semester III	3
PHT 5383 Evaluation and Mobilization: Upper Quarter PHT 5323 Pathophysiology of Therapeutic Exercise Hours	1
PHT 5383 Evaluation and Mobilization: Upper Quarter PHT 5323 Pathophysiology of Therapeutic Exercise	16
PHT 5383 Evaluation and Mobilization: Upper Quarter	3
Biomechanics: Upper Quarter	3
PHT 5327 Functional Physical Therapy Anatomy and	3
PHT 5331 Quantitative Evaluation	3
PHT 6392 Clinical Fellowship II	3

## **Sports Medicine and Primary Care, DSc.P.T.**

## **Keller Army Community Hospital West Point, New York**

**Associate Dean, Hospital Based Education:** Matthew S. Douglas, Lieutenant Colonel, U.S. Army

**Army/Baylor Program Chair Person:** Michael Crowell, Lieutenant Colonel, PT, DSc

Through an affiliation with Baylor University, students enrolled in the Baylor University - Keller Army Community Hospital Sports Division 1 Fellowship at the United States Military Academy, West Point, New York, may qualify for a Doctor of Science in Physical Therapy degree in Orthopaedics, specializing in Sports Medicine. Residents are commissioned officers in one of the four uniformed services: Army, Navy, Air Force, and Public Health Service. Due to active duty obligations and association with the uniformed services, certain policies and procedures governing residents are unique in this program and may be found in the most current Policy and Procedure Manual published by this graduate program.

The program has two primary purposes: to produce graduates with expertise in evidence-based primary care for examining, diagnosing, managing, and preventing a variety of complex orthopaedic and sports injuries, and to ensure competency in sports medicine research design,

execution, analysis, and critical review. The Fellowship provides military physical therapists an opportunity to develop advanced competencies in triage and management of acute sports injuries while at the United States Military Academy, West Point, New York. Graduates will use these same competencies to return injured U.S. Service Members to a high level of military readiness. The concepts of returning injured athletes to play as quickly and safely as possible and returning injured service members to duty in garrison or combat, share the same goals, thereby preparing fellows for. "Sports Medicine on the Battlefield operational readiness through injury prevention and early intervention."

#### **Admission**

Candidates for admission to the program must hold a master's degree in physical therapy from a program accredited by the Commission on the Accreditation of Physical Therapy Education. They must have a minimum of four years of experience and be board-certified in orthopaedic or sports physical therapy upon entry into the program. The GRE General Test is required of all applicants, with a score predictive of success in this program. Candidates must also meet the entrance requirements of the Graduate School of Baylor University. Candidates are selected by a competitive board process by their respective uniformed service. All candidates must accept an active duty service obligation to remain on active duty after completion of the program.

#### Curriculum

The medical community nationwide recognizes the United States Military Academy at West Point as one of the forerunners in the surgical and rehabilitative management of athletic injuries. Experienced orthopedists, physical therapists, and athletic trainers currently work together to provide the best care possible to the cadet student-athletes. To this end, the curriculum focuses on an advanced clinical reasoning model with an emphasis on acute primary care management. The academic curriculum emphasizes anatomy, biomechanics, physiology, and athletic injury management, with a strong foundation in clinical research and critical literature review. The program was originally credentialed by the American Physical Therapy Association in June of 1999 and recently accredited as a Fellowship by the American Board of Physical Therapy Residency and Fellowship Education in 2015. The primary intent is to make the fellowship the leading institution in sports medicine research. The sixty semester-hour program is divided into four semesters. All Fellows are required to complete an individual research project, and submit the study for publication in an indexed peer-reviewed journal prior to graduation.

Course	Title	Hours
Semester I		
PHT 6387	Research and Statistics I	3
PHT 6391	Clinical Fellowship I	3
PHT 6310	Soft Tissue and Bone Pathophysiology	3
PHT 6320	Athletic Injuries I	3
PHT 6395	Advanced Sports Medicine Practicum I	3
PHT 6150	Orthopaedic Lecture Series I	1
	Hours	16
Semester II		
PHT 6388	Research and Statistics II	3
PHT 6392	Clinical Fellowship II	3
PHT 6340	Functional Anatomy and Biomechanics I	3

PHT 6292	Special Topics: Seminar I	2
	Hours	11
Semester III		
PHT 6341	Functional Anatomy and Biomechanics II	3
PHT 6393	Clinical Fellowship III	3
PHT 6321	Athletic Injuries II	3
PHT 6396	Advanced Sports Medicine Practicum II	3
PHT 6293	Special Topics: Seminar II	2
PHT 6152	Orthopaedic Lecture Series III	1
	Hours	15
Semester IV		
PHT 6389	Research and Statistics III	3
PHT 6394	Clinical Fellowship IV	3
PHT 6379	Advanced Radiology in Sports Medicine	3
PHT 6384	Independent Study	3
PHT 6397	Advanced Sports Medicine Practicum III	3
PHT 6294	Differential Diagnosis in Sports Medicine	2
PHT 6153	PHT 6153::Orthopedic Lecture Series III	1
	Hours	18
	Total Hours	60

## **Doctor of Occupational Therapy, OTD Entry-Level Program (0.T.D.)**

#### **Fort Sam Houston, Texas**

Program Director: Enrique V. Smith-Forbes

Through an affiliation with Baylor University, students enrolled in the U.S. Army-Baylor University O.T.D. Program at the Army Medical Center of Excellence (MEDCoE) may qualify for a Doctor of Occupational Therapy degree. The program is located at Joint Base San Antonio-Fort Sam Houston, Texas and is 30 months in length and includes 18 months of didactic coursework, and 12 months of two level II fieldwork clinical affiliations and a doctoral capstone experience and project. The Army-Baylor Occupational Therapy Department offers two distinct program tracks, entry-level and post-professional.

#### Mission

The mission of the Army-Baylor Occupational Therapy Doctorate (OTD) program is to produce active duty, commissioned occupational therapists who are clinician scientists and leaders prepared for worldwide military health system practice. The program focuses on academic and clinical excellence to prepare the students for public servant service with entry level knowledge, skills, clinical reasoning abilities, duties, responsibilities, and ethics to deliver high quality occupational therapy services based on scientific research. This mission is consistent with that of Baylor University, Robbins College of Health and Human Sciences, and the U.S. Army Medical Center of Excellence (MEDCoE) and describes the unique role of the program in preparing graduates to be responsible military citizens, educated leaders, dedicated scholars and skilled professionals who meet the workforce and healthcare needs of the U.S. Army.

## **General Information for the Army-Baylor Entry-Level OTD Program Description**

The Entry-Level Army-Baylor Occupational Therapy Doctorate (OTD) program provides an accelerated, learner-centered, occupation based,

educational program that emphasizes academic excellence, lifelong-scholarship, and servant leadership. This 30 month, educational program prepares doctoral-level, U.S. Army commissioned Occupational Therapy practitioners with the requisite clinical reasoning skills and professional values to be responsive to the occupational needs of persons, organizations and populations within the military they serve. Graduates are eligible to sit for the national certification examination administered by the National Board for Certification in Occupational Therapy (NBCOT). Graduates are employed as U.S. Army Occupational Therapists in such settings as hospitals, mental health facilities, combat stress control units, operational field units, rehabilitation hospitals, outpatient settings, administrative and leadership positions within the Army community. The Entry-Level Army-Baylor OTD program was granted CANDIDACY status by the accreditation by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 6116 Executive Blvd., Suite 200, North Bethesda, MD 20852-4929. ACOTE's telephone number c/o AOTA is (301) 652-AOTA and its Web address is https://acoteonline.org/. We are working to acquire approved accreditation prior to the first cohort graduation in 2024. For the graduate to sit for the national certification examination for the Occupational Therapist administered by the National Board for Certification in Occupational Therapy (NBCOT). The following must occur.

- · The program must hold ACOTE Candidacy Status,
- · Have an ACOTE pre-accreditation review,
- · Complete an ACOTE on-site evaluation,
- · Be granted ACOTE Accreditation Status and,
- Students must complete all academic and fieldwork requirements of the OTD Program.

After successful completion of this examination, the individual will be an Occupational Therapist, Registered (OTR). In addition, all states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination. Information about NBCOT and the certification examination can be found at https://www.nbcot.org/.

**Note:** A felony conviction may affect a graduate's ability to sit for the NBCOT certification examination or attain state licensure. An individual, who has a felony background and is considering entering an occupational therapy program, can have his or her background reviewed prior to applying for the exam by requesting an Early Determination Review: https://www.nbcot.org/en/Students/Services#EarlyDetermination (https://www.nbcot.org/en/Students/Services/#EarlyDetermination)

For more information about the programs, please contact: usarmy.jbsa.medical-coe.mbx.otd-support@mail.mil

#### Robbins College of Health and Human Sciences

The Entry-Level Army-Baylor OTD Program is sponsored by Baylor University through the Robbins College of Health and Human Services (RCHHS).

#### **U.S. Army Medical Center of Excellence**

The Entry-Level Army-Baylor OTD program is an in-residence program, housed at the U.S. Army Medical Center of Excellence at Fort Sam Houston, TX. Students are commissioned officers in the U.S. Army. Due to the students' active duty obligations and association with the uniformed services, certain policies and procedures governing students are unique to this program and may be found in the current OTD Program Manual

or the Individual Student Assessment Plan (ISAP) published by this graduate program.

## The Army-Baylor Entry-Level OTD Program Admission Requirements

The following requirements apply to the Entry-Level Army-Baylor OTD program and must be met by every applicant to be considered for admission. All individuals must work with their local Army Healthcare Recruiting Center to apply. Applicants do not apply to the program through Baylor University.

#### **Program Admission Requirements**

Admission to the Entry-Level Army-Baylor OTD program closely follows the admission criteria for all health science programs in the Robbins College of Health and Human Sciences with differences reflecting the need for prerequisite courses unique to, and in support of the OTD curriculum. Students applying to the Army-Baylor OTD program should have the requisite skills and demonstrated potential to navigate the academic rigors of an accelerated military based OTD education.

#### **Prerequisites for Admission**

All applicants must hold a Baccalaureate Degree in Arts or Sciences from an accredited university or be in the last semester of coursework at the time of the board. Minimum 3.0 overall GPA is required. The following prerequisites (or their approved transfer equivalents) are required for admission:

- · Biological Science with Lab (3 semester hours)
- · Human Anatomy and Physiology I with laboratory (4 semester hours)
- · Human Anatomy and Physiology II with laboratory (4 semester hours)
- · Kinesiology, Biomechanics, or Physics (3 semester hours)
- · Human Development (lifespan) (3 semester hours)
- · Social Sciences (200-level) (6 semester hours)
- Abnormal Psychology (3 semester hours)
- Statistics (3 semester hours)

The Graduate Record Examination (GRE) must be completed within the past five years of the board. Minimum 300 overall GRE score; Minimum 145 Verbal Score; Minimum 149 Quantitative Score; Minimum 3.5 Analytical Writing Score.

Applicants must also complete a minimum of 24 observation hours in Occupational Therapy as a volunteer or employee. It is recommended that the applicant complete these hours in a variety of clinical practice settings. Observational experience in a military OT practice or Veteran's Affairs OT practice is highly recommended.

Three Letters of Recommendation (LOR) are required: LORs must be sent directly to the Army Healthcare Recruiter. LORs must be signed by the author, dated, and on official letterhead. LORs should be addressed to the "Army-Baylor Occupational Therapy Doctorate Program Selection Board.

- LOR 1 From a Professor or Faculty Advisor. This LOR is separate from Dean's Letter stating applicant's projected graduation date.
- · LOR 2 From a current or previous Supervisor
- LOR 3 From anyone of the applicant's choosing (employer, professor, faculty member, occupational therapist, peer, etc.).
- LOR 4 (Only for applicants currently serving in the military) Endorsement from the Commander

 Personal Essay/Statement of Motivation (SOM) is required: Must be one page, 11-or-12-point Arial font, and bear the applicant's signature and date.

SOM should clearly state why the applicant seeks Army-Baylor OTD training and motivation for desire to commission as an occupational therapist in the U.S. Army.

SOM should include information on professional, leadership, and volunteer activities, research involvement, and military experience as applicable.

#### **Application**

Admission to the Army-Baylor OTD program is conducted by a formal application and recruitment process. All selected applicants must be motivated and capable of becoming a military Army officer undergoing rigorous academic and clinical preparation, and developing into a military occupational therapist consistent with the program mission and goals. Qualified students will be admitted regardless of race, color, national or ethnic origin, or gender. Potential candidates for the program must first apply through their local Army Healthcare Recruiting Office, www.goarmy.com, to compete for a seat in the program via an U.S. Army Recruiting Command (USAREC) accession board. The recruiter ensures the applicant meets military eligibility and confers with a selected OTD program faculty to ensure the candidate meets academic eligibility. The Robbins College of Health and Human Sciences and the Baylor University Graduate School works with the Army-Baylor OTD Program Director to review student candidates for the OTD program to ensure that students who are considered for the program meet admission standards for the Army-Baylor OTD program, Robbins College, and the Baylor University Graduate School.

#### **Application Review**

The Army-Baylor OTD Admissions Committee and faculty will review all completed applications (i.e., application and all supporting materials received) in the order of receipt. Applicants are evaluated based on the following items: Applicants are evaluated based on the following items:

- · Cumulative GPA
- · Pre-requisite GPA
- · GRE verbal percentile rank
- · GRE quantitative percentile rank
- · Observation hours
- · Letters of Recommendation
- · Personal Essay
- · Telephonic/Virtual Interview Score

Other factors considered, but not required:

- · Relevant work experience
- · Prior military experience

The Army-Baylor OTD admissions committee uses this evaluative process to ensure nondiscrimination and equal opportunity for all applicants. The Army-Baylor OTD admissions committee will grant admission interviews by invitation only. The Army-Baylor OTD program does not offer credit for previous work experience, coursework or experiential learning, nor is advanced placement credit available for this program.

#### **Interview Process**

The Army-Baylor OTD Program Director or designee will contact selected applicants and provide further instructions for completing the interview process.

#### **Application Deadlines**

The Army-Baylor OTD Application deadline is 10 February 2022. The Army-Baylor OTD Selection Board convenes March 2022. Applicants will be notified of board results by their Army Healthcare Recruiter in accordance with current policies and procedures. The Army-Baylor OTD Program will provide an official OTD Welcome Letter to board selected applicants after individuals have been notified of selection by their Army Healthcare Recruiter.

#### **How to Apply**

All Army-Baylor OTD Applicants (civilians, military service members, or ROTC Cadets) must work with their local Army Healthcare Recruiting Office to apply. Visit www.goarmy.com/amedd (https://www.goarmy.com/careers-and-jobs/specialty-careers/health-care.html) to find your local Army Healthcare Recruiter and to determine eligibility.

#### **Academic Eligibility**

- Bachelor's degree from a regionally accredited institution prior to Army-Baylor OTD classes beginning. Provisional admission may be granted pending completion of the undergraduate degree. Students are required to successfully complete and document a minimum of four (4) FTE academic years of pre-professional preparation.
- Must complete all prerequisite courses with a prerequisite coursework as listed above
- Graduate Record Examination (GRE) completed within the last 5 years, including the analytical writing portion.
- Must NOT be a graduate of an entry-level occupational therapy program (U.S. or foreign), regardless of the level of degree conferred. Note: this requirement does not restrict pre-occupational therapy degrees, or those with COTA certification from applying. Only graduates of entry-level OT programs from any degree level are NOT eligible for admission to the entry-level Army-Baylor OTD program.
- · Must NOT have ever matriculated into another OTD program.

#### Military Eligibility

- Applicants must be U.S. Citizens.
- · Applicants must be between 21 and 42 years old.
- Applicants must be eligible for a 'Secret' security clearance and achieve a favorable security background screening.
- Applicants must meet the medical screening standards for commissioning. Applicants will complete a physical examination where the Department of Defense screens for certain conditions that may be disqualifying for military service. All applicants must meet height and weight standards to be deemed eligible for commissioning.
- Applicants must meet U.S. Army physical fitness standards. For more information, please visit: https://www.army.mil/acft/.
- \*\*\*Students incur a 90 months service obligation (30 months training
   + 60 months Active Duty obligation) if selected for the program. \*\*\*

#### **Special Circumstances:**

- Current Service Members must obtain a Conditional Letter of Release from their current branch prior to the application deadline.
- Current military officers with greater than eight years Active Federal Commissioned Services (AFCS) by 01 November of the year the

applicant is boarding are ineligible to apply. AFCS waivers may be considered on a case-by-case basis by the Army Medical Specialist Corps.

 ROTC Cadets are eligible to apply prior to graduation and do not require an approved Education Delay since the OTD is an Active Duty Program. ROTC Cadets will work with their local Army Health Care Recruiter to apply.

## Minimum Technology Specifications Computer Requirements

The student is required to have a laptop computer and a mobile device that can support the technology programs and resources used by the Army-Baylor OTD program. The student is required to have the laptop computer (with a full version of Chrome browser), and mobile device in possession at the time of the Army-Baylor OTD Program Orientation.

#### Laptop:

- The minimum system requirements for a PC or Mac laptop computer are listed below.
- System performance (processing speed and available RAM) will vary based upon installed software, actively running software/ applications, and internet speed.
- Laptop computer with Windows or iOS operating system, is acceptable with the minimum requirements below.
- Each student should ensure a laptop, internet speed/capacity, a working microphone, and webcam that can support the technology programs and resources used throughout the Army-Baylor OTD Program.

#### Additional Requirements Once Accepted into the Program

Once accepted into the Army-Baylor Occupational Therapy Program, and prior to beginning classes, the student must:

- Attend Army Medical Department (AMEDD) Direct Commissioning Course (DCC) and Basic Officer Leader Course (BOLC) prior to the OTD program start date.
- Attend the mandatory Army-Baylor OTD Program Orientation.
- Purchase all required OTD textbooks, manuals and laboratory supplies.
- Assume all responsibility for transportation to and from all facilities used for educational experiences, including clinical agencies assigned.
- Adhere to the Army-Baylor OTD Program Dress Code (i.e. military appropriate uniform, scrubs, graduate school research uniform)

## **Army-Baylor OTD Program Curriculum**

The professional curriculum leading to the Doctor of Occupational Therapy degree requires students to complete 120 semester credit hours of coursework in 8 continuous academic semesters over a 30- month period. Students are enrolled into the Army-Baylor OTD program as a cohort and complete required courses in a prescribed, sequential manner. Course sequencing within the curriculum is designed to optimize the student's ability to learn and integrate course material into future didactic and clinical education experiences, culminating in the doctoral capstone. The curriculum is dynamic to keep abreast with best evidence in both clinical and educational practice.

The Army-Baylor OTD faculty believe that student-centered teaching promotes discovery and clinical reasoning based client-centered service

delivery characterized by ethical treatment decisions. This approach challenges students to expand their understandings of the relevance of occupational therapy to include considerations about the dynamic interaction of occupational performance, social participation and Army values. The Army-Baylor OTD curriculum design is comprised of the OTD Practice Sequence developed to prepare students for Fieldwork II and the OTD Scholarship Sequence developed for doctoral-level preparation for research and for application of in-depth knowledge required for the Doctoral Capstone. Stemming from the program's five curricular threads the faculty have established the following curricular learning outcomes.

At the time of graduation from the program, the student will be able to:

- Utilize clinical reasoning in the occupational therapy process based on critical analysis, reflection and a dedication to excellence;
- Articulate the positive relationship between occupation and health and appreciate the occupational nature of humans as a core philosophical assumption of the profession;
- Provide client-centered care based on the principles, beliefs, and values of occupational therapy and a steadfast commitment to Army values and identity;
- Demonstrate servant-leadership roles leading to an in-depth understanding of a specialized competency in the profession that contributes to solving problems facing people and communities worldwide;
- Demonstrate a commitment to scholarly practice and research through lifelong learning and critical inquiry.

Code	Title	Hours
Semester I		
OTD 6315	Foundations of Occupational Therapy	3
OTD 6213	Pathophysiology in Occupational Therapy	2
OTD 6214	Research Methods I	2
OTD 6216	Professional Practice and Ethical Formation Seminar	2
OTD 6515	Clinical Anatomy and Lab	5
OTD 6218	Evidence Based Practice Research Proposal	2
Semester II		
OTD 6224	Research Methods II	2
OTD 6328	Neuroscience	3
OTD 6323	Human Movement	3
OTD 6226	Occupational Therapy Across the Lifespan	2
OTD 6228	Occupational Therapy Clinical Skills	2
OTD 6229	OT Theory	2
Semester III		
OTD 6431	Occupational Therapy in Mental Health (OTD 6431::Occupational Therapy in Mental Health)	4
OTD 6235	Level IA Fieldwork (Mental Health)	2
OTD 6334	(OTD 6334::Physical Rehabilitation: Neurorehabilitation)	3
OTD 6236	Physical Rehabilitation: Lab	2
OTD 6233	Clinical Education Seminar	2
OTD 6239	Level IB Fieldwork: Adults and Older Adults	2

OTD 6435	Occupational Therapy with Adult and Older Adult Populations (OTD 6435::Occupational Therapy with Adult and Older Adult Populations)	4
Semester IV		
OTD 6241	Doctoral Mentorship and Research I (OTD 6241::Doctoral Mentorship and Research I)	2
OTD 6243	Management and Program Development	2
OTD 6245	OT Psychosocial COSC and Wellness	2
OTD 6247	Level IC Fieldwork: Children and Youth	2
OTD 6445	(OTD 6445::Occupational Therapy with Children and Youth Populations)	4
OTD 6140	Professional Leadership and Advocacy	1
Semester V		
OTD 6451	(OTD 6451::Upper Quarter Evaluation and Intervention)	4
OTD 6250	Level ID Fieldwork: Upper Quarter	2
OTD 6259	Doctoral Mentorship and Research II	2
OTD 6150	(OTD 6150::Pedagogy)	1
OTD 6350	Human Performance Optimization (Human Performance Optimization)	3
OTD 6155	Military Healthcare Policy and Injury	1
OTD 6258	(OTD 6258::Professional Competency)	2
Semester VI		
OTD 6V60	Level IIA Fieldwork	12
OTD 6167	(OTD 6167::Doctoral Mentorship and Research III)	
Semester VII		
OTD 6V65	(OTD 6V65::Level IIB Fieldwork)	12
OTD 6177	(OTD 6177::Doctoral Mentorship and Research IV)	1
Semester VIII		
OTD 6V85	(OTD 6V85::Doctoral Capstone Experience)	15
OTD 6387	(OTD 6387::Doctoral Capstone Project)	3
Total		120

## **Courses of Instruction Prefixes for Courses of Instruction**

Subject	Prefix
Accounting	ACC
Akkadian	AKK
American Studies	AMS
Anthropology	ANT
Apparel Design and Merchandising	ADM
Aramaic	ARA
Archaeology	ARC
Art	ART
Art History	ARTH
Asian Studies	AST
Aviation Sciences	AVS
Bioinformatics	BINF
Biology	BIO

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Biomedical Engineering	BME
Biomedical Studies	BMS
Business	BUS
Business Law	BL
Chemistry	CHE
Child and Family Studies	CFS
Chinese	CHI
Classics	CLA
Communication Sciences and Disorders	CSD
Communication Studies	CSS
Computer Science	CSI
Curriculum and Instruction	EDC
Doctor of Physical Therapy	DPT
Ecology, Earth, Environmental Science	EEES
Economics	ECO
Educational Administration	EDA
Educational Leadership	EDL
Educational Psychology	EDP
Electrical and Computer Engineering	ELC
Engineering	EGR
English	ENG
Entrepreneurship	ENT
Environmental Science	ENV
Family and Consumer Sciences	FCS
Film and Digital Media	FDM
Finance	FIN
Forensic Science	FORS
French	FRE
Geology	GEO
German	GER
Gerontology	GRT
Global Engagement	GBL
Great Texts	GTX
Greek	GRK
Health Education	HED
Healthcare Policy and Administration	HPA
Hebrew	HEB
History	HIS
Human Performance	HP
Health Services Research	HSR
Information Security	ISEC
International Business	INB
Journalism	JOU
Latin	LAT
Latin American Studies	LAS
Library Science	LS
Management	MGT
Management Information Systems	MIS
Marketing	MKT
Mathematics	MTH
Mechanical Engineering	ME
Medical Humanities	MH
iviculcal numanilies	IVICT

Middle East Studies	MES
Modern Languages and Cultures	MLC
Museum Studies	MST
Music Ensemble	MUEN
Music	MUS
Neuroscience	NSC
Nursing	NUR
Nutrition Sciences	NUTR
Philosophy	PHI
Physics	PHY
Political Science	PSC
Psychology	PSY
Public Health	PUBH
Quantitative Business Analysis	QBA
Recreation and Leisure Services	RLS
Religion	REL
Russian	RUS
Slavic and East European Studies	SEES
Social Innovation Collaborative	SIC
Social Work	SWO
Sociology	SOC
Spanish	SPA
Sport Management	SPM
Statistics	STA
Syriac	SYR
Teacher Education	TED
Theater Arts	THEA
Ugaritic	UGA

## **Affiliated Programs**

Subject	Prefix
Business	MBUS
Business Law	MBL
Clinical Orthopedics	MCO
Economics	MECO
Emergency Medicine	MEM
Finance	MFIN
Health Care Administration	HCA
Management	MMGT
Marketing	MMKT
Master's Program Nutrition	MPN
Military General Surgery	MGS
Military Nursing Anesthesia	MNUR
Military Occupational Therapy	MOT
Occupational Therapy Doctor	OTD
Physical Therapy	PT
Physical Therapy (Doctoral)	PHT

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## **Accounting (ACC)**

#### ACC 5121 Accounting Planning (1)

Pre-requisite(s): Admission to MBA program

Technical accounting concepts that students must master in order to plan an operation effectively. These topics, typically identified as managerial accounting, include traditional cost allocation procedures, cost behavior and cost estimation, contribution margin income statements, and budgets. The general approach will be the use of accounting information rather than its accumulation and distribution.

#### ACC 5122 Accounting Implementation (1)

Pre-requisite(s): ACC 5121

Operating issues as operations are begun. Topics include controlling dayto-day operations and responsibility accounting, and short-term operating decisions. Additional topics include accounting for cash, accounts receivable, inventories, plant and equipment, current and long-term liabilities, installment notes payable, and bonds. Using the information provided by the accounting system and establishing appropriate operating procedures will be emphasized.

#### ACC 5123 Accounting in a Changing Environment (1)

Pre-requisite(s): ACC 5122

Skills used in evaluating and adapting to change. Topics include the income statement, the balance sheet, the cash flow statement, analysis of financial statements, transfer pricing, and international operations. Emphasis will be upon providing non-accounting professionals with the accounting knowledge they need to be successful in today's rapidly changing environment.

#### ACC 5300 Accounting Tools for Management Decision Making (3)

Pre-requisite(s): Admission to graduate business program
This course covers a range of financial accounting and managerial
accounting topics designed to provide managers with the accounting
information needed for effective decision-making. Topics include cost
behavior, break-even analysis, budgeting, standard costs, relevant costs,
equity and dividend policy, statement of cash flows, investments, and
other timely accounting topics.

#### ACC 5301 Business Foundations - Accounting (3)

This course is required for MBA and MSIS students who do not have an undergraduate degree in business from an AACSB-accredited institution. The course will provide students with a foundation in accounting which is expected of all business graduate students.

#### ACC 5305 Financial Accounting (3)

Pre-requisite(s): Admission to the Executive MBA program
This course exposes students to accounting from the perspective of
managers, investors, and creditors. Reading and interpreting financial
statements is a primary focus. Course topics include the limitations of
financial statements, use of financial statements in the determination of
company value, and internal controls.

#### ACC 5308 Management Accounting Seminar (3)

Pre-requisite(s): Admission to MAcc or MTax program; or consent of instructor

Role of accounting analysis in managerial planning and control, with an emphasis on facilitating the development and implementation of business strategies.

#### ACC 5311 Energy Accounting and Law (3)

This course provides an overview of the oil and gas industry with respect to the accounting, tax, and legal functions of an organization. This includes the introduction of general terminology, history, and technical advances in the oil and gas industry as well as detailed analyses of industry-specific accounting methods and cost recovery systems as well as financing and organizational structure trends in the industry.

#### ACC 5312 Data and Analytics in Accounting (3)

Students apply data and analytics skills to audit, tax, operations management, and other accounting issues, focusing on data visualizations and applied statistics. Students examine current developments in technology and analytics and relate them to the accounting profession.

#### ACC 5317 Information Systems Auditing (3)

Pre-requisite(s): Admission to MAcc, MTax, or MSIS program; or consent of instructor

An examination of theories and practices of information systems auditing. Practical exposure to information systems audit tools and risk assessment will be emphasized.

#### ACC 5320 Managerial Accounting (3)

Pre-requisite(s): Admission to the Executive MBA program Students examine accounting's role in the information flow of an organization while focusing on measurement of decision-making and performance. Topics include budgeting, variance analysis, direct costing, profit centers, investment centers, transfer pricing, and ethics. Participants learn to effectively use accounting information in their decision-making process.

#### ACC 5325 Governmental and Nonprofit Accounting (3)

Pre-requisite(s): Admission to MAcc or MTax program or permission of instructor

Examination of accounting, financial reporting, and budgeting for state and local governments, the Federal, and not-for-profit entities.

#### ACC 5330 Seminar in Auditing and Assurance Services (3)

Pre-requisite(s): Admission to MAcc or MTax program; or consent of instructor

A study of auditing and assurance services theories and methodologies through use of case studies, video simulations and reading of current literature. Topical coverage includes emerging issues in auditing, attestation, and assurance services.

#### ACC 5331 Fraud Examination (3)

Pre-requisite(s): Admission to MAcc or MTax program; or consent of instructor

An in-depth study of the nature of financial fraud, its legal elements and criminology, and the methods used to prevent and detect it. Included is exposure to the process by which financial fraud, including computer fraud, is investigated. Litigation techniques, including the giving of expert testimony, are studied. Fraud prevention techniques for business entities are also covered.

#### ACC 5335 Business and Professional Ethics for Accountants (3)

Pre-requisite(s): Admission to MAcc or MTax program; or consent of instructor

Examination of moral and ethical issues within the accounting profession and the broader business environment. Includes a broad study of ethical behavior and decision making and an examination of various professional codes of conduct within the accounting profession. Central to this examination will be the discussion of integrity, independence, and objectivity, as well as accountants' legal liability.

#### ACC 5340 Tax Considerations in Business Decisions (3)

Pre-requisite(s): Admission to MAcc program; or consent of instructor Tax principles, rules, and alternatives: emphasis on effect on business decisions. Includes income and deductions, employee incentives and fringe benefits, cost recovery, tax-free exchanges, gains and losses, form of business organization (proprietorships, partnerships, or corporations), estate and gift taxes, international taxation.

#### ACC 5350 Advanced Auditing Analytics (3)

Pre-requisite(s): ACC 5330

Auditing theory and analytical techniques through the use of cases, problems, and current literature. Specific topics include changing standards, data and analytics, exploration of analytical methodologies, and current issues in auditing.

#### ACC 5355 Cases in Accounting (3)

Pre-requisite(s): Admission to MAcc or MTax program; or consent of instructor

Case-study applications of accounting theory to actual business situations. Emphasis is on an in-depth understanding of elements of financial statements, problem recognition and problem solving as well as the impact of various business situations upon financial reporting practices.

#### ACC 5361 Corporate Taxation (3)

Pre-requisite(s): Admission to MAcc or MTax program; or consent of instructor

Federal income taxation of corporations and their shareholders: problems of organizing and capitalizing a corporation, determinants of the corporate income tax base, non-liquidating and liquidating distributions, reorganizations, and penalty taxes.

#### ACC 5362 Partnership and S Corporation Taxation (3)

Pre-requisite(s): Admission to MAcc or MTax program; or consent of instructor

Major aspects of taxation affecting flow-through entities and their owners. Emphasis on tax law by studying the Internal Revenue Code, Treasury Regulations, IRS Rulings, and case law. Tax planning and preparation of entity tax returns.

#### ACC 5364 International Taxation (3)

Pre-requisite(s): Admission to MAcc of MTax program or consent of instructor

Introduction to jurisdictional tax issues and laws surrounding foreign taxation of United States taxpayers and United States taxation of foreigners doing business in the United States.

#### ACC 5365 Advanced Individual Taxation (3)

Pre-requisite(s): Admission to MAcc or MTax program; or consent of instructor

In-depth coverage of selected areas of taxation relevant to individuals including the alternative minimum tax system; limitations on losses and deductions; acquisitions; uses and dispositions of interests in property; depreciation methods; characterization and reporting of gains and losses; deferral techniques; and other current topics.

#### ACC 5370 Tax Research (3)

Pre-requisite(s): Admission to MAcc or MTax program; or consent of instructor

In-depth treatment of the process necessary to research a tax problem efficiently, to arrive at a defensible solution, and to communicate that solution effectively. Students will also learn the process necessary to research a tax problem efficiently, to arrive at a defensible solution, and to communicate that solution effectively.

#### ACC 5378 Seminar in International Accounting (3)

Pre-requisite(s): Graduate standing

Official and unofficial generally accepted accounting principles (GAAP) used in other major countries. International accounting standards, which are used by many countries that do not have well-developed national GAAP, will also be studied. The course is designed to facilitate the understanding and financial analyses of international corporations.

#### ACC 5380 Advanced Financial Accounting Topics (3)

Pre-requisite(s): Admission to MAcc or MTax program; or consent of instructor

Business combinations and consolidated financial statements, accounting for partnerships, governmental and not-for-profit accounting, and other topics of contemporary interest.

#### ACC 5385 Financial Statement Analysis (3)

Pre-requisite(s): Admission to MAcc or MTax program or permission from Department Chair of Accounting or Director of Accounting Graduate Programs

An analysis of financial statements in order to examine cash flows, make judgments about earnings quality and uncover hidden assets and liabilities as part of the strategic analysis of firms. Financial statement analysis is used prospectively to forecast and value firms using cash flow based and accounting based methods. Tools are applied specifically to the valuation of equities.

#### ACC 5390 Accounting Research and Pedagogy (3)

Seminar to introduce graduate students to the application of advanced research skills to a variety of current accounting issues and to the exploration of curricular issues, including course development and content, across a variety of technical topics relevant to the professional accountant.

#### ACC 5395 Internship in Accounting (3)

Pre-requisite(s): Admission to MAcc or MTax program and Consent of Director of Accounting Internships

Directed real-world learning experience under the supervision of a practicing accountant. The internship assignment must be approved by the Director of Accounting prior to enrollment.

#### ACC 5420 Managerial Accounting (4)

Students examine the role of accounting in the information flow of an organization while focusing on measurement of decision-making and performance. Topics include budgeting, cost-volume-profit analysis, activity costing, planning, forecasting, performance evaluation, and ethics. Participants learn to use accounting information effectively in their decision-making process.

#### ACC 5V98 Special Studies in Accounting (1-6)

Pre-requisite(s): Admission to MAcc or MTax program; or consent of instructor

Individualized research in accounting. Students' proposals for special study project must be approved by the supervising faculty member. Offered on demand and by consent of the adviser for one to six semester hours.

## **Akkadian (AKK)**

#### AKK 5307 Akkadian (3)

Cross-listed as REL 5326

Pre-requisite(s): HEB 3302 or equivalent

An introduction to the grammar, syntax, and vocabulary of Akkadian.

## **American Studies (AMS)**

#### AMS 5304 Bibliography and Research Methods (3)

Cross-listed as ENG 5304

See ENG 5304 for course information.

#### AMS 5306 Literary Criticism: Seminar (3)

Cross-listed as ENG 5306

See ENG 5306 for course information.

#### AMS 5308 Independent Study in Literature (3)

Cross-listed as ENG 5308

See ENG 5308 for course information.

#### AMS 5310 Research Methods in Mass Communication (3)

Cross-listed as JOU 5310

See JOU 5310 for course information.

#### AMS 5315 Foundations of the American Economy (3)

Cross-listed as EDC 5315

See EDC 5315 for course information.

#### AMS 5316 Basic American Documents (3)

Cross-listed as EDC 5316

See EDC 5316 for course information.

#### AMS 5320 Theory of Mass Communication (3)

Cross-listed as JOU 5320

See JOU 5320 for course information.

#### AMS 5330 American Political Development (3)

Cross-listed as PSC 5330

See PSC 5330 for course information.

#### AMS 5332 Human Growth and Development (3)

Cross-listed as EDP 5332

See EDP 5332 for course information.

#### AMS 5333 Psychology of Learning (3)

Cross-listed as EDP 5333

See EDP 5333 for course information.

#### AMS 5335 Research in Education (3)

Cross-listed as EDP 5335

See EDP 5335 for course information.

#### AMS 5336 History of American Christianity (3)

Cross-listed as REL 5336

See REL 5336 for course information.

#### AMS 5340 The American Founding (3)

Cross-listed as PSC 5340

See PSC 5340 for course information.

#### AMS 5350 Seminar in Mass Communication (3)

Cross-listed as JOU 5350

See JOU 5350 for course information.

#### AMS 5360 Seminar in United States History (3)

Cross-listed as HIS 5360

See HIS 5360 for course information.

#### AMS 5365 Seminar in Public History (3)

Cross-listed as HIS 5365

See HIS 5365 for course information.

#### AMS 5367 Seminar in Oral History (3)

Cross-listed as HIS 5367

See HIS 5367 for course information.

#### AMS 5370 Advanced Graduate Research and Writing (3)

Cross-listed as HIS 5370

See HIS 5370 for course information.

#### AMS 5371 Religion in the American South (3)

Cross-listed as HIS 5371

See HIS 5371 for course information.

#### AMS 5389 Contemporary American Literature (3)

Cross-listed as ENG 5395

See ENG 5395 for course information.

#### AMS 5391 Early American Literature (3)

Cross-listed as ENG 5391

See ENG 5391 for course information.

#### AMS 5393 Nineteenth Century American Literature (3)

Cross-listed as ENG 5393

See ENG 5393 for course information.

#### AMS 5394 Modern American Literature (3)

Cross-listed as ENG 5394

See ENG 5394 for course information.

#### AMS 5395 Seminar in American Educational Thought (3)

Cross-listed as EDA 6370, EDL 6370

See EDA 6370 for course information.

#### AMS 5396 American Studies: Seminar (3)

Cross-listed as ENG 5396

See ENG 5396 for course information.

#### AMS 5V90 Independent Study in Mass Communication (1-3)

Cross-listed as JOU 5V90

See JOU 5V90 for course details.

#### AMS 5V99 Thesis (1-9)

hrs.

## **Anthropology (ANT)**

#### ANT 5305 Multicultural Societies (3)

Pre-requisite(s): Consent of instructor

Multicultural societies will be examined with respect to cultural histories as well as modern problems. Special attention will be given to the cultural complexity of the continental United States.

#### ANT 5311 Descriptive and Exploratory Methods in Anthropology (3)

Pre-requisite(s): Consent of the instructor

Modern approaches to descriptive, exploratory, and formative anthropological research, with foundational concepts underlying research design as well as core methodologies. Students develop a domestic research project to collect primary data and gain experience in ethnographic methods, including participant observation, mapping, interviewing, survey design, data management and analysis (indexing, coding, transcribing, and related methods).

#### ANT 5312 Laboratory Methods in Anthropological Reserach (3)

Pre-requisite(s): Consent of the instructor

Experience conducting actual research in human evolutionary biology. Students collect data on living humans, perform laboratory analyses, statistical analyses, and manuscript preparation and presentation. Students gain experience with scientific methodology, hypothesis generation and study design, human subjects committees, biosafety and bioethics, biological sample collection, biomarker assays, survey design, and statistical analyses.

#### ANT 5313 Professional Skills and Grant Writing (3)

Pre-requisite(s): Consent of the instructor

Students learn how granting at the National Science Foundation and National Institutes of Health works, identify research and publication biases, recognize ethical issues in research, distinguish good science from bad attempts at it, identify potential granting opportunities, develop general writing and oral presentation skills, and develop peer reviewing skills.

#### ANT 5314 Advanced Human Biological Variation (3)

This course examines human biological variation, with a focus on human genetic and phenotypic diversity, adaptation, and health disparities in contemporary global populations. The overall framework for understanding human variation is evolutionary and biocultural. It draws from various scientific disciplines, including anthropology, evolutionary biology, genetics, physiology, nutrition, psychology, and global health.

#### ANT 5325 Advanced Medical Anthropology (3)

Students are taught key concepts in Medical Anthropology to examine how health and wellbeing are socially and culturally constituted in contexts of cultural diversity. We bring key insights from anthropological cross-cultural comparisons to public health and medical practice.

#### ANT 5331 Advanced Global Health Ethics (3)

Pre-requisite(s): Consent of the instructor

Study of social theory that informs historical transformations in the ethics of global public health, including the history of research and practice in international and population health. Topics include equality and equity, access and competition, homogeneity and diversity, legitimacy and power, responsiveness and exploitation, and moral reasoning and justice, among others.

#### ANT 5336 Advanced Global Health Policy (3)

Pre-requisite(s): Consent of the instructor

Critique of existing domestic and international policy goals that include efforts to improve global health. Special attention (via analyses of case-studies) is given to the ethical and legal principles pertaining to global health policies.

#### ANT 5V90 Special Problems in Anthropology (1-6)

Pre-requisite(s): Instructor consent

Advanced work in Anthropology on variable topics. Subject and hours of credit agreed upon by student and instructor prior to registration. May be taken more than once provided the content differs substantially from that of any prior offering of the course that the student has taken.

#### ANT 6V97 Research (1-12)

Pre-requisite(s): Only graduate students prior to candidacy may enroll, and only with consent of the Graduate Program Director
Supervised research for doctoral students developing a dissertation proposal and studying for the preliminary examination required for advancement to candidacy. A student may repeat this course for credit with a maximum of twelve total hours.

#### ANT 6V98 Internship (1-6)

Pre-requisite(s): Graduate Program Director approval required Provides graduate students opportunity for internship work experience in research positions with consent of advisory committee.

#### ANT 6V99 Dissertation (1-12)

Pre-requisite(s): Admission to candidacy and approval from Graduate Program Director required

Research, data analysis, writing, and defense of an approved doctoral dissertation project. Student must have been admitted to candidacy before registering for dissertation hours.

## **Aviation Sciences (AVS)**

#### AVS 5320 Instrumentation and Test Stand Laboratory (3)

Pre-requisite(s): AVS 4305 and credit or concurrent enrollment in AVS 4320 and 4330

A laboratory-based course where students gain hands-on experience with (i) modern equipment used to measure air pollution levels;(ii) contemporary engine test equipment for both piston and turbine aircraft engines, including dynamometers and exhaust emission analysis instrumentation; and (iii) the computer software and hardware to enable data collection and reduction via either data loggers and computer manipulation, or by direct computer data capture.

#### AVS 5330 Development of Biofuels in Aviation (3)

Pre-requisite(s): AVS 1312 (or its equivalent); CHE 1301 or AVS 4330 (or their equivalents)

Rationale for developing and using biofuels in aviation. History of the development of biofuels as aviation fuels. History of fossil fuels. International experience in aviation biofuels. Environmental, economic, and energy security factors. Technical considerations and testing procedures including FAA certification procedures.

#### AVS 5368 Integrated Energy Resource Systems (3)

Cross-listed as ENV 5368

See ENV 5368 for course information.

## AVS 5391 Measurement Methods and Data Analysis for Air Pollution (3)

Cross-listed as ENV 5391

See ENV 5391 for course information.

#### AVS 5393 Atmospheric Chemistry & Physics (3)

Cross-listed as ENV 5393

See ENV 5393 for course information.

#### AVS 5V99 Research for Master's Thesis (1-6)

Pre-requisite(s): Consent of instructor

Research, data analysis, writing, and oral defense of an approved master's thesis. At least six hours of AVS 5V99 are required.

## **Bioinformatics (BINF)**

#### BINF 5309 Introduction to Bioinformatics and Systems Biology (3)

Pre-requisite(s): Graduate standing or consent of instructor A project-orientated approach to defining, understanding, and applying modern tools for genomic and systems biology analysis. Students will gain proficiency at sequence, microarray, and systems biology annotation by following a biological problem through each step of the analysis process.

#### BINF 5330 Advanced Computational Biology (3)

Cross-listed as CSI 5330

See CSI 5330 for course information.

## **Biology (BIO)**

#### BIO 5100 Seminars in Biology (1)

Graduate standing in biology and related fields. Topics of current interest in various subdisciplines of biology. Topics change each semester. Involves presentation of seminars by enrolled graduate students. May be repeated only with changes in topics.

#### **BIO 5101 Graduate Scientific Communications (1)**

Examination of various methods of scientific communication including leading undergraduate student groups in critical analysis and evaluation of scientific presentations and the current scientific literature.

#### BIO 5199 Non-Thesis Degree Completion (1)

To fulfill requirements for non-thesis master's students who need to complete final degree requirements other than coursework during their last semester. This may include such things as a comprehensive examination, oral examination, or foreign language requirement. Students are required to be registered during the semester they graduate.

#### BIO 5201 Research Methods in Biology (2)

Description and application of the major tools of professional biology, especially instruction on effective writing for obtaining graduate fellowships and research grants, and methods for presenting results of scientific research.

#### BIO 5202 Res Meth In Bio II (2)

Application of the major tools of professional biology, especially introductory programming, data management and visualization, and exploratory data analysis.

#### BIO 5203 Tropical and Emerging Infectious Diseases (2)

Provides a comprehensive overview of major neglected tropical diseases, HIV/AIDS, malaria, TB and emerging infections in the context of lecture-based learning and student-led evaluation of current literature emphasizing the rapidly changing global infectious disease climate.

#### BIO 5204 Applied Epidemiology, Biostatistics, and Public Health (2)

Reinforces the principles of public health as it applies to tropical medicine through epidemiologic investigations, statistical analyses, and evaluation of public health policy.

#### BIO 5205 Vector Biology and Vector Borne Diseases (2)

Pre-requisite(s): BIO 4102, 4302

Biology, entomology, and transmission dynamics of vector-borne diseases as they relate to the human and animal hosts.

#### BIO 5206 Biotechnology Operations (2)

Introduction to key principles and practices of a biotechnology operation, including lectures on management and project planning, product discovery, development and testing, clinical development, and the regulatory and quality management systems.

#### BIO 5207 Preclinical Models in Biotechnology (2)

Fundamentals of pre-clinical models used for vaccine development. The course emphasizes basic immunologic principles applied to vaccine development, natural and experimental animal models for efficacy testing, and design and execution of GXP animal studies. Additionally, fundamentals of US and international regulations governing human therapeutic development are covered.

## BIO 5208 Bench to Bedside: Biopharmaceuticals, vaccine antigen production and transition to the clinic (2)

Pre-requisite(s): BIO 4307 or BIO 3342 or the consent of the instructor Fundamental principles of discovering and designing modern biopharmaceuticals including recombinant vaccine antigens. Discussion of issues facing the transition from bench to bedside.

## BIO 5209 Topics in Advocacy and Policy for the Neglected Tropical and Emerging Infectious Diseases (2)

Introduction to key topics of advocacy and policy to communicate scientific or technical information effectively in a variety of public and professional interactions. Lectures include best practices for use of different communication methods and understanding the different types of public audiences.

#### BIO 5210 GIS and Health (2)

Provides a comprehensive overview of how dynamic geospatial and environmental factors influence human health and how GIS-based tools can be applied for analysis.

## BIO 5211 Diagnostics of Neglected Tropical and Emerging Infectious Diseases (2)

Examination and evaluation of modern molecular and other point-of-care methods for detection of tropical and emerging infectious diseases.

#### BIO 5213 Research Methods in Biology III (2)

Investigation of the parameters necessary for effective experimental design and interpretation in the biological and biomedical research fields.

#### BIO 5300 Advanced Studies in Biology (3)

Special and advanced topics in biology. May be repeated once with change in content.

#### BIO 5302 Virology (3)

Cross-listed as BMS 5305

Pre-requisite(s): BIO 4106 and 4306 or equivalent

Material covered includes viral replication, molecular regulation, cellular life cycle, and pathogenesis; evolution, emerging diseases, and epidemiology; and prevention and control of viral diseases. Viruses which infect humans, domestic animals, and plants will be the focus. The global health perspective will be addressed throughout.

#### BIO 5303 Behavioral Ecology (3)

Pre-requisite(s): BIO 3403 or equivalent

Relationships among animal behavior, ecology, and evolution. Emphasis is on integrating current models with comparative and experimental evidence on how a particular behavior pattern contributes to an animal's chances of survival and its reproductive success.

#### BIO 5304 Nucleic Acids (3)

This course examines recent developments in both DNA and RNA fields. Topics include nucleic acids structure, protein-nucleic acid interactions, techniques applied to nucleic acids, RNA decay, noncoding RNAs, RNA regulons, riboswitches, RNA bioinformatics and micro RNAs.

#### BIO 5305 Ecosystem Biogeochemistry (3)

This course provides the opportunity to synthesize the principles and current research in the discipline of Ecosystem Biogeochemistry through student-led teaching modules and a research synthesis project.

#### BIO 5306 Molecular Evolution (3)

Pre-requisite(s): BIO 2306 and 2106

Research in molecular genetics and its implications for evolutionary theory. Topics to be discussed include the evolutionary role of plasmids, temperate phage, transposons, introns, multigene families, organelle DNA, and DNA sequence divergence.

#### BIO 5307 Advanced Cell Biology (3)

Cross-listed as BMS 5307

Pre-requisite(s): BIO 4307 or 4308 or equivalents; or consent of instructor

Advanced topics in current cell biology research, including organelle and cytoskeleton structure and function, intra- and inter-cellular signaling, intracellular trafficking, cell cycle regulation, and cell division.

#### BIO 5310 Advanced Microbiology (3)

Pre-requisite(s): BIO 4401 or consent of instructor Microorganisms, especially their mechanics of pathogenesis with emphasis on their distribution in nature, their beneficial and detrimental effects on humans, and the potential role of certain organisms in biowarfare.

#### BIO 5311 Advanced Genetic Analysis (3)

Pre-requisite(s): BIO 1105, 1106, 1305, 1306, 2306, 3342, and 4306 or equivalents; or consent of instructor

Principles and practice of classical and modern genetic analysis as applied to eukaryotic organisms, including yeast, nematodes, Drosophila, mice, and humans; isolation and analysis of mutations; gene mapping; suppressor analysis; chromosome structure; control of gene expression; and developmental genetics.

#### BIO 5315 Genomics & Infectious Diseases (3)

Pre-requisite(s): BIO 2306, 3342, 4308 or equivalents or consent of instructor

This course concerns new principles of genome science and explores their applications in infectious disease research. Topics include how pathogen and vector genomes are studied, how they function, and how they evolve. The importance of comparative and functional genomics along with use of arthropod disease vectors in identifying control mechanisms of human pathogens are highlighted.

#### BIO 5320 Ecological Biophysics (3)

Pre-requisite(s): BIO 3303 or BIO 3403; and MTH 1321, PHY 1408 and PHY 1409

First principle approaches that are used to describe microenvironments of living organisms and the energy and mass transfer between organisms and their external environment.

#### BIO 5325 Advanced Topics in Evolutionary Biology (3)

Pre-requisite(s): Consent of instructor

This course provides an opportunity to explore advanced evolutionary theory and its implementation. Emphasis on evolution as an integrative principle of biological science.

#### BIO 5330 Conservation Biology (3)

Cross-listed as ENV 5330

Pre-requisite(s): BIO 2306 and 3403 or equivalent Biological forces influencing scarcity and diversity, emphasizing: genetics, fitness, population viability, extinction, endemism, habitat fragmentation, and community structure and stability.

#### BIO 5335 Climate Change and Biodiversity (3)

Pre-requisite(s): BIO 3303 and MTH 1320, or equivalents

Biological and conservation responses to naturally and human-induced climate change. Greenhouse gas levels, recent climate trends, range and abundance changes, phenological changes, evolutionary effects, climate change models and projections, designing landscapes and seascapes for change, managing the landscape matrix, and the future of biodiversity.

#### BIO 5340 Ecosystem Process Modeling (3)

Pre-requisite(s): MTH 1321 (or equivalent) and BIO 3403 (or equivalent) Interactions among ecosystem elements are formalized in computer simulation. Identification of ecosystem sources/sinks, reservoirs, and flux pathways is presented with the biological interpretation of mathematical representation of ecological processes.

#### BIO 5345 Molecular Biology of Disease Vectors (3)

Pre-requisite(s): BIO2306 Genetics: BIO4308 Cell and Developmental Biology; or consent of instructor

This course provides an important foundation of knowledge of the biology of disease vectors, followed by current topics in vector biology, cell and developmental biology, physiology, gene drive system, old and new strategies in vector control and control of vector-borne diseases and vector/pathogen/host interactions.

#### BIO 5350 Biocomputing (3)

Pre-requisite(s): Consent of instructor

An introduction to the Python language and its specific application to genomic, proteomic, and environmental research. Emphasis on strings, data storage/access, and creating custom modules. Weekly coding projects will be based on each student's dissertation research. No coding experience is required.

#### BIO 5351 Advanced Biocomputing (3)

Pre-requisite(s): Consent of instructor

A Python-based course covering protein structure, phylogeny, DNA sequencing and transcriptome analysis, Markov chains, clustering, and machine learning. Weekly coding projects will be completed which are relevant, where possible, to each student's dissertation research. Strong skills in Python are required.

#### BIO 5355 Genomic Analysis (3)

Cross-listed as BMS 5355

Provides comprehensive instruction on the analysis of genomic data. An overview of basic genome biology, study design, NGS technology, and galaxy analysis tools is provided in addition to current best practices in the analysis of genomic data. Genomic Analysis focuses on analysis and detection of variants and transcriptomics from next-generation sequencing data including RNA-seq, ChIP-seq, and SNP-seq.

#### BIO 5360 Biological Invasions: Ecology and Management (3)

Cross-listed as ENV 5360

Pre-requisite(s): BIO 3403 or equivalent

The biology of invasive alien plants and animals, emphasizing evolutionary ecology, impacts on native species, and effects on biodiversity. Biological invasion causes, pathways, vectors, and management strategies in terrestrial and aquatic systems.

#### BIO 5377 Landscape Ecology (3)

Cross-listed as ENV 5377

Pre-requisite(s): BIO 3403, MTH 1304, or equivalent Ecological factors influencing landscape structure and dynamics. Emphasis on landscape structure, exchanges among landscape components, and landscape stability and management.

#### BIO 5380 Integrative Ecophysiology (3)

Pre-requisite(s): BIO 4431 or instructor approval

Application of the basic principles of nutrition to the study of fish, reptiles, birds, and mammals in their natural environments.

## BIO 5399 Experimental Design and Research Communications for Molecular Biologists (3)

Cross-listed as BMS 5399

Pre-requisite(s): Consent of instructor

This course provides in-depth training on how to formulate research hypothesis and questions and how to present the specialized areas of student research to general and professional audiences.

#### BIO 5400 Population Genetics (4)

Pre-requisite(s): BIO 2306 or equivalent

Basic concepts and current research in population genetics. Topics covered include genetic variation in natural populations, evolutionary forces causing change in gene frequency, linkage disequilibrium, quantitative variation, and the genetics of speciation.

#### BIO 5401 Microbial Ecology (4)

Interactions and transformations of microorganisms in soil, air, and water. Emphasis on methodology and practical relationships of microorganisms in the environment.

#### BIO 5402 Invertebrate Zoology (4)

Diversity and phylogenic development of all non-vertebrate phyla. Current areas of research in invertebrate biology are examined.

#### **BIO 5403 Population Ecology (4)**

Pre-requisite(s): BIO 3403 or equivalent; and BIO 5412 or MTH 2381 or STA 3381 Lectures, discussions, and field studies that illustrate basic concepts and current research in theoretical and applied population ecology

Topics include life tables, census techniques, single-species population and metapopulation dynamics, population regulation, population dynamics in competitive and predator/prey interactions, and the conservation of populations. Includes an independent research project.

#### BIO 5404 Wetland Ecology and Management (4)

Cross-listed as ENV 5404

Prerequisite(s); BIO 3403 or equivalent. Lecture, laboratory, and field studies of the ecology and management of North American wetland environments. Emphasis will be placed on the ecology of aquatic and wetland plants and their role in determining wetland structure and function. Overnight field trip required.

#### BIO 5405 Stream Ecology (4)

Cross-listed as ENV 5405

Physical, chemical and biological organization of streams. Topics include geomorphology and hydrology, water chemistry, ecosystem processes in streams, watershed-stream linkages, and bioassessment methods.

#### BIO 5407 Bioenergetics (4)

Discussion and laboratory experiences on the processes, pathways, and rate of biological energy transformation.

#### BIO 5408 Plankton Ecology (4)

Pre-requisite(s): BIO 3303 or equivalent; or consent of instructor Plankton comprise the most important community of oceans and most lakes. Their metabolism drives the global carbon cycle and supports global fisheries. We consider all plankton, but focus on the middle of the food web, i.e., the zooplankton as an intermediary between the phytoplankton producers and the fish consumers. The course has a strong hands-on component with experimental laboratory experiences.

#### BIO 5409 Cancer Biology (4)

Pre-requisite(s): BIO 4306 or 4307 or 4308 or consent of the instructor Basic concepts and current research in cancer biology. Topics include the cell intrinsic regulation of growth control, the accumulation of mutations, and the cell biological and micro-environmental changes associated with cancer, as well as therapeutic strategies. Current literature is discussed.

#### BIO 5412 Biometrics (4)

Pre-requisite(s): MTH 1304 or equivalent

Principles and methods for experimental design, quantitative analysis, and interpretation of biological data, including application of mainframe computer packages.

#### BIO 5413 Advanced Ecological Data Analysis (4)

Cross-listed as ENV 5413

Pre-requisite(s): BIO 5412 or equivalent

Current approaches to analyzing and interpreting complex biological data. Emphasis on integrative analysis strategies using modern statistical modeling techniques. Hands-on analysis of data sets using the statistical package R.

#### BIO 5420 Transmission Electron Microscopy (4)

Pre-requisite(s): Consent of instructor

Use and operation of the transmission electron microscope and ancillary equipment as instruments of biological research, with special emphasis on tissue preparation, sectioning, examination, data acquisition, and photography.

#### BIO 5421 Scanning Electron Microscopy (4)

Pre-requisite(s): Consent of instructor

Use and operation of the scanning electron microscope and support equipment. Specimen preparation, specimen examination, data acquisition, and data analysis are emphasized.

#### BIO 5425 Molecular Ecology (4)

Pre-requisite(s): Consent of instructor

Basic concepts and current laboratory techniques in molecular ecology. Emphasis is on use of these skills in addressing basic and advanced ecological questions.

#### BIO 5V90 Special Problems (1-6)

Pre-requisite(s): Consent of instructor

Advanced work in biology. Subject and hours of credit agreed upon by student and professor prior to registration. For master's and doctoral students.

#### BIO 5V99 Thesis (1-6)

Pre-requisite(s): Consent of major professor

Research, data analysis, writing, and oral defense of an approved master's thesis. At least six hours of BIO 5V99 are required.

#### BIO 6101 Research Rotation (1)

The research rotation allows students to become familiar with different areas of research, learn new experimental techniques, obtain experience in different research laboratories, and ultimately identify a lab in which to conduct dissertation research.

#### BIO 6V10 Doctoral Prospectus Research (1-2)

Pre-requisite(s): Consent of Instructor

Supervised research for writing a dissertation research proposal and designing experimental approaches that will be the subject of a preliminary exam that will admit students to candidacy. A student may repeat this course for credit, with a maximum of 4 total hours.

#### BIO 6V99 Dissertation (1-12)

Pre-requisite(s): Consent of major professor

Research, data analysis, and writing and oral/written defense of an approved doctoral dissertation. At least twelve hours of BIO 6V99 are required.

## **Biomedical Engineering (BME)**

#### BME 5351 Multidimensional Signal Analysis (3)

Cross-listed as ELC 5351

See ELC 5351 for course information.

#### BME 5353 Biomedical Signal Analysis (3)

Cross-listed as ELC 5353

See ELC 5353 for course information.

#### BME 5357 Cardiovascular Engineering and Instrumentation (3)

Cross-listed as EGR 5357, ELC 5357, ME 5357

A quantitative approach to the function and performance of cardiovascular elements, including ECG signal generation, blood flow rheology, and ventricular/vessel wall mechanics. Principles of measurement instrumentation including Fick dilution, ultrasound, and magnetic resonance imaging are explored. Major implant types, as well as FDA submission pathways, are examined.

#### BME 5360 Introduction to Biomedical Engineering (3)

Pre-requisite(s): Consent of instructor

Introduction to the interdisciplinary nature and broad scope of biomedical engineering. Topics covered will include biomechanics, biomaterials, biosensors, biomedical instrumentation, bioinformatics, prosthetic devices, and other biomedical engineering areas.

#### BME 5375 Biomechanical Computer Modeling (3)

Pre-requisite(s): Graduate standing in Engineering

An investigation into the methods of computer modeling and simulation for the study of human musculoskeletal biomechanics.

#### BME 5376 Medical Device Design and Evaluation (3)

Project-based introduction to medical device design and evaluation. Topics include: clinical needs finding, design criteria generation, basic anatomy, design evaluation, prototyping, regulatory process, intellectual property, and validation process. Students work in teams on real medical problems and serve on committees to provide guidance for the project teams on either intellectual property or regulatory standards.

#### BME 5390 Research Methods and Project Formulation (3)

Cross-listed as EGR 5390, ELC 5390

See ELC 5390 for course information.

#### BME 5396 Special Topics in Engineering (3)

Cross-listed as EGR 5396, ELC 5396, ME 5396

See EGR 5396 for course information.

#### BME 5397 Special Projects in Engineering (3)

Cross-listed as EGR 5397, ELC 5397, ME 5397

See EGR 5397 for course information.

#### BME 5V99 Master's Thesis (1-6)

Students completing a master's program with a thesis must complete six hours of BME 5V99.

## **Biomedical Studies (BMS)**

#### BMS 5100 Biomedical Seminar (1)

Pre-requisite(s): Enrollment in graduate program
Students are required to register for the weekly seminar (a forum for

outside speakers, presentation of student research, and discussion of selected topics) and to present papers. No more than three semester hours may be counted on a master's degree and no more than six may be counted on the Ph.D. degree.

#### BMS 5199 Non-Thesis Degree Completion (1)

To fulfill requirements for non-thesis master's students who need to complete final degree requirements other than coursework during their last semester. This may include such things as a comprehensive examination, oral examination, or foreign language requirement. Students are required to be registered during the semester they graduate.

#### BMS 5301 Survey of Immunology (3)

Pre-requisite(s): BIO 4301

Advanced aspects of the following topics are covered: Innate immunity, antigen recognition and presentation, lymphocyte maturation, autoimmunity, host defense failure, hypersensitivity, and vaccine development.

#### BMS 5302 Current Concepts in Immunology (3)

Pre-requisite(s): BIO 4301

The manipulation of the immune system to advance therapy and prevention is a special focus of this course. Antigen recognition and presentation, dendritic cell development, vaccine development, and other topics are covered in detail. Each topic is presented from the literature by a researcher working on the topic.

#### BMS 5305 Virology (3)

Cross-listed as BIO 5302

See BIO 5302 for course information.

#### BMS 5307 Advanced Cell Biology (3)

Cross-listed as BIO 5307

See BIO 5307 for course information.

#### BMS 5308 Biotechnology and Cell Biomedicine (3)

Pre-requisite(s): Graduate student enrollment in Biology, Chemistry, or Biomedical Studies program

(BIO 4306 preferred but not required.) Interdisciplinary course that covers basic mechanisms of molecular biology and genetics along with rigorous presentation of state-of-the-art research methodology. Utilization of DNA/RNA/protein regulation technology in biomedical and clinical applications.

#### BMS 5310 Molecular Biology of the Cell (3)

Pre-requisite(s): BIO 4307

Advanced topics in cell biology. Cell division, replication, and recombination of DNA and mutations and repair of DNA will be reviewed. Application of restriction enzymes, recombinant DNA technology, and sequencing of DNA to study molecular architecture of the cell will be overviewed.

#### BMS 5343 Studies in Intermediary Metabolism (3)

Pre-requisite(s): CHE 4341 or BIO 4341; or consent of instructor Investigation of the interrelationships of energy utilizing and producing metabolic pathways. Consideration will be given to glycolysis, Kreb's cycle, oxidative pathways of fatty acids, pathways of lipid and sterol formation, and various aspects of gluconeogenesis and the pentosephosphate shunt, as well as specific functions of amino acid metabolism in oxidative stress and methylation.

#### BMS 5355 Genomic Analysis (3)

Cross-listed as BIO 5355

See BIO 5355 for course information.

## BMS 5399 Experimental Design and Research Communications for Molecular Biologists (3)

Cross-listed as BIO 5399

See BIO 5399 for course information.

#### BMS 5401 Special Techniques in Immunology (4)

Pre-requisite(s): CHE 4341 and 4342; or consent of instructor Immune responses of vertebrate animals, including immunochemistry and molecular genetics. Cellular responses will be analyzed by conventional skin tests, in vitro correlates of delayed-type hypersensitivity, histology, and laser-activated cell sorting.

#### BMS 5V95 Biomedical Research (1-8)

Pre-requisite(s): Consent of student's dissertation or advisory committee Directed research for those students who have not yet passed the Ph.D. preliminary examination and who have not yet selected a Ph.D. dissertation topic or for master's students desiring in-depth practical training in a specific area of research. May be repeated for no more than 30 semester hours of credit.

#### BMS 5V99 Thesis (6)

Pre-requisite(s): Consent of student's thesis committee or a minimum of twelve hours of graduate work

A minimum of six semester hours is required.

#### BMS 6310 Research Rotations (3)

Individual students complete five-week rotations in three research laboratories in order to master a set of biomedical techniques and to choose a home lab and dissertation mentor. Students join ongoing research projects and learn current techniques from lab personnel that will advance their dissertation work. Participation in experimental planning and exploration of the relevant literature is expected.

#### BMS 6390 Special Problems in Biomedical Studies (3)

Pre-requisite(s): Consent of student's dissertation committee Selected topics in biomedical studies. May be repeated with change in content. No more than six semester hours total credit allowed.

#### BMS 6V99 Dissertation (1-12)

Pre-requisite(s): Consent of the student's dissertation committee and admission to candidacy

A minimum of twelve semester hours is required.

## **Business (BUS)**

#### BUS 5050 Graduate Business Colloquium (0)

Student's attendance at designated Hankamer School of Business sponsored speaker events is required to earn credit for this course. Events will be identified at the beginning of each semester.

#### BUS 5101 Focus Firm I (1)

Pre-requisite(s): Admission to MBA program

An experiential learning course that provides students with opportunities to apply MBA classroom concepts to solving real-world business issues. Student teams work with a focus firm advisor to define a specific organizational issue, collect and analyze market research data, conduct a strategic analysis, and present alternative solutions to a client

#### BUS 5102 Focus Firm II (1)

Pre-requisite(s): Admission to MBA Program and BUS 5101
An experiential learning course that provides students with opportunities to apply MBA classroom concepts to solving real-world business issues. Under the guidance of a Focus Firm Advisor, students assume leadership roles in team-based projects to address a specific organizational issue and to oversee the team's problem analysis, definition of alternate solutions, and delivery of recommendations to the client.

## BUS 5111 Professional Career Development for First Semester Graduate Students (1)

A one-hour, beginning, graduate career development course designed to enhance personal marketability by providing self-assessments, career passion discovery, career exploration and development experiences, and career resources to help prioritize and focus the student's specific internship and job search.

## BUS 5112 Professional Career Development for Second Semester Graduate Students (1)

Pre-requisite(s): BUS 5111

A one-hour graduate career development course designed to introduce personal accountability, networking skills, company/position analysis, job search strategy, interviewing skills, and negotiations to maximize the student's career development and personal marketability.

#### BUS 5199 Non-Thesis Degree Completion (1)

To fulfill requirements for non-thesis master's students who need to complete final degree requirements other than coursework during their last semester. This may include such things as a comprehensive examination, oral examination, or foreign language requirement. Students are required to be registered during the semester they graduate.

#### BUS 5201 In-Residence: Leading in the 21st Century (2)

Pre-requisite(s): Acceptance into the executive MBA program This course introduces the major dimensions associated with high-performing organizations. The complexities of business, competition, and leadership are explored. Teamwork and critical thinking skills are refined as participants explore global business and leadership challenges in the 21st century.

## BUS 5302 In Residence: Government, Business, and Societal Impact (3)

Pre-requisite(s): Policy Process Admission to the Executive MBA program

Course exposes students to issues related to business, public policy, societal impact, and their intersections. Audiences with govt. officials and corporate leaders provide the participant with a global perspective on how these issues influence business strategy and leadership decision-making. Participants build skills in critical thinking and influence as they understand how organizations and industries are impacted by policy and role advocacy.

#### **BUS 5315 Graduate Business Case Competition (3)**

Pre-requisite(s): Consent of Instructor

Provides in-depth application of case study techniques in a variety of business contexts. Experiential learning through case analysis projects and competing in national case competitions.

#### BUS 5340 Studies in the Caribbean Region (3)

Pre-requisite(s): Graduate standing

This course is conducted in the Dominican Republic as part of the Baylor in the Dominican Republic program, which allows graduate students to experience life in the Caribbean region first-hand. Students will study the social, cultural, historical, economic, and political issues that impact businesses in the Dominican Republic and the general environment in which they operate. Students will visit a variety of enterprises and consider the dynamics of participation in the economy and society of a Caribbean nation.

#### BUS 5350 Project Management (3)

Pre-requisite(s): Graduate standing

This graduate course in project management is designed to enhance the work of business professionals and persons involved in construction, environmental remediation, software development, grant writing, new product development, engineering, and design. Project management planning, network building, project control, reporting, and closing will be studied, including critical path and critical chain methodologies. Students will develop expertise in using Microsoft Project and critical chain computer software. This course introduces the tools and techniques necessary for successful and timely completion of projects in a single project environment. While briefly addressed, multi-project environments will not be covered in detail in this course.

#### BUS 5354 Business Research in Latin America (3)

See ENT 5354 for course description.

#### **BUS 5390 Management Communication (3)**

Examines principles and strategies of effective management communication in the areas of audience analysis, ethics, cross-culture, crisis, interpersonal communication, and team dynamics. Provides techniques, skills, and strategies for overcoming communication barriers and for designing and delivering executive presentations. Provides instruction in preparing effective professional reports including research, drafting, revision, format, and documentation. Examines corporate and leadership communication topics including corporate responsibility, integrity and image, communicating with the media, change, principle-centered leadership, and web-based communication, with ample opportunities for application and feedback.

#### BUS 5395 The Focus Firm (3)

Pre-requisite(s): Admission to MBA program

This course integrates the content of previous courses through an indepth analysis of the semester's Focus Firm company with attention to day-to-day operations as well as strategic issues. The course emphasizes the practical application of theoretical knowledge in an actual company facing current, challenging problems. Students will experience a team-centered approach to learning and selling their ideas. Participants will be involved in analyzing the Focus Firm company issues, presenting their solutions to faculty and company executives of the Focus Firm. Students will receive feedback from the company executives as well as faculty on their work.

#### BUS 5401 Business Frameworks (4)

Pre-requisite(s): Graduate business student

The common body of knowledge in business administration comprising the following areas: a background of the concepts, processes, and institutions in the financing of the business enterprise or other forms of organization; and a basic understanding of the concepts and applications of accounting, quantitative methods, and excel software.

#### BUS 5421 Ethical Leadership (4)

This course explores the causes of unethical behavior and expands students' understandings of the ethical challenges and responsibilities in today's diverse, interconnected, and global society. Students will reflect upon and utilize their faith principles, values, and relevant research as they learn practical techniques for promoting ethical behavior.

#### BUS 5460 Communicating With Data (4)

Upon completion of this course, students will be able to apply a wide range of ideas, concepts, and multi-disciplinary theories to communicate the results of data more effectively to key constituents both within and external to their organizations.

#### **BUS 5490 Strategic Communication (4)**

Students cultivate principles, enhance skills, and develop winning strategies to communicate effectively in a business setting.

#### BUS 5602 Business Foundations II (6)

Pre-requisite(s): Graduate business student

The common body of knowledge in business administration comprising the following areas: a background of the concepts, processes and institutions in the financing of the business enterprise or other forms of organization; a background of the economic and legal environment as it pertains to profit and/or nonprofit organizations along with ethical considerations and social and political influences as they affect such organizations and basic understanding of the concepts and applications of accounting quantitative methods and statistics.

#### BUS 5V95 Internship in Business (1-6)

Pre-requisite(s): Minimum of twelve hours of graduate credit
Three to six months of work experience in a domestic or international
company. The work experience should be integrated into students' overall
graduate program in such a way as to provide meaningful application
of previously studied course material. A written report of the work
experience shall be submitted to the director of the internship.

#### BUS 5V98 Special Studies in Business (1-6)

Pre-requisite(s): Instructor and departmental approval required Individualized research or project in business. Students' proposals for special study project must be approved by the supervising faculty member. Offered on demand with instructor and departmental approval required for one to six semester hours.

## **Business (MBUS)**

#### MBUS 5220 Organizational Ethics (2)

This course will review major ethical theories, principles, decision-making methods, and the relationship between ethics and leadership. Clinical ethics topics will be considered from an organizational perspective, and topics with a more definitive business focus will be addressed.

## **Business Law (BL)**

#### BL 5104 Business Foundations - Business Law (1)

Co-requisite(s): FIN 5203

This course is required for MBA and MSIS students who do not have an undergraduate degree in business from an AACSB-accredited institution. The course will provide students with a foundation in business law which is expected of all business graduate students. This course will be required as a co-requisite for FIN 5203.

#### BL 5105 Employment Law (1)

Pre-requisite(s): Admission to Executive MBA program
The purpose of this course is to analyze the impact of employmentrelated statutes and court decisions on the business environment. The
focus of the class will be on the impact of these laws for managers
and those responsible for making employment-related decisions in
the workplace. The laws will be examined from a societal (macro)
perspective, as well as firm (micro) perspective. Students will participate
in reviewing and drafting human-resource-related policies.

#### BL 5110 International Business Law (1)

Pre-requisite(s): Enrolled in the Executive MBA program
This course provides students with an introduction to the legal
environment, issues, and controversies related to conducting business
internationally; basic legal research; and logical legal reasoning.

#### BL 5171 Legal Aspects of Business (1)

Pre-requisite(s): Admission to Executive MBA program
This course provides a comprehensive overview of legal issues currently
at the forefront of the increasingly complex body of laws challenging
business managers. Students will be able to recognize legal issues
and manage legal risks in business decision-making. The course will
also acquaint students with the essential processes by which law is
created and changed. Students will be challenged to increase their ethical
sensitivity by exposing them to business-related legal problems that have
ethical issues.

#### BL 5201 Business Law: Application and Strategy (2)

A study of the application of law to managerial decisions and the relationship between legal and business strategy. Provides students with sufficient understanding to identify and manage legal and ethical issues in global business transactions.

#### BL 5303 Seminar in Employment Law (3)

Pre-requisite(s): Graduate standing

A study of the legal and regulatory framework governing the employment relationship, with particular emphasis on a business manager's role in providing the informed leadership necessary to maintain a workplace free of discrimination. The course will include topics such as employment contracts, equal-opportunity law (discrimination, sexual harassment, affirmative action), wrongful discharge, and employee privacy.

#### BL 5304 Legal Aspects of Financial and Commercial Transactions (3)

Pre-requisite(s): Graduate standing

Legal issues encountered in conducting financial and commercial business transactions. Students gain knowledge to prepare them to participate in these transactions, particularly with regard to financial and accounting aspects of the transactions. The course includes a study of laws relating to business organizations, sales, secured transactions, documents of title, bankruptcy, securities regulations, and accountants' legal liability.

#### BL 5310 Cyberlaw (3)

Pre-requisite(s): Graduate standing

Current legal issues affecting businesses operating online. In an active learning environment, students examine e-commerce law, intellectual property, privacy, data security, cyber-contracts, international cyberlaw, and related ethical issues. How is the law responding to the digital age? How are legal risks increasing in significance for decision-makers? How does the law balance critical and often competing issues such as security and privacy?

#### BL 5320 International Business Law (3)

Pre-requisite(s): Graduate standing

Detailed review and discussion of laws related to conducting business internationally. Includes examination of Convention of International Sale of Goods and other laws related to contracts, barriers to entry into foreign markets and trade, determination of tariffs, import/export requirements, arbitration, licensing issues, and intellectual property concerns.

#### BL 5345 Global Trade Compliance Management (3)

Pre-requisite(s): BL 3305

Management of global trade compliance as a strategic business function of international firms and the regulatory requirements of firms participating in international trade. The course provides an overview of U.S. export and import regulatory agencies, current issues in trade compliance, the role of trade compliance in the operations and strategic management of international firms, and skills necessary for a career in global trade compliance.

#### BL 5445 Global Trade Compliance Strategy (4)

This course provides an in-depth framework for understanding the complexities of export and import regulatory requirements and their effect on firms conducting business in a global environment, and for treating the management of global trade compliance as a strategic organizational function.

#### BL 5V98 Special Studies in Business Law (1-6)

Pre-requisite(s): Graduate standing

Individualized research in business law. Students' proposal for special study project must be approved by the supervising faculty member. Offered on demand and by consent of the advisor for one to six semester hours. May be repeated under a different topic, but not to exceed six maximum degree hours.

## **Business Law (MBL)**

#### MBL 5310 Selected Topics in Business Law (3)

This course builds on the material from Health Care Jurisprudence and from Health Care Contracting and Negotiations. Topics reviewed may include sales, negotiable instruments, the corporation qua corporation, debtor-creditor relations, bankruptcy, real property, and the governmental regulation of business. Case studies will be developed by students and analyzed.

## **Chemistry (CHE)**

#### CHE 5050 Chemistry Colloquium (0)

A weekly, graduate-level seminar featuring speakers from science departments at Baylor, industry, medical schools, and other universities.

#### CHE 5101 Responsible Conduct of Research (1)

Covers ethical and regulatory issues regarding modern scientific research.

#### CHE 5150 Graduate Seminar (1)

Pre-requisite(s): Enrollment in the graduate program

A seminar program in which students will be required to present a paper for evaluation before the graduate faculty and other graduate students. Must be taken two times for the master's degree and three times for the Ph.D. degree.

#### CHE 5179 Research Seminar (1)

Pre-requisite(s): Enrollment in the graduate program

A weekly colloquium in which students are required to present papers and study the literature in the area of their research project. May be repeated, but no more than three semester hours may be counted on a master's degree and no more than six may be counted on the Ph.D. degree. May not be used to fulfill course work requirements.

#### CHE 5260 Scientific Communication (2)

Pre-requisite(s): Graduate standing

This experiential-learning course, designed for first-year graduate students, provides instruction and practice in the development of an original research proposal. Strategies for effective oral and written communication of scientific information are emphasized, along with the importance of mastering primary literature in the chosen field of interest.

#### CHE 5301 Chemistry of the Elements (3)

Pre-requisite(s): CHE 4301 or consent of instructor Comparative chemistry of the Main Group and Transition elements; relationships between structure and reactivity; energetics and kinetics of inorganic reactions.

#### CHE 5302 Symmetry and Group Theory in Chemistry (3)

Pre-requisite(s): CHE 4301 or consent of instructor Application of symmetry and group theory to chemical bonding and spectroscopic selection rules; use of character tables; electronic and vibration spectroscopy.

#### CHE 5303 Physical Methods in Inorganic Chemistry (3)

#### CHE 5304 Special Topics in Inorganic Chemistry (3)

This course concerns characterization of redox active inorganic complexes by a number of physical methods. Topics covered include electronic structure and geometry (Group theory, MO diagrams), orbital energies of ground and excited states (UV-vis absorbance/emission), and ways of accessing and interpreting changes in oxidation states (electrochemistry, Marcus theory). Symmetry and group theory are fundamental to many of these applications, and will be introduced.

#### CHE 5305 Organometallic Chemistry and Homogenous Catalysis (3)

Pre-requisite(s): Consent of instructor

Chemical reactions of organometallic compounds and their role in homogeneous catalysis with emphasis on the transition metals. Reactivity patterns and reaction mechanisms in organometallic chemistry. Factors influencing stabilities and reactivities of metal-carbon bonds.

#### CHE 5306 Bioinorganic Chemistry (3)

An overview of the biological chemistry of metal ions. Emphasis will be on the structural motifs of metalloproteins and their associated reactivities in relation to physiological function.

#### CHE 5310 Advanced Chemical Instrumentation (3)

Pre-requisite(s): CHE 4217 and 4316

Principles of chemical instrumentation, including principles of electronic signal handling, sources of noise and signal-to-noise theory, noise reduction techniques such as modulation and phase-sensitive detection, introductory information theory, introductory geometrical optics, and vacuum systems.

#### CHE 5312 Advanced X-omics Mass Spectrometry (3)

Understanding of chemical interactions within complex mixtures, such as biological fluids and environmental samples, requires simultaneous characterization of all sample components at the molecular level. State-of-the art high performance mass spectrometers, coupled to various separation techniques, provide the necessary sensitivity, resolving power, and multidimensionality for comprehensive characterization of complex mixtures. This course covers current topics in x-omics research (including genomics, metabolomics, petroleomics, and proteomics) with a focus on bioanalytical aspects of utilizing ion generation methods, ion-molecule reactions, ion fragmentation techniques, particle analyzers/detectors, and multidimensional data generation/analyses. Moreover, fundamental aspects and practical significance of accurate mass measurements and conformational analyses in biomedical research and drug development strategies are presented.

#### CHE 5314 Separation Science (3)

 $\label{eq:charge_pre-requisite} Pre\text{-requisite}(s) \hbox{: CHE 4316 or consent of instructor}$ 

Theoretical foundations and practical applications of analytical separations with emphasis on gas, liquid, supercritical fluid, and ion chromatographies.

#### CHE 5315 Electroanalytical Chemistry (3)

Pre-requisite(s): CHE 4316 or consent of instructor

Modern electroanalytical techniques and their application to analytical, kinetic, mechanistic, and synthetic problems.

#### CHE 5316 Analytical Spectroscopy (3)

Pre-requisite(s): CHE 4316

Theoretical and practical aspects of analytical optical spectroscopy with emphasis on instrumentation.

#### CHE 5320 Thermodynamics and Statistical Thermodynamics (3)

Pre-requisite(s): CHE 4322

Principles of classical and statistical thermodynamics.

#### CHE 5322 Chemical Kinetics and Mechanisms (3)

Pre-requisite(s): CHE 4322

Theory of rate processes and the use of kinetic data in the interpretation of reaction mechanisms.

#### CHE 5323 Structural Studies by X-ray Crystallography (3)

Pre-requisite(s): CHE 4324

Preliminary studies of X-ray structure determination and solving the phase problem by various techniques to be learned before employing methods of structural refinement. Results and conclusions derived from refined structures will be applied to chemical research problems. Practical experience of crystal structure analysis will be the main emphasis.

#### CHE 5325 Quantum Chemistry (3)

Pre-requisite(s): CHE 4322

Comparison of classical and quantum mechanics and application of quantum mechanics to electronic structure of the atoms and to the study of molecules and chemical bonds.

#### CHE 5326 Lasers and Molecular Spectroscopy (3)

Pre-requisite(s): CHE 4321 and 4322

Properties of lasers and the fundamental principles of laser operation. Modern application of lasers to the study of spectroscopy and energy flow in atoms and molecules.

#### CHE 5331 Stereochemistry (3)

Pre-requisite(s): CHE 3332 and credit or concurrent enrollment in CHE 4322

The stereochemistry of compounds of carbon and other elements, steric effects on physical and chemical properties of compounds, and recent developments in the field.

#### CHE 5334 Heterocyclic Chemistry (3)

Pre-requisite(s): CHE 3238, 3332 with grades of B or above; or consent of instructor

The chemistry of heterocyclic compounds including substances containing nitrogen, oxygen, and sulfur. Synthesis, typical reactions and reaction mechanisms will be emphasized.

#### CHE 5335 Physical Organic Chemistry (3)

Pre-requisite(s): CHE 3238 and 3332 with grades of B or above; and credit or concurrent enrollment in CHE 4321; or consent of instructor Organic reaction mechanisms, including kinetics, steric and electronic effects, and molecular orbital considerations.

#### CHE 5336 Advanced Synthesis and Natural Products (3)

Pre-requisite(s): CHE 4332 or consent of instructor

A study of modern synthetic organic chemistry with particular emphasis on the synthesis of complex natural products and reaction mechanisms.

#### CHE 5345 Selected Topics in Bioanalytical Chemistry (3)

This current topics course covers current breakthroughs in the development and application of bioanalytical tools. Applications of bioanalytical tools in fundamental biochemical science, as well as in biomedical applications, are included.

#### CHE 5346 Chemical Biology (3)

Pre-requisite(s): CHE 4341 or BIO 4307

Revolutionary transformations in chemistry and biology have led to a merging at the boundary of these disciplines where contributions from both fields impact our molecular and quantitative understanding of biology. This course covers current research in chemical biology with a focus on enzyme mechanisms, molecular probes, biological pathways, chemical tools, and analytical methods to study biology, while also harnessing biological activity for chemical syntheses and commercial applications.

#### CHE 5347 Physical Biochemistry (3)

Pre-requisite(s): CHE 4341 or BIO 4341; and CHE 4321 or 4327; or consent of instructor

Theory and applications of physical chemistry to systems of biological interest including such topics as reaction kinetics, protein folding and denaturation, ligand interactions, x-ray diffraction of proteins and nuclear magnetic resonance spectroscopy.

#### CHE 5348 Enzymology (3)

Pre-requisite(s): CHE 4341 or BIO 4307

Kinetics, mechanisms, regulation, and other topics related to enzymecatalyzed reactions.

#### CHE 5V60 Advanced Special Topics in Chemistry (1-3)

Topics in chemistry that are not covered in other graduate chemistry courses. May be repeated for credit if topic is different.

#### CHE 5V98 Graduate Research (1-10)

Pre-requisite(s): Graduate standing

Required of all graduate students. For research credit prior to admission to candidacy for an advanced degree. Credit will be given for the amount of work done. May be repeated for credit through 45 hours.

#### CHE 5V99 Thesis (1-9)

Credit for the amount of work done. In no case will fewer than six semester hours be accepted for a thesis. Required of all master's students.

#### CHE 6V99 Dissertation (1-9)

Required of all doctoral candidates. In no case will fewer than twelve semester hours be accepted for a dissertation.

## **Child and Family Studies (CFS)**

#### CFS 5330 Human Development and Family Science (3)

Cross-listed as CRED 7355

See CRED 7355 for course information.

#### CFS 5335 Child Development (3)

A survey of the physical, intellectual, emotional, moral, social, and spiritual development from birth to middle childhood. An understanding of child development from both theoretical and descriptive perspectives is the goal. This course provides an introductory foundation to the field that enables students to serve children and families in varied settings.

#### CFS 5354 Family Life Education and Ethics (3)

Cross-listed as CRED 7381

See CRED 7381 for course information.

#### CFS 5355 Child Development (3)

Cross-listed as CRED 7357

This course surveys physical, intellectual, emotional, moral, social, and spiritual development from birth to middle childhood. An understanding of child development from both theoretical and descriptive perspectives is the goal. This course provides an introductory foundation to the field that will enable the student to serve children and families in varied settings.

## CFS 5358 Planning and Administration of Child and Family Programs (3)

Cross-listed as CRED 7380

Administration and planning of programs serving children and families. Emphasis is placed on program planning, evaluation, ethics, and professionalism as they apply to child and family programs.

#### CFS 5363 Adolescent Development (3)

Cross-listed as CRED 7360

See CRED 7360 for course description.

#### CFS 5367 Family Transitions, Stress and Resilience (3)

Cross-listed as CRED 7367

See CRED 7367 for course description.

## **Classics (CLA)**

#### CLA 5300 Proseminar in Classics (3)

Introduction to the history, tools and resources, and main methods of research of the discipline of classics. In addition, the course provides an overview of the major subdisciplines of classical studies such as ancient history, epigraphy, papyrology, archaeology, and numismatics.

#### CLA 5302 Topics in Ancient History (3)

Specific topics in the history of ancient Greece and Rome and related fields with attention to the methodologies of ancient historical inquiry. May be taken five times, provided topics change.

#### CLA 5V90 Final Project (1-3)

Pre-requisite(s): Consent of project director Supervised research for final project.

#### CLA 5V99 Thesis (1-3)

Pre-requisite(s): Consent of the thesis director Supervised research for master's thesis.

## Clinical Orthopaedics (MCO)

#### MCO 6140 Articular Injuries of the Knee (1)

This course summarizes the current diagnosis, treatment (conservative and surgical) and expected outcomes of articular cartilaginous injuries of the knee. This course will provide the DScPAS-CO resident the knowledge needed to diagnose and guide a patient through the various current treatment options.

#### MCO 6141 Anterior Knee Pain and Patello-femoral Joint Instability (1)

This course summarizes the possible causes, clinical presentations, and treatment options for anterior knee pain. This will provide the DScPAS-CO resident with the knowledge needed to properly diagnose and treat this common, yet significant problem.

#### MCO 6142 Genetics I and II, Developmental Dysplasia of the Hip (DDH), Legg-Calve-Perthes Disease and Slipped (1)

This course provides the basic knowledge and skills that the DScPAS-CO resident will require throughout training and in clinic practice regarding genetic disorders and musculoskeletal conditions.

#### MCO 6143 Orthopaedic Surgery in the Immunocompromised Host (1)

This course brings to light the special requirements and potential complications of orthopaedic surgery in the immunocompromised patient. Being familiar with techniques used to decrease morbidity and mortality in this special subset of the population undergoing orthopaedic surgery is essential for the DScPAS-CO resident in today's society.

#### MCO 6144 Osteoarthritis (1)

This course is an overview of osteoarthritis, including the epidemiology, pathogenesis, clinical features, evaluation, and management. Clinically, osteoarthritis is a very common diagnosis, and being knowledgeable about this disease entity is essential for the DScPAS-CO resident.

#### MCO 6145 Benign Bone Tumors (1)

This course addresses the incidence, clinical and radiographic features, and management of benign bone tumors. Benign bone tumors are four to five times more common than malignant bone tumors, making familiarity with benign bone tumors essential for the DScPAS-CO resident.

## MCO 6146 Prioritization and Management of the Polytrauma Patient (1)

This course discusses the prioritization and management of the polytrauma patient. The DScPAS-CO resident will become familiar with and utilize established trauma management protocols and learn how to integrate into a coordinated team of traumatologists.

#### MCO 6147 Ligamentous Injuries of the Foot and Ankle (1)

This course discusses common injuries of the foot and ankle. The DScPAS-CO resident will become familiar with and be able to differentiate surgical versus non-surgical ankle injuries and use well-established treatment options for non-surgical injuries.

## MCO 6148 Knee Ligament and Meniscal Injuries: Epidemiology, Mechanism, Diagnosis and Natural History (1)

This course will give the DScPAS-CO resident knowledge necessary to identify, diagnose and determine the appropriate management course for knee ligamentous and meniscal injuries.

#### MCO 6150 Diagnosis and Management of Musculoskeletal Infection (1)

This course reviews the microbiology, history, physical exam findings, ancillary studies and management options for common musculoskeletal infections.

#### MCO 6151 Overview of Arthritis (1)

This course is an overview of arthritis. It touches on the impact of arthritis in our society and reviews some unique considerations in the care of the orthopaedic patient with arthritis.

#### MCO 6152 Pathophysiology of Bone Tumors (1)

This course is an overview of the pathophysiology of bone tumors. Understanding the pathophysiology of bone tumors will help the DScPAS-CO resident when evaluating a patient with an osseous lesion with regards to the expected natural course and the presenting symptoms.

#### MCO 6153 Orthopaedic Sports Medicine (1)

This course provides the basic knowledge and skills that the DScPAS-CO resident will require throughout training and in clinic practice regarding orthopaedic sports medicine.

#### MCO 6154 Spinal Pain (1)

This course covers the role of the spine in pathologic pain processes. Spinal pain is frequently non-specific and provides little insight into its source. The spine may be affected by a myriad of pathological disorders—traumatic, neoplastic, inflammatory, metabolic, or degenerative.

## MCO 6201 Biomechanics of Fracture Fixation and Classification of Fractures (2)

This course will provide the DScPAS-CO resident with a basic introduction to the classification of fractures as well as the biomechanics of fractures, the biomechanics of implants used to fix fractures, and problems associated with implants and specific fracture patterns.

## MCO 6202 The Multiply Injured Patient with Musculoskeletal Injuries and Anesthetic Care of the Trauma Patien (2)

This course will provide the orthopaedic PA resident familiarity with trauma team organization and responsibilities, ATLS guidelines, anesthetic care, DVT prophylaxis and orthopaedic management of the multiply injured patient.

#### MCO 6203 Non-Operative Fracture Treatment (2)

This course will provide the DScPAS-CO resident familiarity with the history of the evolution of fracture treatment and the effect of today's treatments on the natural skeletal repair process. The resident will also gain familiarity with identifying fractures of the upper and lower extremities, which are commonly treated non-operatively with and without manipulative reduction.

#### MCO 6204 Principles of Internal and External Fixation (2)

This course discusses the principles of internal and external fixation. Being familiar with the principles of internal and external fixation is essential for the DScPAS-CO resident while developing a treatment plan, assisting during operative procedures, and providing post-operative care and rehabilitation.

## MCO 6205 Musculoskeletal Healing, Vascular Injuries and Compartment Syndromes (2)

This course provides the basic knowledge and skills that the orthopaedic PA resident will require throughout training and in clinic practice regarding bone and soft tissue healing, open fractures, vascular injuries, and compartment syndrome.

## MCO 6206 Penetrating Trauma/Bone and Soft Tissue Reconstruction (2)

This course focuses on penetrating trauma caused by ballistic projectiles. Emphasis is on ballistic behavior and the resulting orthopaedic injuries. Initial management principles are explained with differentiation between the management of upper and lower extremity injuries.

## MCO 6207 War Wounds, Limb Salvage Traumatic Amputations, and Periprosthetic Fractures (2)

This course covers explosive devices such as mortars, bombs, land mines and improvised explosive devices causing multiple torso, abdominal and extremity trauma. Initial management should focus on saving life and limb but also wound debridement and functional limb salvage for long-term functional and prosthesis use and the classification of common causes of pathologic and periprosthetic fractures.

#### MCO 6208 Complications of Injury to the Musculoskeletal System (2)

This course will give the OPA resident knowledge about the incidence, pathophysiology, examination, diagnostic testing and imaging, classification, and management of select common complications of traumatic, nontraumatic, and surgical (iatrogenic) injury to the musculoskeletal system.

#### MCO 6209 Fractures and Dislocations of the Hand and Wrist (2)

This course will provide the DScPAS-CO resident with a base knowledge of fractures and dislocations in the hand and wrist with insight into the complexities involved with even the seemingly insignificant appearing fractures.

## MCO 6210 Fractures of the Radial and Ulnar Shafts and Isolated Distal Radius Fractures (2)

This course will provide the orthopaedic PA resident with the information and knowledge needed to diagnose, describe, reduce, and recommend for surgical fixation one of the most common fractures in all age groups.

## MCO 6211 Fractures and Dislocations of the Elbow and Distal Humerus (2)

This course provides the basic knowledge and skills that the orthopaedic PA resident will require throughout training and in clinic practice regarding elbow dislocations and fractures about the elbow and distal humerus

## MCO 6212 Subluxations and Dislocations about the Glenohumeral, Acromioclavicular, and Sternoclavicular Joint (2)

This course will give the DScPAS-CO resident knowledge about the general anatomy, biomechanical pathology, examination, diagnostic imaging, and classification of select subluxations and dislocations of the glenohumeral joint and surrounding musculoskeletal tissues of the shoulder girdle.

#### MCO 6213 Fractures of the Shaft and Proximal Humerus (2)

This course discusses the evaluation and treatment of humeral shaft and proximal humerus fractures. Being familiar with the history, physical exam, radiological findings and treatment of humerus fractures is an essential skill for the orthopaedic PA.

#### MCO 6214 Fractures of the Clavicle and Scapula (2)

This course covers scapular fractures which can occur after high energy mechanisms, and have a significant (35% to 98%) amount of associated injuries. Fractures of the scapula occur infrequently at 0.4% to 1% of all fractures. Not until recently has it been determined that clavicle fractures are anything but routine and that some problematic types of clavicle fractures and non-unions need more in-depth treatment.

#### MCO 6215 Fractures of the Pelvic Ring and Acetabulum (2)

This course will provide the DScPAS-CO resident with the basic information necessary to diagnose, describe, reduce, and treat fractures of the pelvis and acetabulum.

## MCO 6216 Femoral Head, Neck, and Intertrochanteric Fractures and Hip Dislocations (2)

This course will give the DScPAS-CO resident knowledge of the general anatomy, biomechanical pathology, signs and symptoms, examination, diagnostic imaging, and classification of hip dislocations and fractures of the head, neck and intertrochanteric regions of the femur.

## MCO 6217 Subtrochanteric Fractures and Fractures of the Shaft of the Femur (2)

This course will give the DScPAS-CO resident knowledge about the general anatomy, biomechanical pathology, signs and symptoms, examination, diagnostic imaging, and classification of subtrochanteric and femoral shaft fractures.

#### MCO 6218 Fractures of the Proximal Tibia, Fibula and Patella (2)

This course will give the DScPAS-CO resident knowledge about the general anatomy, biomechanical pathology, signs and symptoms, examination, diagnostic imaging, and classification of select common fractures of the proximal tibia, fibula and the patella.

## MCO 6219 Knee Injuries and Fractures of the Tibia and Fibula Shafts (2)

This course will give the OPA resident knowledge about the general anatomy, biomechanical pathology, examination, diagnostic imaging, and classification of select common injuries of the knee as well as examination, diagnostic imaging, and classification of select common fractures of the tibia and fibula.

#### MCO 6220 Ankle Fractures and Fractures of the Talus (2)

This course will give the OPA resident knowledge about the general anatomy, biomechanical pathology, examination, diagnostic imaging, and classification of common select fractures and dislocations of the ankle and talus.

## MCO 6221 Fractures and Dislocations of the Midfoot, Forefoot, and Calcaneous (2)

This course will give the OPA resident knowledge about the general anatomy, biomechanical pathology, examination, diagnostic imaging, and classification of common select fractures and dislocations of the calcaneous, midfoot, and forefoot.

#### MCO 6301 Foot and Ankle Practical Rotation (3)

This is a one-month clinical and surgical rotation on service with a fellowship-trained foot and ankle surgeon and a team of surgical residents.

#### MCO 6302 Orthopaedic Spine Rotation (3)

This is a one-month clinical and surgical rotation on service with a fellowship-trained orthopaedic spine surgeon and a team of surgical residents.

#### MCO 6303 Pediatric Orthopaedic Surgery Rotation (3)

This is a one-month clinical and surgical rotation on service with a fellowship-trained pediatric orthopaedic surgeon and a team of surgical residents.

#### MCO 6304 Orthopaedic Total Joint Rotation (3)

This is a one-month clinical and surgical rotation on service with a fellowship-trained total joint surgeon and a team of surgical residents.

#### MCO 6305 Orthopaedic Hand Surgery Rotation (3)

This is a one-month clinical and surgical rotation on service with a fellowship-trained hand surgeon and a team of surgical residents.

#### MCO 6306 Orthopaedic Tumor Rotation (3)

This is a one-month clinical and surgical rotation on service with a fellowship-trained musculoskeletal oncologist and a team of surgical residents.

#### MCO 6308 Orthopaedic Emergencies and Inpatient Care (3)

Instructs students on appropriate care for orthopaedic emergencies while on call for the Emergency Department and while doing daily rounds on orthopaedic inpatients. Instruction also covers daily wound care for orthopaedic inpatients as well as preoperative and postoperative management.

#### MCO 6346 Clinical Research (3)

The MCO 6346 course consists of a didactic phase during the first month of training, dedicated research blocks, and individual research days scheduled throughout the eighteen-month course. The research course is designed to familiarize residents with the research process and, more importantly, to facilitate the development of the skills necessary to critically analyze published scientific articles, including statistical aspects of those articles.

## MCO 6350 Introduction to Orthopaedic Clinical Evaluation and Procedures (3)

This course introduces advanced principles of orthopaedic evaluation, diagnosis, and treatment necessary for regular clinical application, applying evidence-based medicine to the management of orthopaedic patients, and focusing on extremity anatomy, biomechanical pathology, physical examination, diagnostic imaging, and rehabilitation methods.

#### MCO 6351 Evidence Based Orthopaedic Care (3)

This course introduces the application of evidence-based medicine to the management of orthopaedic complaints, focusing on assessing current peer-reviewed journal articles for sound research design and valid conclusions so as to apply lessons learned from the literature to individual patients and patient populations.

## MCO 6352 Orthopaedic Evaluation and Management of Spine Disorders (3)

This course introduces advanced principles of orthopaedic evaluation, diagnosis, and treatment necessary for regular clinical application, applying evidence-based medicine to the management of orthopaedic spine complaints, and focusing on spine anatomy, biomechanical pathology, physical examination, diagnostic imaging, and classification of common select fractures of the spine.

#### MCO 6353 Evaluation and Management of Neurologic Disorders (3)

This course introduces advanced principles of orthopaedic evaluation, diagnosis and treatment necessary for regular clinical application, applying evidence-based medicine to the management of neurologic complaints, and focusing on spine and head anatomy, biomechanical pathology, physical examination, diagnostic imaging, laboratory studies, and classification of common select fractures of the head and spine.

## MCO 6354 Evaluation and Management of Pediatric Orthopaedic Disorders (3)

This course introduces advanced principles of orthopaedic evaluation, diagnosis, and treatment necessary for regular clinical application, applying evidence-based medicine to the management of pediatric orthopaedic complaints, and focusing on general anatomy, biomechanical pathology, physical examination, diagnostic imaging, laboratory studies, congenital disorders, and classification of pediatric fractures.

## MCO 6355 Advanced Orthopaedic Clinical Evaluation and Procedures (3)

This course furthers critical principles of orthopaedic evaluation, diagnosis, and treatment necessary for regular clinical application, applying evidence-based medicine to the management of orthopaedic patients, and focusing on extremity anatomy, biomechanical pathology, physical examination, diagnostic imaging, and rehabilitation methods.

# MCO 6356 Techniques for Medical Research Presentation (3)

Pre-requisite(s): CITI training only

This course introduces various techniques for medical research presentation. It takes information obtained in developing a high-quality clinical research project, demographic and outcome measure data, and statistical analysis, and generates oral and written products for presentation at local and national venues.

## MCO 6401 Orthopaedic Sports Rotation (4)

This is a two-month clinical and surgical rotation on service with an orthopaedic sports medicine surgeon and a team of surgical residents.

## MCO 6402 Orthopaedic Trauma Rotation (4)

This is a two-month clinical and surgical rotation on service with a fellowship-trained orthopaedic traumatologist and a team of surgical residents.

# MCO 6410 Introduction to Upper Extremity Sports Injury Management (4)

This course introduces advanced principles of orthopaedic evaluation, diagnosis, and treatment necessary for regular clinical application, applying evidence-based medicine to the management of patient athletes, and focusing on upper extremity anatomy, biomechanical pathology, physical examination, diagnostic imaging, and rehabilitation methods.

# MCO 6411 Introduction to Lower Extremity Sports Injury Management (4)

This course introduces advanced principles of orthopaedic evaluation, diagnosis, and treatment necessary for regular clinical application, applying evidence-based medicine to the management of patient athletes, and focusing on lower extremity anatomy, biomechanical pathology, physical examination, diagnostic imaging, and rehabilitation methods.

# MCO 6412 Evaluation and Management of Hand and Elbow Disorders (4)

This course introduces advanced principles of orthopaedic evaluation, diagnosis, and treatment necessary for regular clinical application; applies evidence-based medicine to the management of orthopaedic upper extremity complaints; and focuses on microsurgery, upper extremity anatomy, biomechanical pathology, physical examination, diagnostic imaging, and classification of common select fractures and dislocations of the upper extremity.

## MCO 6413 Evaluation and Management of Foot and Ankle Disorders (4)

This course introduces advanced principles of orthopaedic evaluation, diagnosis, and treatment necessary for regular clinical application, applying evidence-based medicine to the management of orthopaedic complaints, and focusing on lower extremity anatomy, biomechanical pathology, physical examination, diagnostic imaging, and classification of common select fractures and dislocations of the leg, ankle, and foot.

# MCO 6414 Evaluation and Management of Complex Wounds (4)

This course introduces advanced principles of orthopaedic evaluation, diagnosis, and treatment necessary for regular clinical application, applying evidence-based medicine to the management of patients with complex wounds., and focusing on general anatomy, biochemistry, physical examination, diagnostic imaging, laboratory studies, and medical and surgical management of complex wounds.

# MCO 6415 Evaluation of Joint Arthritis and Trauma Managed with Joint Reconstruction (4)

This course introduces advanced principles of orthopaedic evaluation, diagnosis, and treatment necessary for regular clinical application, applying evidence-based medicine to the management of orthopaedic complaints, and focusing on general anatomy, biomechanical pathology, physical examination, diagnostic imaging, classification of periarticular fractures, and arthritis.

#### MCO 6416 Musculoskeletal Oncology Evaluation and Management (4)

This course introduces advanced principles of orthopaedic evaluation, diagnosis, and treatment necessary for regular clinical application, applying evidence-based medicine to the management of musculoskeletal neoplasms and infections, and focusing on general anatomy, biomechanical pathology, physical examination, diagnostic imaging, laboratory studies, and radiographic classification of oncologic lesions and pathologic fractures.

# MCO 6417 Introduction to Evaluation and Management of Orthopaedic Trauma (4)

This course introduces advanced principles of orthopaedic evaluation, diagnosis, and treatment necessary for regular clinical application, applying evidence-based medicine to the management of musculoskeletal trauma, and focusing on general anatomy, biomechanical pathology, physical examination, diagnostic imaging, laboratory studies, and radiographic classification of orthopaedic trauma.

# MCO 6418 Introduction to Evaluation and Management of General Trauma (4)

This course introduces advanced principles of surgical evaluation, diagnosis, and treatment necessary for regular clinical application, applying evidence-based medicine to the management of multisystem trauma, and focusing on general anatomy, biomechanical pathology, physical examination, diagnostic imaging, laboratory studies, and radiographic classification of multisystem trauma.

# MCO 6419 Introduction to Critical Care Management (4)

This course introduces advanced principles of orthopaedic evaluation, diagnosis, and treatment necessary for regular clinical application, applying evidence-based medicine to the management of intensive care unit patients, and focusing on general anatomy, biomechanical pathology, physical examination, diagnostic imaging, laboratory studies, and medical management of critical patients.

# MCO 6420 Advanced Sports Injury Management (4)

This course further examines critical principles of orthopaedic evaluation, diagnosis, and treatment necessary for regular clinical application, applying evidence-based medicine to the management of patient athletes, and focusing on extremity anatomy, biomechanical pathology, physical examination, diagnostic imaging, and rehabilitation methods.

# MCO 6421 Advanced evaluation and management of orthopaedic trauma (4)

This course introduces advanced principles of orthopaedic evaluation, diagnosis, and treatment necessary for regular clinical application, applying evidence-based medicine to the management of musculoskeletal trauma, and focusing on general anatomy, biomechanical pathology, physical examination, diagnostic imaging, laboratory studies, and radiographic classification of orthopaedic trauma.

#### MCO 6422 Advanced Critical Care Management (4)

This course introduces advanced principles of orthopaedic evaluation, diagnosis, and treatment necessary for regular clinical application, applying evidence-based medicine to the management of intensive care unit patients, and focusing on general anatomy, biomechanical pathology, physical examination, diagnostic imaging, laboratory studies, and medical management of critical patients.

## MCO 6423 Medical Research Design (4)

Pre-requisite(s): CITI training only

This course introduces medical research design, focusing on generating a testable research question, developing a research design that addresses the question, and conducting a literature review that supports the study design.

# MCO 6424 Approaches to Medical Data Collection and Analysis (4)

Pre-requisite(s): CITI training only

This course introduces approaches to medical data collection and analysis, focusing on executing a research protocol, collecting outcome measures data, and then participating in the analysis of the data.

# MCO 6425 Urgent Orthopaedic Evaluation (4)

This course introduces advanced principles of orthopaedic evaluation, diagnosis, and treatment necessary for regular clinical application, applying evidence-based medicine to the management of musculoskeletal trauma, and focusing on extremity anatomy, biomechanical pathology, physical examination, diagnostic imaging, laboratory studies, and radiographic classification of orthopaedic trauma.

# MCO 6426 Advanced Joint Reconstruction (4)

Pre-requisite(s): MCO 6417

This course advances principles of orthopaedic evaluation, diagnosis, and treatment necessary for regular clinical application. It applies evidence-based medicine to the management of orthopaedic complaints. The course focuses on general anatomy, biomechanical pathology, physical examination, diagnostic imaging, classification of periarticular fractures, and arthritis

# **Comm. Sciences and Disorders (CSD)**

# CSD 5101 Leveling-Observation (1)

Observation of speech and language therapy, to identify methods for treating individuals who have communication disorders, in preparation for graduate coursework.

## CSD 5149 Clinical Practicum in Speech Pathology (1)

Practicum in evaluation and treatment of individuals who have communication disorders.

## CSD 5151 Clinical Practicum Placement 1 (1)

The first practicum placement in the master's program for the evaluation and treatment of individuals with communication disorders.

## CSD 5152 Clinical Practicum Placement 2 (1)

The second practicum to be taken in the master's program for the evaluation and treatment of individuals with communication disorders.

### CSD 5153 Clinical Practicum Placement 3 (1)

The third practicum to be taken in the master's program for the evaluation and treatment of individuals with communication disorders.

## CSD 5199 Non-Thesis Degree Completion (1)

To fulfill requirements for non-thesis master's students who need to complete final degree requirements other than coursework during their last semester. This may include such things as a comprehensive examination, oral examination, or foreign language requirement. Students are required to be registered during the semester they graduate.

#### CSD 5201 Leveling-Clinical Methods (2)

Methods for treating individuals who have communication disorders. Observation of speech and language therapy in preparation for graduate coursework.

## CSD 5302 Leveling - Anatomy & Physiology (3)

A study of the anatomy and physiology of speech in preparation for graduate coursework.

## CSD 5303 Leveling - Speech Science (3)

Basic sciences underlying speech and hearing: physics of sound, the decibel, instrumentation, speech production, speech perception, and audition in preparation for graduate coursework.

## CSD 5304 Advanced Aural Rehabilitation (3)

Pre-requisite(s): CSD 4368

Hearing aids, cochlear implants, vibrotactile devices, and therapy programs for hearing-impaired persons.

# CSD 5305 Leveling-Survey of Speech Pathology and Audiology (3)

An introduction to the nature and causes of speech, language, and hearing disorders and speech language pathology as an educational and clinical field in preparation for graduate coursework.

#### CSD 5306 Leveling-Language Development (3)

Linguistic theory and language development in normal children in preparation for graduate coursework.

## CSD 5307 Leveling-Introduction to Phonological Science (3)

Introduction to the phonological rules and processes of American English and an examination of descriptive, physiological, and acoustic phonetics in preparation for graduate coursework.

# CSD 5308 Leveling-Structures and Functions in Communication and Swallowing (3)

Anatomy and physiology of the subsystems that underlie speech and swallowing—neural bases, respiration, phonation, resonance, and articulation as well as speech science in preparation for graduate coursework.

## CSD 5309 Leveling-Introduction to Clinical Audiology (3)

Hearing sciences and approaches for evaluating hearing: anatomy and physiology of the ear, the decibel, ear pathology, pure-tone audiometry, speech audiometry, and acoustic-immittance audiometry in preparation for graduate coursework.

#### CSD 5311 Aphasiology (3)

Etiology, symptomatology, and treatment of aphasia and kindred disorders.

## CSD 5312 Fluency Disorders (3)

Pre-requisite(s): CSD 4307

Nature, evaluation, treatment, and current research trends in stuttering.

## CSD 5313 Augmentative Communication and Severe Populations (3)

Exploration of selection and teaching of augmentative and alternative communication, and a focus on populations with severe language disorders including autism.

### CSD 5314 Voice Pathology (3)

Pre-requisite(s): CSD 3308 and 4309

Application of principles of voice science to the treatment of organic and functional voice disorders.

## CSD 5316 Motor Speech Disorders (3)

Etiologies, symptoms, classifications, evaluative procedures, and treatments of developmental and adult motor speech disorders.

#### CSD 5317 Cleft Lip and Palate (3)

Etiologies, classifications, evaluation procedures, and management of communication disorders associated with cleft lip and palate and related orofacial dysmorphologies.

# CSD 5318 Methods in Graduate Study in Communication Sciences and Disorders (3)

Methods necessary to evaluate literature, to conduct research, and describe results in communication sciences and disorders.

# CSD 5319 EBP Evaluation and Interprofessional Practice in a Diverse Society (3)

This course focuses on orienting students to the principles of evidencebased practice (EBP) and evaluations and directs students in utilizing components of the EBP process in making decisions regarding treatment and evaluation.

## CSD 5320 Neurology and Advanced Instrumentation (3)

Study of the neuroanatomy and neurophysiology of the mechanisms associated with speech, language, and swallowing, and the instrumentation and latest technological advances used to study speech, language, and swallowing.

# CSD 5324 Adolescent Language and Learning Disabilities (3)

Pre-requisite(s): CSD 2318

A neuropsychological approach to the etiology, classification, diagnosis, and treatments of learning disabled children.

#### CSD 5325 Speech Sound Disorders (3)

Current research, assessment, and treatment of speech-sound disorders (SSD) including articulation and phonological disorders with functional and organic etiologies.

# CSD 5328 Diagnosis and Treatment of Dysphagia (3)

Development of swallowing, etiologies, evaluative procedures, and management of swallowing disorders.

# CSD 5330 Cognitive Linguistic Communication Disorders (3)

Neuropathology, symptomology, assessment, and treatment of cognitive linguistic communication disorders associated with right hemisphere damage, traumatic brain injury, and dementia.

## CSD 5332 Traumatic Brain Injury Seminar (3)

Familiarizes students with research literature regarding the neuropathology, symptomatology, assessment and treatment of persons having traumatic brain injury.

# CSD 5334 Multicultural Issues in Speech-Language Pathology (3)

Relates cultural background to normal development of speech and language. Topics include sound system acquisition, syntax, pragmatics, and professional issues and concerns.

## CSD 5337 School-Age Language and Literacy Disorders (3)

Contemporary research on language and reading disorders, evidencebased practice, and language/literacy methods of prevention, assessment, and treatment.

# CSD 5338 Instrumentation and Advanced Speech Science (3)

Pre-requisite(s): CSD 4307 or consent of instructor Principles and techniques of electronics and new techniques

Principles and techniques of electronics and new technology used in the diagnosis and treatment of pathologies of speech and swallowing, including videostrobolaryngoscopy, digital signal analyses, and flexible fiberoptic endoscopic evaluation of swallowing.

#### CSD 5341 Birth to Five Language Disorders (3)

This course is an advanced study of language impairments in children from birth to five years of age.

# CSD 5351 Speech and Language Neurology (3)

Neuroanatomy and neurophysiology as applied to the evaluation of normal and pathological speech and language behaviors.

### CSD 5353 Advanced Medical Speech Pathology (3)

Advanced medical diagnostic procedures and treatment techniques associated with speech pathology patients in an advanced medical setting.

# CSD 5354 Mentored Research Experience in Communication Sciences and Disorders (3)

Pre-requisite(s): CSD 5318 and/or consent of instructor Advanced study and application of research methods in communication sciences and disorders. Supervised by a faculty member in CSD.

## CSD 5649 Speech Pathology Internship (6)

Supervised off-campus experience in speech pathology. Intern placement will be related to students' specialized area of interest.

# CSD 5V07 Seminar in Audiology (1-9)

hrs

# CSD 5V35 Problems in Communication Sciences and Disorders (1-9)

Designed to give students opportunities for additional work in their area of concentration. May be repeated for a maximum of nine semester hours

## CSD 5V39 Advanced Clinical Practicum in Audiology (1-6)

Pre-requisite(s): Nine semester hours in audiology including CSD 4301 and 5304

Supervised practicum in audiology using speech audiometry. Hearing aid selection.

# CSD 5V48 Seminar in Speech Pathology (1-9)

Published research, theoretical and clinical, in speech and hearing and allied fields.

## CSD 5V99 Thesis (1-6)

Research, data analysis, writing, and/or oral defense of an approved master's thesis. At least three hours of CSD 5V99 are required for thesis.

#### CSD 6101 Mentored Research in CSD I (1)

Pre-requisite(s): Instructor approval required Research apprenticeship in area of expertise in CSD. Design, implementation, and dissemination of study outcomes.

# CSD 6205 Professional Writing for Doctoral Students (2)

Development of technical and scientific writing skills. Emphasis on critical review and writing of scientific papers.

# CSD 6302 Introduction to Doctoral Studies in CSD (3)

This course includes critical thinking, problem-solving, and synthesis of topics to introduce students to doctoral studies. The history of science in CSD, Ph.D. shortages, IRB, issues in scientific conduct, mentoring models, preparation for study, and servant leadership as well as launching a successful academic career post-graduation are discussed.

# CSD 6306 Advanced Neuroscience of Speech, Language, Swallowing, and Hearing (3)

This course is designed to provide a comprehensive introduction to the neuroscience of speech, language, swallowing, and hearing, incorporating current research findings with current perspectives on assessment and treatment of language disorders. It will cover speech, language, swallowing, and hearing mechanisms in the human brain as well as the various types of research methods used in human neuroscience, and their intended uses.

# CSD 6V10 Doctoral Independent Study in Advanced Communication Sciences and Disorders (1-3)

Focuses on advanced topics in speech, language, hearing, and/or swallowing. Permission of instructor is required. This course may be repeated when content differs for a maximum of 12 semester hours.

# **Communication (CSS)**

# CSS 5199 Non-Thesis Degree Completion (1)

To fulfill requirements for non-thesis master's students who need to complete final degree requirements other than coursework during their last semester. This may include such things as a comprehensive examination, oral examination, or foreign language requirement. Students are required to be registered during the semester they graduate.

# CSS 5310 Modern Communication Theory (3)

An overview of criticism regarding continuing developments in communication theory.

#### CSS 5311 Seminar in Interpersonal Communication (3)

An in-depth analysis of interpersonal theory and research.

## CSS 5312 Seminar in Argumentation (3)

Pre-requisite(s): CSS 4352; or consent of instructor Advanced theoretical work on the form and function of argumentation. This course explores field theory, examines the utility of argument diagram, and considers approaches to ordinary language argument.

## CSS 5313 Seminar in Rhetoric and Society (3)

An analysis of the function of rhetorical discourse in contemporary society.

#### CSS 5314 Seminar in Small-Group Communication (3)

An analysis of small-group communication theory and research with a focus on topics such as decision making, leadership, social influence, and interaction analysis.

# CSS 5316 Seminar in Organizational Communication (3)

An analysis of organizational communication theory and research.

## CSS 5317 Seminar in Organizational Change and Communication (3)

Organizational change is viewed from a communication perspective with special attention placed on the conversational architectures that create sensible and coherent change.

# CSS 5318 Seminar in Rhetoric and the Public Sphere (3)

Pre-requisite(s): Graduate standing or consent of instructor Analysis of major theoretical statements on the changing nature of the public sphere in western democracies and the related implications for the role of argumentation and rhetorical discourse in the formation of public policy.

# CSS 5319 Seminar in Family Communication (3)

An advanced examination of scholarly theory, research, and quantitative/ qualitative research methods used for academic investigation of topics and issues related to communication within the family.

# CSS 5320 Leadership and Persuasion (3)

Explores the interwoven relationship between educational leadership and persuasive communication. By the end of the class students should be able to fashion compelling persuasive messages as well as interpret the attempts at persuasion by others.

### CSS 5321 Organizational Membership and Identification (3)

Explores the relationship between communication and one's self-concept as it is defined and shaped by membership in workplaces, civic organizations, churches, clubs, and other social groupings. Discussion and analysis of the processes and practical consequences of organizational identification.

## CSS 5322 Communication and Organizing in Disruptions (3)

Examines the theory, research, and communicative processes related to disruptive events in organizations.

#### CSS 5323 Seminar in Organizational Rhetoric and Discourse (3)

This seminar focuses on how rhetoric and discourse shape organizational life in terms of power, culture, change, identity, and crisis.

## CSS 5341 Rhetoric and Cultural Studies (3)

Methods of rhetorical criticism influenced and intersected by cultural studies, beginning with early twentieth century and continuing into present day.

## CSS 5350 Seminar in Presidential Rhetoric (3)

Cross-listed as PSC 5350

See PSC 5350 for course information.

### CSS 5351 Methods of Graduate Study (3)

Methods of quantitative inquiry in the study of communication theories. Emphasis on application theory and methods in a variety of communication research contexts, e.g., organizational communication, mass communication.

## CSS 5352 Seminar in Methods of Rhetorical Criticism (3)

Quantitative/critical methodology utilized in the analysis of public discourse.

# CSS 5353 Rhetorical Theory (3)

Examines the lines of inquiry that guide rhetorical theorizing and lenses that inform the practice of rhetorical criticism from ancient to contemporary usages.

# CSS 5354 Quantitative Research Methods in Communication (3)

Introduction to the approaches and procedures used in designing and analyzing communication research studies.

## CSS 5380 Internship in Communication (3)

Pre-requisite(s): Consent of graduate program director Provides graduate students opportunity for application of communication-related skills and knowledge under the supervision of a professional employer in a corporate organization.

# CSS 5V35 Problems in Communication (1-6)

Designed to give individual students opportunities for additional work in their area of concentration. May be repeated in a different semester for a maximum of six semester hours.

## CSS 5V36 Seminar in Communication (1-3)

Seminar topics vary each semester. One to three semester hours may be earned in a semester. May be repeated once with change in topic for a maximum of six semester hours.

### CSS 5V90 Professional Paper in Communication (1-3)

Satisfies the non-thesis option for the master of communication. Under the direction of a supervising professor, a student will select a problem or topic in communication and will write a substantial paper or produce a substantial project for submission to the faculty. Maximum three hours.

# CSS 5V98 Praxis Practicum (1-6)

Pre-requisite(s): CSS 5V35 and 5351

At least 150 hours of applied learning in a communication-centered role/ field. Final project that includes a written and verbal report and draws from scholarly literature, original research, and field experiences.

#### CSS 5V99 Thesis (1-6)

Research, data analysis, writing, and oral defense of an approved master's thesis. At least six hours of CSS 5V99 are required.

# **Computer Science (CSI)**

# CSI 5010 Graduate Seminar (0)

Pre-requisite(s): Graduate standing in computer science Research presentations by the graduate faculty, outside speakers, and select advanced graduate students. Attendance at various functions is also required.

## CSI 5199 Non-Thesis Degree Completion (1)

To fulfill requirements for non-thesis master's students who need to complete final degree requirements other than coursework during their last semester. This may include such things as a comprehensive examination, oral examination, or foreign language requirement. Students are required to be registered during the semester they graduate.

#### CSI 5301 Foundations of Algorithms (3)

This course provides a comprehensive introduction to computer algorithms taken from diverse areas of application. The course concentrates on algorithms of fundamental importance and on analyzing the efficiency of these algorithms.

## CSI 5302 Foundations of Database (3)

The course covers current relational database design concepts including ER diagrams, database access techniques such as SQL, database issues including performance and security, and web-database applications.

#### CSI 5303 Foundations of Software Engineering (3)

Pre-requisite(s): Consent of instructor

Fundamentals of software engineering; software development processes, requirements analysis, modular design, design patterns, software testing and evolution, configuration management, and implementation of software systems. A small project to illustrate and extend concepts from lectures.

## CSI 5304 Foundations of Data Communications (3)

Introduction to the the fundamentals of computer networking, including communication issues/solutions at various layers, socket programming, and internet protocols.

# CSI 5305 Foundations of Operating Systems (3)

Online only. Operating system design and implementation. Topics include process control and synchronization, memory management, processor scheduling, file systems, and security. Course projects implement parts of an operating system.

# CSI 5306 Foundations of Mathematics for Computer Science (3)

A survey of mathematical topics for computer scientists. An introduction to differential and integral calculus, matrices, proof techniques, and statistics.

# CSI 5310 Introduction to Computation Theory (3)

Several models of computation (including finite automata, pushdown automata, and Turing machines) and their related languages. Topics include closure properties, regular languages, context-free languages, decidability and recognizability, and time and space complexity (including NP-completeness and randomized complexity).

## CSI 5321 Advanced Data Communications (3)

Pre-requisite(s): CSI 4321 or equivalent

Survey of current and seminal research in networking.

#### CSI 5324 Software Engineering (3)

Pre-requisite(s): Consent of instructor

Methods for developing and maintaining software systems; system software life cycle, requirements elicitation, specification and design methods, planning, maintenance, configuration management, documentation and coding standards, cost estimation, metrics and quality attributes; class project.

## CSI 5325 Introduction to Machine Learning (3)

Pre-requisite(s): CSI 4336 or consent of instructor

An introduction to topics in machine learning, including supervised and unsupervised learning, modeling for regression and classification, naive Bayes methods, kernel-based learning, support vector machines, statistical and mathematical models for learning, and model assessment and prediction.

# CSI 5330 Advanced Computational Biology (3)

Cross-listed as BINF 5330

Advanced course of computational methods for understanding biological systems. Topics include string matching, suffix tree analysis, sequence alignment, and other graph theoretic algorithms for gene mapping and sequencing, phylogenetic inference, and biological network analysis.

## CSI 5335 Advanced Database (3)

Pre-requisite(s): CSI 3334 and 3335

A continuation of database system implementations to include objectoriented and knowledge-based systems. Additional topics covered are physical-data organization, database integrity, security, transaction management, and distributed database management.

# CSI 5336 Data Models (3)

Pre-requisite(s): CSI 4334 and 4335

Conceptual and abstract parts of databases. Topics include commonly used data models (hierarchical, network, relational, semantic network and infological) and the use of data models for database design and operation.

### CSI 5337 Advanced Operating Systems (3)

Pre-requisite(s): CSI 4337 and STA 4385; or PSY 4300

Advanced topics in operating systems including queuing models, performance measurement and evaluation, security and protection, and design issues involved in operating system design.

## CSI 5338 Advanced Computer Organization (3)

Pre-requisite(s): CSI 3338 or consent of instructor

Advanced topics in computer systems organization, including techniques used in large-scale computer systems, parallel and pipeline architectures, stack machines, and other non-von Neumann architectures.

## CSI 5342 Software Verification and Validation (3)

Pre-requisite(s): Consent of instructor

Advanced topics in software engineering research, including techniques used in software verification and validation with a particular focus on software specification and testing.

## CSI 5343 Introduction to Human Computer Interaction (3)

Introduction to Human Computer Interaction is a research seminar designed to explore the issues of design, organization, implementation, communication, training, and management which confront humans as users of computer environments.

# CSI 5344 Analytic Models (3)

Pre-requisite(s): STA 3381

Computer modeling of a variety of systems. Topics include selections from: linear programming, network analysis, queuing theory, game theory, and statistical methods and models.

## CSI 5345 Parallel Systems (3)

Description and evaluation of parallel hardware and software. Distributedmemory versus shared-memory. Design and implementation of parallel programs using parallel hardware and software.

## CSI 5346 Design Automation (3)

This course is about automating the design of Very Large Scale Integrated circuits. The curriculum covers compiled and event driven simulation algorithms, differential simulation techniques, current literature in electronic simulation, channel routing algorithms, Lee routers, partitioning, current literature in placement and routing, synthesis algorithms, and current literature in logic and circuit synthesis.

#### CSI 5347 Distributed Systems (3)

Pre-requisite(s): Consent of the instructor

Design and implementation of distributed systems with up-to-date software architecture and relevant development frameworks. Topics include inter-module communication, asynchronous processing, security, concurrency, parallelism, and an overview of contemporary enterprise technology and challenges.

## CSI 5350 Advanced Algorithms (3)

Pre-requisite(s): CSI 3344 or graduate standing

Advanced data structures, algorithm design, and analysis. Topics include common data structures, algorithms, implementation, classes of algorithms, algorithm analysis, computational tradeoffs, and adaptation of familiar algorithms to new problems.

# CSI 5351 Data Visualization (3)

An in-depth exploration of the techniques and algorithms for creating effective visualizations based on principles from graphic design, visual art, psychology, and cognitive sciences. Explores how to better understand data, present clear findings, and tell engaging data stories.

# CSI 5352 Advanced Object-Oriented Development (3)

Pre-requisite(s): Consent of the instructor

Object-oriented design and development with best practices in solving recurring engineering problems. Topics include core object-oriented concepts, such as composition, inheritance, polymorphism, and templates; an overview of design pattern-based problem solving and design practices; and advanced design patterns applicable for enterprise solution development.

## CSI 5353 Multimedia Systems (3)

Overview of systems requirements to handle multimedia information. Topics include synchronization, content-based information retrieval, protocols, and media type definitions. Theory and applications are covered.

# CSI 5354 Advanced Software Engineering (3)

Pre-requisite(s): CSI 5324 or consent of instructor

Advanced topics in software engineering research, including techniques used in the modeling and analysis of complex systems.

# CSI 5355 Data Mining and Analysis (3)

Pre-requisite(s): Graduate standing

Advanced topics in Data Mining are presented. These include the pattern analysis of numerical, categorical, time, and textual data. The course focuses on algorithms for clustering and predictive modeling with special attention to extracting useful information from raw data, and methods for data validation.

## CSI 5357 Cloud Computing (3)

Programming and data storage with cloud architectures. Topics include the Apache Hadoop Ecosystem and related programming frameworks.

## CSI 5360 Information Retrieval & Natural Language Processing (3)

Pre-requisite(s): CSI 3344, MTH 2311 or equivalent Introduce fundamental and advanced algorithms in Information Retrieval and Natural Language Algorithms. Topics include Language Modelling, Retrieval Algorithms and Evaluation, and Language Processing techniques such as tagging, parsing, and lexical semantics. Applications

# and research topics are also covered. CSI 5361 Cybersecurity Concepts (3)

Introduction to concepts in cybersecurity, including cryptography; instruction detection/prevention; attacking/defending; cybersecurity tools; malware and reverse engineering; and defensive programming.

#### CSI 5362 Advanced Cybersecurity Concepts (3)

Pre-requisite(s): CSI 5361

Advanced topics in cybersecurity, including threat modeling, policy, hardware systems, network/wireless/protocol security, cloud security, risk analysis/management/mitigation, and compliance.

# CSI 5365 Secure Systems, Software Architecture, Development, and Operations (3)

Pre-requisite(s): CSI 5361 Development and analysis of secure system lifecycles, software and hardware flaws and detection, secure repository/deployment, secure supply chain, and compromise mitigation architectures

# CSI 5367 Cybersecurity Analytics (3)

Pre-requisite(s): CSI 5362

Fundamentals of data analytics approaches and applications for cybersecurity; algorithms for analysis of structured and unstructured data; applications of machine learning to anomaly detection in software and system; exploration of automated detection techniques, various attacks, and post-compromise activities.

# CSI 5388 Advanced Topics in Human-Computer Interaction (3)

This class investigates the "emerging" next generation of user interaction with a focus on the design and evolution of interaction techniques. Variety of user interaction styles may include gesture, virtual reality, augmented reality, ubiquitous, tangible, lightweight, tacit, passive, affective, perceptual, context-aware, and multi-modal interfaces.

## CSI 5V90 Special Problems (1-9)

Pre-requisite(s): Consent of instructor

# CSI 5V92 Master's Research (1-3)

Pre-requisite(s): Consent of instructor

Concentrated research for the purpose of determining whether the thesis or project option is most appropriate, and for the initial selection of a topic area.

# CSI 5V93 Special Topics in Computer Science (1-4)

May be repeated for credit, provided topic is not duplicated, for a maximum of eighteen semester hours total.

# CSI 5V95 Internship Experience (1-3)

Pre-requisite(s): Graduate program director approval required Provides graduate students opportunity for internship work experience in computer science-related positions with consent of major advisor.

## CSI 5V96 Master's Project (1-3)

Pre-requisite(s): Consent of instructor

# CSI 5V99 Thesis (1-9)

Pre-requisite(s): Consent of instructor

Research, data analysis, writing, and oral defense of an approved master's thesis. At least three hours of CSI 5V99 are required.

## CSI 6V10 Doctoral Prospectus Research (1-6)

Pre-requisite(s): Instructor approval

Supervised research for developing a dissertation prospectus. Prepares students for the preliminary exam required for students to advance to candidacy. A student may repeat this course for credit with a maximum of ten total hours. Registration for this course is sufficient for achieving full-time status.

## CSI 6V90 Special Topics in Computer Science (1-3)

Special topics in Computer Science. This course may be taken up to 6 times, on a different topic each time, for up to 18 hours of credit.

#### CSI 6V99 Dissertation (1-12)

Research, data analysis, writing, and oral defense of an approved doctoral dissertation topic.

# **Curriculum & Instruction (EDC)**

## EDC 5199 Non-Thesis Degree Completion (1)

To fulfill requirements for non-thesis master's students who need to complete final degree requirements other than coursework during their last semester. This may include such things as a comprehensive examination, oral examination, or foreign language requirement. Students are required to be registered during the semester they graduate.

## EDC 5300 Advanced Elementary Social Studies Methods (3)

Preparation to become effective social studies educators capable of teaching elementary students the content knowledge, the intellectual skills, and the civic values necessary for fulfilling the responsibilities of citizenship in a participatory democracy.

# EDC 5302 Linguistics: Implications for Improving Reading Instruction (3)

Several linguistic fundamentals of the American English language and the manner in which these fundamentals may affect children's reading development. The linguistic fundamentals investigated are origin of the language, language development, phonology, morphology, and syntax. Special emphasis is placed on the function dialects have in children's reading development. An integral strand of the course is instruction strategies for implementing the linguistic fundamentals in classroom reading instruction.

# EDC 5303 Models of Teaching and Learning (3)

Teaching-learning situations. Emphasis on learning techniques, methods, and materials of instruction, functions of the different subject matter areas. Special projects assigned to each student.

## EDC 5304 Reading Intervention for Students (3)

This course focuses on research-based reading interventions that support K-8 children.

# EDC 5310 Principles and Strategies for Effective Discipline and Classroom Management (3)

A study of the principles of classroom discipline and management, including analysis of the dynamics of the classroom, application and evaluation of interactive models of classroom management, and legal issues of student discipline.

# EDC 5311 Introduction to Qualitative and Quantitative Research (3)

An introduction to the research process applied to Curriculum and Instruction topics, including design of the study, data collection, and analysis using qualitative and quantitative methods. Includes a discussion of variables, sampling, reliability, validity, and ethics of research. Students will read and interpret published research and develop a research proposal.

## EDC 5312 Literacy, Equity, and Children's Lives (3)

Adapting materials and methods of reading instruction to aid teachers meet the identified needs of learners.

## EDC 5313 Media Literacy Across the Curriculum (3)

An examination of media literacy and its place in the curriculum. Students will examine major themes and issues in media literacy education; acquire skills in deconstructing, using, and creating various media; and develop curriculum involving media literacy including appropriate methods of assessment.

#### EDC 5314 Clinical Experiences in Teaching Reading (3)

Pre-requisite(s): EDC 5304 or 5312; or consent of instructor Remedial and clinical methodologies and techniques utilized with pupils referred because of reading disabilities.

## EDC 5315 Foundations of the American Economy (3)

Cross-listed as AMS 5315

Behavior of households and business firms in determining the allocation of scarce resources among competing needs in a free market economy for those with no or little previous training in economics. Basic economic analysis is introduced as an aid in understanding the problems of energy, consumerism, unemployment, inflation, and pollution, among others. The course is designed to meet the requirements of Texas state law mandating instruction in free enterprise and economics education.

# EDC 5316 Basic American Documents (3)

Cross-listed as AMS 5316

The development of the American political, economic, and social system by reference to the basic documents which undergird that structure. Emphasis is placed on understanding how the system developed and how that development reflected the thoughts of the American public as reflected in those documents. Particular emphasis is placed on the Constitution, court interpretation, and landmark Federal legislation.

## EDC 5317 Special Techniques in Secondary Schools (3)

Special techniques and methodology that the modern teacher must now master. Emphasis is given to diagnosing learning difficulties, specified techniques in directing learning activities, and ways of meeting the individual differences found among high school pupils.

## EDC 5318 Elementary Language Arts (3)

Development of strategies for facilitating communication skills in the elementary grades and integration of language arts across the curriculum.

# EDC 5319 Reading in the Secondary School (3)

The application of developmental reading precepts to the reading requirements of the secondary content subjects. Peer teaching emphasizes techniques and materials for individualized reading assignments.

# EDC 5320 Elementary Science and Social Studies (3)

A study of the national standards and Texas requirements for science and social studies content in the elementary classroom with an emphasis on teaching strategies to promote active learning.

### EDC 5321 Contemporary Curriculum-Designing and Implementing (3)

Contemporary philosophies and practice for designing and implementing the school's instructional program for administrators, supervisors, and teachers. In addition to placing an emphasis on the changing philosophies and patterns for implementing the curriculum, stress will also be given to current innovations and experimentation in curriculum.

# EDC 5322 Learning and the Young Child (3)

Relation of theories of learning and concept development to the young child.

#### EDC 5323 Contemporary Curricula for the Young Child (3)

Application of learning and developmental theories to the design and evaluation of curricula for the young child.

## EDC 5324 Alternative Models of Instruction for the Young Child (3)

Use of research literature to examine, understand, and evaluate various models of instruction for the young child.

# EDC 5325 Current Issues and Concerns in Educating the Young Child (3)

Legal, social, and economic issues that affect educational processes for the young child.

# EDC 5326 A Process Approach to Teaching Writing (3)

A process approach to teaching writing K-12 explored in a workshop environment.

# EDC 5327 Research and Advanced Methods of Teaching Writing (3)

Recent practices and research in teaching writing K-12. Students will engage in some aspect of classroom research in writing.

# EDC 5328 Language and Learning across the Curriculum (3)

Emphasis on teaching writing across the curriculum.

#### EDC 5329 Secondary English Curriculum (3)

Content of secondary English, instructional methods, and teaching materials for grades 7-12. Contemporary concerns relevant to the curriculum development of the English language arts in the components of language, composition and literature. Includes a review of recent research in the teaching of English.

# EDC 5330 Contemporary Models of Character Education (3)

Current practices in character education (K-12) with an emphasis on schoolwide models and the materials and resources available to support character education initiatives. The arguments of both advocates and critics of character education will be considered.

# EDC 5331 Assessment Issues in Mathematics Education (3)

Students will explore current issues related to assessment, multiple dimensions of assessment, and the process of assessment for mathematics education.

# EDC 5332 Mathematics in the Elementary Grades (3)

Introduction to a constructivist approach for teaching mathematics in grades K-5, emphasizing NCTM Principles and Standards. Includes a field-experience working with elementary and/or middle school students.

## EDC 5333 Mathematical Immersion to Advance Understanding (3)

This course is designed to engage students in mathematical problem solving and problem posing and examining related research while immersing them in mathematics. The emergence of advanced mathematical understandings will aid students in the development of strategies that promote mathematical learning, particularly related to their professional educational work.

# EDC 5334 Numerical Understanding: Rational Numbers (3)

Designed to allow graduate students to explore and analyze research, experiences, case studies, and theory related to the teaching and learning of numerical thinking across grade levels. In particular, students will focus on rational numbers. Students will be able to investigate curriculum standards for K-12, instructional strategies in teaching rational numbers, and recent research on conceptual approaches.

#### EDC 5335 Research in Algebraic Thinking (3)

Research in Algebraic Thinking is designed to allow graduate students to explore and analyze research, experiences, case studies, and theory related to the teaching and learning of algebraic thinking across grade levels. Students will investigate algebraic curriculum standards for K-12, instructional strategies in teaching algebra, and recent research on conceptual approaches.

## EDC 5340 Advanced Elementary Curriculum Development (3)

Analysis of the unique needs of the elementary aged child with special emphasis on EC-6 content standards, lesson and unit planning in the elementary classroom, and elementary curriculum programs.

#### EDC 5341 Curriculum Theory and Practice (3)

Students read and discuss the most influential works in the history of curriculum development and deliberation from the past 100 years. Students also are introduced to the main philosophical traditions within curriculum theory and practice.

# EDC 5342 Data and Instructional Design (3)

An in-depth analysis of standardized assessments given at national, state, district, campus, and individual student levels. Participants make extensive use of technological tools to analyze instructional data sets. Data will be related to curricular analysis and instructional design at appropriate levels.

## EDC 5347 Philosophy of Education (3)

An in-depth analysis of curriculum philosophies, including perennialism, idealism, realism, experimentalism, and existentialism. Emphasis on curriculum planning using the philosophies and learning theory to meet needs of contemporary students.

## EDC 5348 Issues in Curriculum Development (3)

Designed essentially for administrators, supervisors, and curriculum coordinators, this course investigates and analyzes current issues in curriculum theory and development with particular attention to curriculum revision and reform.

# EDC 5349 Comparative Education (3)

Comparative study of social, political, cultural and factors which influence international education. Emphasis on reform movements, curriculum and pedagogical characteristics of schools throughout the world.

# EDC 5350 Teaching for Understanding (3)

Exploration and analysis of research, experiences, technology, and theory related to the teaching and learning of major concepts across grade levels. Students will investigate curriculum standards for K-12, National and International test results and implications, and recent research on conceptual approaches. Opportunities for exploring grade-level and content interests will be provided.

# EDC 5358 Seminar: Organizing and Administering School Reading Programs and Reading Clinics (3)

Cross-listed as EDL 5358

See EDL 5358 for course information.

### EDC 5360 Advanced Elementary Science Curriculum (3)

An in-depth analysis of the fundamental issues related to science curricula, primarily at the K-6 levels, including the role of curricula in historical and current reform efforts in science education.

# EDC 5363 Observation and Participation in Middle and Secondary Schools (3)

Provides the teacher candidate with foundational knowledge in inquiry-based, project-based, and problem-based learning, as well as providing opportunities to interact with middle and high school students during informal education experiences. The experiences will provide the teacher candidate with opportunities both to observe students and to participate as counselors/instructors.

#### EDC 5370 Applications of Technology to Teaching and Learning (3)

The course explores multiple frameworks for integrating technology into the teaching and learning process. Current research on the positive and negative impacts of technology is examined. Personalized learning experiences are based on the individual student's assessment of her or his technological expertise and professional trajectory.

# EDC 5372 The Instructor and Technology (3)

Pre-requisite(s): EDC 5370 or consent of instructor Focuses on the participant's future role as an instructor and the participant's personal and professional use of various technologies (data/computer, communication, and video) to gather information, to conduct research, to communicate with learners and colleagues, and to prepare material for publication and/or presentation.

## EDC 5374 Curriculum and Technology (3)

Pre-requisite(s): EDC 5370 or consent of instructor Prepares future instructional personnel to integrate technology (data/computer, communication, and video) into curricular applications. Emphasizes the application of technology in student learning activities.

# EDC 5375 Courseware Development (3)

Pre-requisite(s): EDC 5370 and 5374; or approval of instructor Examines technology-driven instructional systems. After reviewing existing systems, participants will design and develop technology-based course materials. An emphasis will be placed on the use of authoring languages and/or applications to present course material and to track student interaction.

# EDC 5376 Multimedia Development (3)

Pre-requisite(s): EDC 5370 and EDC 5374; or approval of instructor Examines the instructional design and production of multimedia curricular materials. Principles of human and machine interaction, hardware and software configurations, and production practices will be studied as participants create multimedia curriculum in a designated subject area.

## EDC 5377 Practicum in Technology (3)

Pre-requisite(s): EDC 5370 and 5372; or consent of instructor Placement in a "technology-rich" environment will expose the participant to addressing the technology needs of end users.

# EDC 5385 Religion and Education in America: Exploring the Tensions and Possibilities (3)

A critical examination of the historical and contemporary relationship between religion and public education. Particular attention will be paid to the history of religion and education, contemporary church-state law and education, and how religion can and should be addressed in the curricula in constitutionally appropriate ways.

# EDC 5390 Seminar: Education (3)

Designed to meet the individual needs of graduate students. May be repeated.

## EDC 5391 Social Foundations of Education (3)

This course will provide students the opportunity to encounter several highly influential books, ideas, and individuals from the fields of Social Foundations of Education and Curriculum. As an interdisciplinary, Foundations course, the instructor will assist students as they consider the field of education from a broad liberal arts perspective.

## EDC 5392 Issues in Diversity (3)

An analysis of issues related to diversity in learning settings and the exploration of culture in educational contexts.

# EDC 5663 Montessori Preprimary and Elementary Curriculum Design and Teaching Strategy (6)

Pre-requisite(s): EDC 5660

Introduction to the Montessori preprimary and elementary method of education, emphasizing the continuum of development in the young child (birth to age 9). Curriculum areas and classroom management skills as well as philosophical principles. Preparation for assisting in Montessori preprimary classrooms.

# EDC 5690 Teaching Associate EC-6 (6)

Pre-requisite(s): EDC 5304

Practicum in a local elementary school where teacher candidates teach small groups of students within a variety of disciplinary areas as associated with the elementary teaching certificate.

## EDC 5691 Teaching Associate Middle Grades (6)

Practicum in a local middle school where teacher candidates teach small groups and large groups of general education students within their content area as associated with the middle level teaching certificate.

## EDC 5692 Teaching Associate Secondary (6)

Practicum in a local school (grades 7-12) where teacher candidates teach small groups and large groups of students within their content areas of mathematics, science, social studies, or ELAR as associated with specific secondary level teaching certificates.

# EDC 5699 Graduate Teaching Internship (6)

Pre-requisite(s): Acceptance into the Master's with initial certification program

Designed for student participating in the Master's degree with initial teaching certification. A supervised teaching experience in an area public school.

# EDC 5V95 Special Problems in Education (1-4)

Designed to meet the individual needs of graduate students. May be repeated.

# EDC 5V99 Thesis (1-6)

Credit received when the thesis is finally approved.

# EDC 6101 Professional Seminar (1)

Introduction to responsibilities of university faculty, including applying for university tenure-track positions, preparing presentation proposals, writing for publication, and teaching university students, as well as discussion of resources to support research and writing.

# EDC 6199 Problem of Practice Dissertation (1)

Research, data analysis, writing, and of an approved problem of practice dissertation.

## EDC 6310 Seminar in Curriculum and Instruction (3)

Data collection/analysis, writing, and defense of an approved doctoral dissertation. At least nine hours of EDC 6V99 are required for the PhD degree in curriculum and teaching. EdD students take required Problem of Practice hours in the form of EDC 6391, 6392, 6333, and 6393. EdD students requiring more hours to complete and defend their Problem of Practice as well as satisfy graduation requirements may enroll.

## EDC 6311 Fundamentals of Curriculum (3)

Exploration, analysis, and evaluation of various trends in curriculum and their impact on classrooms, as well as their causes and contexts and major scholars who advocate these ideas.

## EDC 6312 Curriculum Inquiry and Analysis (3)

Pre-requisite(s): EDC 6311

Examination of the varied lenses for understanding curriculum.

#### EDC 6330 The History of American Education (3)

Seminar focusing on the philosophical history of American education with emphasis on primary source documents. Includes a discussion of the social, cultural, and historical contexts for development of this distinct intellectual tradition.

# EDC 6331 Sociopolitical Contexts of Schooling (3)

Provides doctoral students with increased understanding of historical and contemporary landmark policies that have influenced the landscape of schooling and education for students. Using a policy analysis framework, students analyze and offer critiques on reform-based educational initiatives.

# EDC 6333 Problem of Practice Phase Three (3)

Pre-requisite(s): EDC 6391 and 6392 This is the third course in the sequence of four courses for Ed.D. students to work on and complete the dissertation project

In this course, students complete the data analysis, results, and conclusions.

#### EDC 6336 Qualitative Research and Data Analysis (3)

Cross-listed as EDP 6336

See EDP 6336 for course information.

# EDC 6338 Grant Writing (3)

Cross-listed as EDP 6338

See EDP 6338 for course information.

# EDC 6339 Ethnographic Research Methods in Education (3)

Cross-listed as EDP 6339

A study of ethnographic research methods, data collection and procedures for data analysis.

## EDC 6340 Research in Mathematics Education (3)

Pre-requisite(s): EDP 5335

Research in mathematics education with emphasis on understanding current research, applied methodologies, and implications for teaching and learning mathematics. Includes practical skills in data collection and analysis with individualized and critical assistance given in application of technological tools, research types (qualitative and quantitative), and analysis techniques.

# EDC 6341 Advanced Studies of Issues in Mathematics Education (3)

In-depth investigation of critical issues in the nature of knowledge and inquiry in school mathematics.

# EDC 6342 Cognitive Processes in Mathematics Education (3)

Various theoretical approaches used to understand the teaching and learning of mathematics are examined. Experiences in this course will allow for insight into the existing evidence accumulated on issues related to how people think about mathematics and how an understanding of mathematics develops.

# EDC 6345 Christian Faith and Education (3)

This course examines the historical and contemporary relationship between the Christian tradition and education. It specifically addresses historical and contemporary proposals that consider how Christianity influences teaching, research, and service within educational institutions.

#### EDC 6346 Mentoring and Supervision (3)

A theoretical and practical overview of mentoring and supervision. Through the examination of theoretical perspectives and current issues in the field of mentoring and supervision, the course uses a variety of interactive exercises to assist in the development of a mentoring stance and a developmental approach to supervision.

## EDC 6352 Trends in Educational Thought (3)

Cross-listed as EDA 6352

See EDA 6352 for course information.

#### EDC 6355 Concepts of Teaching and Teacher Education (3)

Focuses on the profession of teaching and preparation of teachers; definitions, history, role in American society; diverse means of studying and conceiving of teaching and teacher education; research in teaching and teacher education; the teaching life; the teaching career; teacher leadership; pedagogical reflection; and trends and issues in national and international teacher education.

## EDC 6358 Design Research (3)

This course introduces students to different design-based research methods in educational research and provides students with an intensive experience in carrying out their own design-based research studies.

# EDC 6359 Mixed Methods Research Design and Analysis (3)

Cross-listed as EDP 6359

This course focuses on applied mixed method designs that address the unique settings and systems of education, including data collection strategies for field work.

#### EDC 6360 Instructional Design (3)

Examination of issues related to instructional design in K-12, postsecondary, and corporate environments. Effective instructional design includes an assessment of specific needs, an understanding of the learner, and the implementation and assessment of effective learning experiences for content and skill mastery.

# EDC 6361 Leadership and Organizational Change (3)

Through the examination and application of theories, including but not limited to leadership, decision-making, communication, motivation, power and influence, group dynamics, and change, this course develops diagnostic and problem-solving skills necessary for successful leadership of various organizational structures.

# EDC 6362 Community Leadership & Collaboration (3)

This course helps students to understand the context of healthy community partnerships. They engage with community partners to generate new knowledge and practices for all constituents. The culminating projects from the course will be disseminated to both academic audiences and public audiences.

## EDC 6365 Philosophy and Ethics in Leadership (3)

Analysis of the intersection of education, ethics, philosophy, and leadership in order to build ethical educational leadership capacity in ourselves and in our organizations.

# EDC 6368 Future Trends in Leadership (3)

This course focuses on future trends that impact leadership and call for new leadership competencies. The course examines these trends as well as successful examples of leadership excellence in various fields. Students discuss emerging leadership frameworks, profiles, and case studies as the students develop in their own roles as future leaders in their organizations.

# EDC 6370 Case Study Research Methods and Analysis in Education (3) Cross-listed as EDP 6370

oss-listed as EDF 0370

Case study research methods, data collection and procedures for analysis.

#### EDC 6372 Teaching and Learning in Online Environments (3)

Survey of the technologies, methods, strategies, assessments, and research-related synchronous, asynchronous, and hybrid environments for teaching and learning. Learning experiences will be customized to meet the participant's target instructional environment.

## EDC 6374 Technology as a Curricular Approach (3)

Survey of technology frameworks designed to facilitate the integration of technology and instruction. Research related to effective implementation and documented outcomes will be reviewed. Learning experiences will be customized to meet the participant's desired target environment (K-12, higher education, informal settings, etc.).

## EDC 6376 Organizational Change in a Technological Society (3)

This course examines short, medium, and long-range trends in the nature of professional work, organizations, and change as a result of rapid and pervasive technological development. The legal, ethical, and moral dimensions associated with these changes are addressed. Tools for trend analysis, innovation implementation, and professional development are introduced.

## EDC 6390 Seminar: Education (3)

Designed to meet individual needs of doctoral students and address current issues in teaching, learning, curriculum, and educational research.

## EDC 6391 Problem of Practice Phase One (3)

Pre-requisite(s): EDC 6359 and EDP 5327 This is the first course in the sequence of three courses for Ed.D. students to work on and complete the dissertation project

In this course, students complete the review of literature.

## EDC 6392 Problem of Practice Phase Two (3)

This is the second course in the sequence of three courses for Ed.D. students to work on and complete the dissertation project. In this course, students complete the research methodology.

#### EDC 6393 Problem of Practice Final Phase: Capstone (3)

Pre-requisite(s): EDC 6391, 6392, and 6333

This is the final course in the sequence of three courses for Ed.D. students to work on and complete the dissertation project. In this course, students complete the data analysis, results, and conclusions.

# EDC 6V99 Dissertation (1-6)

Data collection/analysis, writing, and defense of an approved doctoral dissertation. At least nine hours of EDC 6V99 are required for the PhD degree in curriculum and teaching. EdD students take required Problem of Practice hours in the form of EDC 6391, 6392, 6333, and 6393. EdD students requiring more hours to complete and defend their Problem of Practice as well as satisfy graduation requirements may enroll.

# **Doctor of Physical Therapy (DPT)**

# DPT 6100 Professional Physical Therapist Practice I (1)

Pre-requisite(s): Admission to Doctor of Physical Therapy program This course introduces the physical therapy profession, history, physical therapist roles, contemporary professional issues and advocacy, and the APTA. The student explores professional ethics and values, communication/collaboration, and cultural competence. Students self-reflect on their own values and mission to develop personal leadership and begin their journey as physical therapists and their lifelong professional identity development.

## DPT 6110 Capstone I (1)

Pre-requisite(s): Successful completion of Trimester 4 courses Integrates and applies knowledge gained from previous courses and clinical experiences. Comprehensively reviews body systems, pathophysiological mechanisms, examination procedures, and management strategies consistent with evidence-based practice and clinical guidelines. Utilizes independent study and sample examinations, with a musculoskeletal and neuromuscular systems focus. Prepares students for exit examination based on FSBPT Content Outline.

#### DPT 6120 Capstone II (1)

Pre-requisite(s): Successful completion of Trimester 5 courses Builds upon DPT 6110 Capstone I to integrate prior coursework and clinical experiences. Comprehensively reviews body systems, pathophysiological mechanisms, examination procedures, and management strategies consistent with evidence-based practice and clinical guidelines. Focuses on cardiovascular, pulmonary, othersystems, and non-systems domains. Culminates in completion of an exit examination based on the FSBPT Content Outline.

#### DPT 6212 Functional Movement (2)

Pre-requisite(s): Admission to the Doctor of Physical Therapy Program This course introduces students to the science of movement and movement analysis. It begins by introducing physical therapy as a movement profession that uses the International Classification of Function, Disability and Health as vital in the process of clinical decision making. This course emphasizes concepts of neuroplasticity, theories of motor control, motor development, and motor learning.

## DPT 6220 Bracing, Orthotics, and Prosthetics (2)

Pre-requisite(s): Successful completion of Semester 1 DPT courses This course takes students through common orthotics and braces utilized in physical therapy practice. Functional and surgical anatomy of lower limb amputations and conditions requiring lower quarter orthotic and prosthetic intervention are presented. Lab activities emphasize gait analysis, movement analysis, residual limb management, orthotics, prosthetics, and amputee rehabilitation.

## DPT 6250 Integrative Pain Sciences (2)

Pre-requisite(s): Successful completion of Semester 4 DPT courses
Provides an overview of managing patients with chronic pain syndromes
and associated psychosocial factors using emerging evidence and
contemporary concepts of pain assessment, treatment, and outcomes.
Current best practice techniques and research are integrated to provide
discussion of the multi-dimensional and multi-disciplinary nature of
chronic pain.

# DPT 6270 Professional Competencies II (2)

Pre-requisite(s): Successful completion of Semester 5 DPT courses
Prepares student professionally and emotionally for clinical practice, as a
lifelong learner and educator in the physical therapy profession. Explores
major forms of health care delivery and how they interact with physical
therapy services, including but not limited to medical ethics, health care
regulations, and risk management strategies.

# DPT 6290 Primary Care Physical Therapy (2)

Pre-requisite(s): Successful completion of Semester 4 DPT courses Explores the therapist's role as an interdependent practitioner working within a collaborative medical model. Presents the clinical tools and decision-making processes necessary to efficiently and effectively collect, evaluate, and communicate examination data while promoting differential diagnostic principles and clinical decision-making.

## DPT 6300 Human Physiology (3)

Pre-requisite(s): Admission to Doctor of Physical Therapy program This course introduces students to the various physiological systems and principles that impact human movement and health across the lifespan through a multisystem approach to the human body. Students gain an understanding of how to apply key characteristics of physiological systems into clinical reasoning to enhance evidence-informed care and build the knowledge necessary for physical therapist practice.

#### DPT 6310 Health Promotion and Fitness Management (3)

Pre-requisite(s): Admission to Doctor of Physical Therapy program Introduces patient-centered care that includes components of prevention, health promotion, wellness, and fitness. Students will explore the various domains and influencers of health while identifying appropriate screening/testing procedures, individual patient/client needs, and applicability to care, as well as targeted interventions at the individual and community level.

## DPT 6331 Physical Therapy Interventions (3)

Pre-requisite(s): Successful completion of Trimester 1 courses
This course provides an introduction to selection, application, and
progression of principles and interventions across the lifespan and
various clinical settings. This course incorporates concepts from the
International Classification of Function, Disability, and Health into clinical
practice. Knowledge from this course will be integrated across the clinical
management courses to prepare for physical therapist practice.

## DPT 6350 Management of the Pediatric Patient (3)

Pre-requisite(s): Successful completion of Semester 3 DPT courses Presents fundamental concepts for the physical therapy management of children with musculoskeletal, neurological, and/or cardiopulmonary impairments. A framework of normal development and aging from birth to young adult serves as a course foundation. Topics include developmental delay and disability, family-centered care, advocacy, and assistive technologies.

# DPT 6360 Advanced Patient Management (3)

Pre-requisite(s): Successful completion of Semester 4 DPT courses Develops advanced clinical reasoning and intervention skills for the management of patients with neuromusculoskeletal dysfunction. Students develop dry needling skills and refine previously introduced manual therapy and therapeutic exercise skills. Lab activities use case scenarios to challenge clinical reasoning for the development and progression of comprehensive treatment plans.

# DPT 6370 Business Management and Entrepreneurship (3)

Pre-requisite(s): Completion of semester 4 courses
Provides an overview of practice management fundamentals and applies
principles to various aspects of leadership and personal development,
strategic planning, and business operations. Students gain knowledge
in health care management, leadership, strategic planning, human
resources, finance, organizational structures, and fiscal management as
they relate to physical therapy practice.

#### DPT 6380 Management of the Aging Adult (3)

Pre-requisite(s): Successful completion of Semester 2 DPT courses Introduces the physiologic changes of aging and sociologic and economic consequences of an aging population. Reviews natural aging processes and how complicating factors such as vascular compromise, fall risk, and comorbidities negatively impact the aging adult. Lab activities focus patient management skills on the aging adult patient.

# DPT 6440 Musculoskeletal Practice II (4)

Pre-requisite(s): Successful completion of Semester 1 DPT courses Explores the clinical application of biomechanics, functional movement, and examination principles for musculoskeletal dysfunction of the lower extremities. Concentrates on the application of psychomotor skills related to regional palpation, examination, and evidence-based interventions emphasizing patient education, manual therapy, and therapeutic exercise in a patient-centered approach across the lifespan.

#### DPT 6450 Applied Neuroscience (4)

Pre-requisite(s): Successful completion of Trimester 1 courses
This course builds on prior knowledge of anatomical cellular structure
and function. Emphasis is placed on the central and peripheral
nervous system regulation of movement and movement impairments
that present from nervous system pathology. Lab activities apply
foundational knowledge of neuroscience to the neurologic screen and a
comprehensive neurological examination. Common outcome measures
and assessment tools are introduced.

## DPT 6460 Musculoskeletal Practice IV (4)

Pre-requisite(s): Successful completion of Semester 2 DPT courses Explores the clinical application of biomechanics, functional movement, and examination principles for musculoskeletal dysfunction of the lower extremities. Concentrates on the application of psychomotor skills related to regional palpation, examination, and evidence-based interventions emphasizing patient education, manual therapy, and therapeutic exercise in a patient-centered approach across the lifespan.

# DPT 6470 Cardiopulmonary Practice (4)

Pre-requisite(s): Successful completion of Semester 2 DPT courses Explores the management of patients with cardiovascular, metabolic, and pulmonary causes of movement dysfunction across a variety of clinical settings using the disablement framework. Lab activities include, but are not limited to, ECG analysis, exercise testing, heart and lung auscultation, lung function testing, and chest examinations.

# DPT 6530 Management of Complex Patients (5)

Pre-requisite(s): Successful completion of Semester 3 DPT courses Introduces patient management strategies for the medically complex patient. Community-based strategies and outpatient management for patients with primary disease or comorbidities of the cardiovascular, pulmonary, metabolic, oncologic, lymphatic, and integumentary systems is emphasized. Students will design individual and community-based interventions for effective disease management.

# DPT 6540 Physical Therapy Examination (5)

Pre-requisite(s): Admission to Doctor of Physical Therapy program This course introduces interview, tests and measures, communication, and documentation skills used in physical therapist practice across multiple clinical settings. Lab activities include psychomotor skill training for vital signs, goniometry, muscle testing, anthropometric measures, and functional mobility skills inclusive of transfers and gait training with assistive devices.

# DPT 6810 Physical Therapy Practice I (8)

Pre-requisite(s): Successful completion of Semester 3 DPT courses Develops student examination, evaluation, and intervention skills during an eight-week mentored clinical internship. Utilizes interpersonal communication with patients/clients, family, and healthcare staff. Emphasizes evidence-based practice and clinical reasoning skills. Students are expected to demonstrate professionalism and progress towards competency as a clinician as rated on a standardize rating instrument.

#### DPT 6820 Physical Therapy Practice II (8)

Pre-requisite(s): Completion of semester 4 courses

Demonstrated readiness for clinical education progression (as determined by faculty). Develops student examination, evaluation, and intervention skills during an eight-week mentored clinical internship. Utilizes interpersonal communication with patients/clients, family, and healthcare staff. Emphasizes evidence-based patient management and clinical reasoning skills as an adult learner and medical professional. PT CPI performance expectations are at intermediate and advanced intermediate levels.

## DPT 6V10 Physical Therapy Practice III (15)

Pre-requisite(s): Completion of semester 5 courses

Demonstrated readiness for clinical education progressions (as determined by faculty). Progresses student to entry-level patient management skills during a fifteen-week mentored clinical internship. Students refine interpersonal communication and professional socialization skills with patients/clients, family, and healthcare staff. Develops advanced evidence-based patient management and clinical reasoning skills. PT CPI performance expectations are at entry-level by the conclusion of internship.

# **Ecology, Earth, Environ Sci (EEES)**

# EEES 6100 Seminar in Ecology, Earth, and Environmental Sciences (1)

Pre-requisite(s): Doctoral student standing only Current topics and readings in earth system science. Variable topics depending on semester and instructor.

# EEES 6V99 Dissertation in Ecology, Earth, and Environmental Sciences (1-3)

Pre-requisite(s): Doctoral student standing only Required of all doctoral candidates. A minimum of 12 hours is expected.

# **Economics (ECO)**

# ECO 5001 Research Seminar (0)

Pre-requisite(s): Graduate standing

Presentation and discussion of current research in economics. Course will be graded pass/fail.

## ECO 5002 Research Seminar (0)

Pre-requisite(s): Graduate standing

Presentation and discussion of current research in economics. Course will be graded pass/fail.

# ECO 5110 Key Global Economic and Strategic Issues (1)

Pre-requisite(s): Admission to Executive MBA program

This course will enable the participant to see how economic analysis is applied to key global issues that affect management decisions at home and abroad. Questions related to globalization and interdependence among nations will be addressed.

## ECO 5115 Pricing and Economic Analysis (1)

Pre-requisite(s): Admission to MBA program

Use of economic analysis by managers to help firms acquire and sustain competitive advantage.

# ECO 5116 Economics of Strategic Interaction (1)

Pre-requisite(s): ECO 5115

Use of economic analysis to aid managers in obtaining favorable outcomes in situations involving strategic interaction between and within firms.

# ECO 5117 Managerial Macroeconomics (1)

Pre-requisite(s): ECO 5116

Use of macroeconomic analysis by managers in tactical and strategic planning with reference to long-term macroeconomic trends and short-term business cycle fluctuations; sources of disaggregated data; forecasting.

# ECO 5199 Non-Thesis Degree Completion (1)

To fulfill requirements for non-thesis master's students who need to complete final degree requirements other than coursework during their last semester. This may include such things as a comprehensive examination, oral examination, or foreign language requirement. Students are required to be registered during the semester they graduate.

#### ECO 5305 Business Foundations - Economics (3)

This course is required for MBA and MSIS students who do not have an undergraduate degree in business from an AACSB-accredited institution. It provides students with a foundation in economics which is expected of all business graduate students, and helps them to understand the market environment in which businesses operate.

# ECO 5310 Macroeconomic Analysis in the Global Economy (3)

Pre-requisite(s): A minimum grade of C in ECO 5315

This course analyzes national and global economic issues from a macroeconomic perspective. Topics include economic aggregates, interest rates, the balance of payments and exchange rates, aggregate production, economic growth, unemployment, consumption, investment, macroeconomic dynamics, monetary policy, and fiscal policy.

# ECO 5314 Seminar in Behavioral and Experimental Economics (3)

Application of the scientific method to economics using laboratory experimentation to test economic theories about individual and group behavior. Exploration of behavioral concepts to expand economic modeling beyond pure rational choice models.

## ECO 5315 Microeconomic Theory and Business Decisions (3)

Pre-requisite(s): Six semester hours of economics

A seminar designed to cover aspects of micro theory that are relevant for decision making within the firm. Emphasis is placed on the decision-making process. Numerous problems, cases, and examples are used to illustrate the theory.

# ECO 5317 Contemporary Government and Business Relations (3)

Pre-requisite(s): Six semester hours of economics

An examination of the many ways in which government and business interact. Topics covered include the historical development of government regulations of business; the current state of antitrust enforcement; issues involving multinational corporations; the basis for regulated markets and forces favoring deregulation; the impact of consumer protection policies and affirmative action policies on business; and the outlook for government and business relations in the future.

# ECO 5318 Game Theory (3)

Pre-requisite(s): Admission to graduate program in Economics or consent of instructor

This course provides a technical treatment of the theory of games and strategic behavior with an emphasis on applications in economics and business. This framework helps us to understand the nature of competition and cooperation. We also study contractual arrangements that affect incentives under different information constraints.

## ECO 5320 The Economics of Government (3)

Pre-requisite(s): Six semester hours of economics Economic rationale and effect of various taxes, user pricing, and the role of government in the allocation of resources, stabilization of the economy, and redistribution of wealth.

# ECO 5321 Energy Economics (3)

Cross-listed as ENV 5321

Pre-requisite(s): Six semester hours of economics

Origins of the energy crisis, the effect of oil prices on inflation and the international monetary system, the origins and nature of OPEC, the economic feasibility of alternative energy sources, U.S. energy policy alternatives, and other current issues in the field of Energy Economics. A portion of the course is devoted to examining the energy industry in Texas and the Southwest.

#### ECO 5325 Seminar in Regional Economics (3)

Pre-requisite(s): Nine hours of economics or consent of instructor Adaptation of economic theory for use in regional economic analysis. Selected problems: urban renewal, transportation, plant location, individual location decisions, land use, regional economic growth, and structure.

#### ECO 5327 E-Commerce Economics (3)

Pre-requisite(s): Six hours of economics or consent of instructor This course applies tools of economic analysis to evaluate the evolving role of electronic commerce in the United States and world economies. The course addresses theories of firm conduct and performance in the electronic marketplace; the role of information and e-commerce intermediaries; the economics of Internet advertising; intellectual property rights of digital products; national and international public-policy issues of e-commerce; the financial and monetary implications of electronic trading; and the broader implications of e-commerce for U.S. and world economic activity.

## ECO 5330 Problem Areas in International Economics (3)

Pre-requisite(s): ECO 3306, ECO 5415, or the equivalent, or consent of department chair

World economy with particular emphasis upon emerging problems relating to the international monetary system, the trend toward economic regionalism, the growth of the less developed countries, and economic relations between private enterprise economies and state trading enterprises. Basic theories of international economics are developed as a framework for analysis of policy issues.

# ECO 5333 Foreign Exchange Markets and International Monetary Institutions (3)

Cross-listed as FIN 5333

Foreign exchange markets, emphasizing theoretical and empirical issues and their relation to the business environments. Topics include exchange rate regimes, efficiency, forecast measurement and management of foreign exchange risk forward and futures markets, options, swaps, and multi-currency bonds.

#### ECO 5334 Economic Development (3)

Pre-requisite(s): Six semester hours of economics Major issues involved in the process of development such as mass poverty, population growth, agricultural transformation, and trade.

# ECO 5338 Seminar in World Economic Systems (3)

Pre-requisite(s): ECO 2305, 2306, 3305, or equivalent course work Economic institutions in a number of capitalist and socialist nations, and their relative success or failure presented in the context of country studies. Topics include the problems involved in making international statistical comparisons, the importance of the rise in the U.S. service sector, the operation of private and nationalized industries in Western Europe, lifetime employment in Japan, central planning in the Soviet Union, socialist economic reforms, international trade among and between Western and Eastern nations, and the convergence hypothesis.

# ECO 5340 Economic Tools for Management Decision Making (3)

Pre-requisite(s): Admission to graduate business program Upon completion of this course, students will be able to apply a wide range of ideas, concepts, and results from the economics discipline to be more effective managers. Topics may include incentives, market structures and pricing, price discrimination, game theory, macroeconomic theory, analysis and application, and exchange rates and international trade.

#### ECO 5343 History of Economic Thought (3)

Pre-requisite(s): Nine semester hours of economics or consent of instructor

Historical and analytical study of economic thought, beginning with Mercantilism and including the following schools of thought: Physiocratic, Classical, Marxian, Austrian, Neoclassical, Institutional, Keynesian, and Post-Keynesian.

## ECO 5347 Econometric Theory and Methods (3)

Pre-requisite(s): Graduate standing

Empirical estimation of economic relationships; behavioral (consumers), technical (firms), and institutional. It teaches proper use of linear estimation techniques along with problem identification and solution.

## ECO 5349 Causal Inference and Research Design (3)

Pre-requisite(s): Minimum grade of C in ECO 4347 or department approval

Introduction to modern tools for determining the existence of causal relationships among variables. Emphasizes both the design of the research process and the use of advanced econometric techniques.

## ECO 5350 Health Economics (3)

Cross-listed as HPA 5350

Pre-requisite(s): ECO 5115 or 5315; or consent of instructor Application of economic principles to health care issues; examining economic efficiency in a variety of circumstances including the production and distribution of health services, health insurance, governmental programs, health care personnel and hospitals. Analysis of public in health and medical care from an economic perspective.

## ECO 5351 Data Science I (3)

Pre-requisite(s): A minimum grade of B in ECO 4347 or the equivalent, or approval of the department

Best practices in data collection, cleaning, manipulation, and data and code management. Methods and principles of data exploration and visualization. Unsupervised statistical learning techniques, supervised statistical learning techniques, and false discovery principles.

#### ECO 5352 Data Science II (3)

Pre-requisite(s): A minimum grade of B in ECO 4347 and ECO 5351 Assessing model accuracy, resampling methods, model selection, regularization, and dimension reduction. Machine learning techniques and their applications in economic research.

# ECO 5360 Seminar in Corporate Finance (3)

Cross-listed as FIN 5360

See FIN 5360 for course information.

## ECO 5362 Seminar in Corporate Short-term Financial Management (3)

Cross-listed as FIN 5362

See FIN 5362 for course information.

# ECO 5365 Investment Management (3)

Cross-listed as FIN 5365

See FIN 5365 for course information.

# ECO 5368 Seminar in Financial Markets (3)

Cross-listed as FIN 5368

See FIN 5368 for course information.

## ECO 5370 Management of Financial Institutions (3)

Cross-listed as FIN 5370

See FIN 5370 for course information.

## ECO 5415 Economics for Managers (4)

This course helps students understand and apply a wide range of economics-related theories, concepts, and facts to managerial decision-making. Four areas of economics are considered: (i) managerial economics, with a focus on how to determine what prices a firm should charge for its products; (ii) game theory, with a focus on how issues of strategic interaction arise in business settings and what kinds of decisions in various circumstances are likely to lead to the most favorable outcomes; (iii) macroeconomics, with a focus on applying theories and information about the national economic environment in which firms operate to enhance managerial effectiveness; and (iv) international economics.

#### ECO 5V98 Special Studies in Economics (1-6)

Pre-requisite(s): Nine semester hours of economics and consent of instructor

This course may be taken for one to six semester hours of credit.

# ECO 5V99 Thesis (1-6)

hrs.

# **Economics (MECO)**

# MECO 5132 Macroeconomic Analysis in the Global Economy (1)

Pre-requisite(s): HCA 5309 and MECO 5330

This seminar builds upon basic macroeconomic principles, applying economic models/theory to the global economies. Global macroeconomics seeks to explain the nature of association among economic forces in markets around the world, such as the impact of the United States fiscal deficit on increased foreign borrowing and forces causing the economic slump in Japan.

# MECO 5133 Seminar in World Economic Systems (1)

Pre-requisite(s): HCA 5309 and MECO 5330

This seminar explores differences among economic institutions, policy, and performance in countries around the world and provides information on the methods used to make economic comparisons across countries, examining the relative success or failure of these various economic states. Topics of discussion will revolve around major developments in the world economy.

#### MECO 5330 Principles of Macroeconomics (3)

Pre-requisite(s): HCA 5309

This course introduces students to the performance of market economies. It addresses market dynamics that affect organizations and management decision-making in order to enhance the ability of the student to understand the context, source, and potential solutions for various problems and opportunities routinely encountered in the practice of management.

## MECO 5331 Managerial Economics (3)

Pre-requisite(s): HCA 5309 and MECO 5330

Managerial Economics concerns the efficient management of resources to achieve organizational or enterprise goals by applying economic theory and methodological techniques in the practice of management. This course is focused on the application of economic models, estimation techniques, and fundamental analysis in contemporary private and public markets.

# **Education (EDU)**

# EDU 5350 Teaching Associate: Special Education with Gifted Education (3)

In this course, teacher candidates teach small groups of special education, gifted and talented, and twice exceptional students within specific disciplinary areas that match their certificate areas.

# EDU 5354 Curriculum Differentiation (3)

Historical, philosophical, and theoretical background of curriculum differentiation and specific strategies to adapt instruction for individual student differences related to rate, content, and preferences. Emphasis on best practices in differentiated instruction as demonstrated by empirical research.

# EDU 5371 Assessment of Students with Exceptionalities (3)

In this course, students learn and apply formal and informal assessments currently used for students with exceptionalities and students considered educationally at-risk. Students practice using assessment data for individual case study.

## EDU 5374 Literacy for Learners with Exceptionalities (3)

Students learn about assessment, instructional design, and instructional delivery in literacy. Students practice evidence-based practices in literacy for students with exceptionalities and with students who are considered educationally at-risk. Emphasis is placed on evidence-based teaching techniques, mastery learning, high-leverage practices in special education, acceleration, and best practices in inclusive education.

#### EDU 5375 Mathematics for Learners with Exceptionalities (3)

In this course students learn and apply direct instruction methods in mathematics with students who have a variety of learning needs including those with exceptionalities. Emphasis is placed on evidence-based teaching techniques, mastery learning, high-leverage practices in special education, acceleration, and best practices in inclusive education.

## EDU 5377 Applied Behavior Analysis (3)

A course focusing on the use of applied behavior analysis in classroom settings. Emphasized topics include measuring behavior, functional assessment procedures, individualized behavior interventions, and classroom management.

# EDU 5650 Teaching Associate: Special Ed and Twice Exceptionalities (6)

In this course, teacher candidates teach small groups of special education and gifted and talented students within specific disciplinary areas that match their certificate areas.

#### EDU 5651 Internship: EC-6 Education with Gifted Education (6)

Full-time teaching experience in an elementary classroom with specific emphasis on general education student including gifted and talented students. A mentor teacher and resident faculty will support teacher candidates as they gradually assume complete responsibilities for teaching.

## EDU 5652 Internship: Special Education with Gifted Education (6)

Full-time teaching experience in a local school where teacher candidates interact with special education and gifted education students. Includes completion of content modules, conferencing with mentor teacher and university instructor, observation of lessons taught by master teachers, written lesson reflections, and preparation of an evaluation of benchmarks.

# EDU 5662 Internship: Early Childhood through Grade 6 (EC-6) Education with Special Education (6)

Pre-requisite(s): EDU 5690, EDU 5350, EDP 5363, EDC 5690, OR EDU 5650

Full time teaching experience in a local elementary school where teacher candidates interact with general education and special education students. Includes completion of content modules, conferencing with mentor teacher and university instructor, observation of lessons taught by master teachers, written lesson reflections, and preparation of a benchmark evaluation.

# EDU 5690 Teaching Associate EC-6 with Special Education (6)

Practicum in a local elementary school where teacher candidates teach small groups of general education and special education students within a variety of disciplinary areas as associated with their elementary certificate.

# **Educational Administration (EDA)**

# EDA 5378 Capstone Course: Special Problems in Student Affairs Administration (3)

This culminating course uses a problem-based, case study learning approach to apply the competencies gained in other educational administration courses. Students address new trends in college student personnel through attendance at a national conference as well as through a mentoring relationship with a student affairs professional.

# **Educational Leadership (EDL)**

# EDL 5100 Professional Seminar in Higher Education and Student Affairs (1)

Orients new graduate students to the HESA program and the student affairs profession, including topics such as writing for the social sciences, APA formatting, critical reading, professional presentations, and apprenticeship success.

# EDL 5118 Competency Assessment and Development (1)

A process in which student performance is assessed in several skill areas including leadership, problem analysis, critical thinking, decision-making, sensitivity and communication. A professional development plan is developed for each student.

# EDL 5127 Seminar: Personal and Professional Values and Ethics (1)

A study of ethical issues and standards related to the practice of educational leadership with an emphasis on understanding personal values and beliefs that influence practice.

## EDL 5128 Seminar: Interprofessional Practice (1)

Seminar designed to promote the collaboration of educators and other human service professionals in solving complex problems of children and youth in today's schools.

## EDL 5129 Folio Assessment and Professional Development (1)

Culminating assessment of students' progress in attaining competence for mid-management certification as evidenced by professional folios. Student folios will be evaluated by faculty and practitioner panels.

## EDL 5131 Practicum: Contextual Domains (1)

A field-based application of knowledge and skills in the contextual domain of practice including: philosophical and cultural values; legal and regulatory applications; policy and political influences; and public and media relationships.

#### EDL 5191 Introductory Graduate Seminar (1)

This one-hour seminar will provide an introduction to the field of student service in terms of philosophy, principles of good practice, standards of preparation and professional development. Special focus will be given to the relationship of graduate preparation to the development of a coherent practice.

## EDL 5194 Leadership Theory (1)

This one-hour seminar is designed to encourage new student affairs professionals to consider ways in which leadership contributions are made in the context of higher education.

#### EDL 5195 Seminar: The Art of Advising and Mentoring (1)

Advising and mentoring of students in higher education settings will be examined. Understanding this importance and dynamic nature of mentoring relationships and advising students and student organizations is critical to the success of student affairs practitioners. Current literature on mentoring will be studied.

## EDL 5196 Student Services in a Multicultural Society (1)

In this course students will be exposed to theory and research pertaining to student cultures. Emphasis will also be given to exploring the manner in which student services professionals work with minority students in implementing multicultural programs on campus.

## EDL 5199 Non-Thesis Degree Completion (1)

To fulfill requirements for non-thesis master's students who need to complete final degree requirements other than coursework during their last semester. This may include such things as a comprehensive examination, oral examination, or foreign language requirement. Students are required to be registered during the semester they graduate.

#### EDL 5273 Person-Environment Theories (2)

This course offers an in-depth analysis of person-environment theories, including the history and current use of such theories in higher education and student affairs. How people learn and the design of effective learning experiences and environments is also examined.

## EDL 5300 Research Applications in Educational Leadership (3)

Research methods, design, and application related to the practice of educational leadership.

# EDL 5301 Christian Faith and P-12 Educational Leadership (3)

The primary purpose of this course is the integration of faith, teaching, and educational leadership. This integration is vital for both public and private school teachers and manifests itself through excellence in instruction and learning that promotes human flourishing. This course connects a theology of education to outcomes for students made in the image of God to ground the leadership and educational theory in this course.

## EDL 5302 Instructional Leadership (3)

In this course, school leaders learn to plan, implement, monitor, and evaluate assessment, curriculum, and instruction in public and independent schools for diverse learners. Topics include local, state, and national policy, assessment, curriculum, models of instruction, and multitiered support systems. Students will use data to make evidence-based decisions, monitor student progress, and provide accountability.

#### EDL 5303 Capstone in Educational Leadership (3)

Pre-requisite(s): EDL 5300, 5301, 5302, 5344, 5345, 5353, 5359, 5363, and 5V64 Aspiring leaders examine the complex realities of administration in public or independent schools by developing and implementing an improvement science capstone project

Working with the university advisor and the site supervisor, each candidate uses data analysis and leadership skills to identify a problem of practice and design, conduct, and report the findings of improvement science research.

#### EDL 5305 International and Comparative Education (3)

Education in the United States compared with that of selected foreign countries. Designed to provide a world view for educational leaders. Foreign study/travel required. (Also available to master's-level students.)

## EDL 5322 Principles and Practices of Supervision (3)

Philosophical foundations, principles, and practices of effective supervision in public schools. Special attention is given to the supervisory methods used to improve instruction at all grade levels.

# EDL 5323 Problems in Supervision (3)

Treatment of functional relationships in a program of supervision in the public schools. Case studies will be analyzed as practice in making the transition from theory to application of supervisory practice. Emphasis is placed on group interaction and human dynamics as basic constituents of sound supervisory practice.

# EDL 5324 Practicum in Supervision (3)

Pre-requisite(s): EDL 5322 and 5323

Practice in planning supervisory in-service programs, problem solving, and procedures for improving supervisory and contemporary supervisory leadership in the public schools. An analysis of current literature as aids in setting up supervisory programs for instructional improvements is also included.

## EDL 5327 Educational Evaluation (3)

Cross-listed as EDP 5327

Evaluation of educational programs including instructional as well as guidance programs. The student will be expected to organize and conduct research activities and to interpret the results of the research to teachers, administrators, parents, and other interest groups. Special topics will include construction of assessment instruments, the use of the computer in pupil personnel services, and the development of local norms

## EDL 5329 Philosophical and Cultural Contexts of Education (3)

A study of the philosophical, social, and cultural frameworks impacting schooling in America.

# EDL 5330 Policy/Politics/Publ Rel Educ (3)

Pre-requisite(s): EDL 5345

An examination of the political and governance structures and public relations in American public education, including significant issues of policy and practice.

## EDL 5336 Qualitative Research in Higher Education (3)

The development of an in-depth understanding of the major methods of inquiry associated with qualitative research is emphasized. Additionally, an appreciation for the strengths and limitations of engaging in qualitative research and a general understanding of the paradigms that undergird qualitative research and their implications for conducting qualitative inquiry are cultivated.

# EDL 5344 School Business Management and Finance (3)

Develop a working knowledge of school finance by exploring adequacy, efficiency, and equity and how these issues influence school finance from the federal, state, district and school level. Students will have knowledge of how to relate state funding to district and building level budget preparation. Independent school leaders will develop skills in fund-raising, board facilitation, and budget preparation based on their own contextualized needs.

#### EDL 5345 Fundamentals of School Leadership (3)

This course examines leadership competencies that focus on and enhance human flourishing, social justice, equity, academic growth in diverse school environments, high leverage turnaround leadership, dynamics of schools in decline, and leadership coaching based on the core tenets of improvement science. Coursework provides opportunities for self-reflection in areas of personal leadership and Christian ethical beliefs.

### EDL 5347 Administration of Pupil Personnel Services (3)

Organization and implementation of the pupil services necessary to provide a sound instructional program. The various services are studied from the viewpoint of a total program of services to make possible continuing progress by the pupil through his instructional program. The special services are considered in relation to the basic administrative service provisions.

# EDL 5349 Administration of Staff Personnel Services (3)

Studies, practices, and principles of administration with reference to recruitment, selection and promotion, and retention of school personnel. Modern employment and placement practices with reference to incentive pay systems, control of working conditions, job analysis and evaluation, salaries and salary scheduling, maintenance of morale, fringe benefits, and other employee services are studied and analyzed.

# EDL 5353 The Principalship (3)

Examine the diverse array of responsibilities of the modern school leader, with an emphasis on the development and growth of the principal in the area of strategic leadership as it relates to improvement science and continuous school improvement while developing a more comprehensive understanding of the role of a school leader within the context of a 21 st-century education environment in public and independent schools.

# EDL 5355 Transforming Learning Environments: School Facility Planning (3)

Educational leadership students study the planning, funding, and design of student-centered learning spaces incorporating functional efficiencies and applicable State and Federal statutes. Students will focus on how space influences and shapes learning, how design must serve both current and future educational needs, how capital construction is planned and financed, and how to apply TEC: School Facilities Funding and Standards to school facility planning, design, construction and instructional needs.

## EDL 5356 School Surveys and Field Studies (3)

Place of the survey in present-day American education; its methods; findings concerning current problems in various types and phases of education; and tendencies in survey recommendations. Extensive reading of surveys required. Typical problems are assigned for investigation and report.

# EDL 5357 Community Relations (3)

Principles and practices of successful college and/or K-12 school community relations programs.

# EDL 5358 Seminar: Organizing and Administering School Reading Programs and Reading Clinics (3)

Cross-listed as EDC 5358

Orientation for administrators concerning four aspects of reading instruction: (1) Administrator roles and responsibilities essential to effective reading instruction; (2) Strategies for improving instruction that emphasize measurement, the use of varied media, and staff development; (3) Innovative practices in reading instruction at the elementary and secondary school levels; (4) Knowledge of developments in educational research and suggestions concerning bridging the gap between innovation and practice; (5) Preparation of a comprehensive school/district reading program.

## EDL 5359 School Law and Governance (3)

Presents legal principles on all major facets of school and institutional operation by examining the relationships among law, public policy, ethics, and current issues in P-12 education. By developing a deeper understanding of legal and ethical requirements as well as multi-tiered systems of support, school leaders will be better prepared to lead in public and independent schools where each student is able to flourish.

## EDL 5360 Seminar: Administration of Special Programs (3)

Administration of compensatory and special education, career and vocational programs, basic skills program (reading), and middle management services. May be repeated.

# EDL 5361 Seminar: Central Office Administration (3)

Basic administrative concepts, processes, and organization of public school administration. The roles of the superintendent and other central office personnel are examined in relation to effective administration. The relationship of the local school district to the Texas Education Agency, the federal government, and other educational institutions is examined. There will be intensive study in selected areas.

# EDL 5362 Seminar. Administration of Career and Technical and Vocational Programs (3)

Application of the principles of administration to vocational education programs. In addition to the study of organizational structures, planning, coordinating, allocation of resources, and decision-making, the course will cover special requirements of vocational education as program standards, state and local policies and regulations, state plans, building and equipment needs, and in-service training of vocational education personnel.

## EDL 5363 Administrative Theory and Educational Leadership (3)

This course provides aspiring leaders with a foundation of the theory base for the field of educational leadership. It introduces students to a comprehensive set of historical and current theories, concepts, and approaches in educational leadership. The foundational theories are meant to provide students with an understanding of how organizations, behavior, and management associate with desired outcomes in public and independent schools.

# EDL 5370 Psychosocial Development in College Students (3)

This course will offer an in-depth analysis of psychosocial development theories, including models based on gender, race, ethnicity, sexual identity, and socioeconomic/sociocultural class. Erik Erikson's Identity over the Life Span and Arthur Chickering's Theory of Identity Development, along with Josselson, Phinney, Cross Helms, Cass, and others will be used.

## EDL 5371 Cognitive-Structural Development in College Students (3)

This course offers an in-depth analysis of cognitive-structural college student development theories, including William Perry's Intellectual Scheme; Mary Field Belenky, et al.'s Women's Ways of Knowing; Marcia Baxter Magolda's Epistemological Reflection Model; and Patricia King and Karen Kitchener's Reflective Judgment Model.

## EDL 5372 Culture and Organization of Higher Education (3)

This course provides an overview of the organizational structures and dynamics of higher education governance, leadership, planning, and resource allocation. Particular attention in this course is given to the diversity of post-secondary institutions in the United States, and how varying institutional settings influence organizational behavior, structures and cultural norms of operating. Students should anticipate a rich interaction with related literature. An introductory survey of organizational theories in higher education will also be explored.

#### EDL 5374 Moral and Faith Development in College Students (3)

An in-depth survey of major theories related to moral and faith development of American college students. Current research on the effect of the college environment on moral and faith development will be explored. Special emphasis will be placed on the integration of theory into student affairs administrative practice.

## EDL 5375 Sociology of Higher Education (3)

This course explores the intersection of sociological issues and interests and the study of higher education. The course analyzes issues central to the study of higher education through sociological frameworks, including consideration of the structures and environments that form the context of higher education, and the impact of the institution of higher education on participants and non-participants.

# EDL 5376 Human Resource Management and Development in Student Affairs (3)

Human resource management and development in student affairs are examined. Special attention is given to staff selection, training, evaluation, productivity, decision making, job stress, and job satisfaction. Current literature on management and supervision is studied.

# EDL 5378 Capstone Course: Special Problems in Student Services Leadership (3)

This culminating course will use a problem-based, case study learning approach to apply the competencies gained in other Educational Leadership courses. Students address new trends in college student personnel through attendance at a national conference as well as through a mentoring relationship with a student services professional.

#### EDL 5379 Foundations & History of Higher Education Leadership (3)

The history of higher education and student affairs is explored through an introduction to the various fields, organizations, and functions in student affairs, including trends, issues and ethics.

# EDL 5380 Technology and Leadership (3)

An overview of technology in the context of organizational leadership. Participants examine the application of data (computer), video, and communications technology to formal and informal leadership responsibilities within educational organizations. Assumes no previous knowledge of advanced technology. Technology lab and field experiences will be required.

## EDL 5387 The College Dean (3)

A functional approach to the problems of the dean, treating the phases of administration; instructional personnel; public relations; curriculum construction and organization; faculty selection, assignment, promotion, and retirement; extracurricular activities; student and parent relations.

#### EDL 5388 College Registrar (3)

A study of duties, functions, and responsibilities of the registrar.

## EDL 5390 Seminar-Education (3)

A course designed to meet the individual needs of graduate students. May be repeated.

### EDL 5391 Cultural Issues in Higher Education (3)

Cross-listed as EDA 5391, EDP 5391

See EDP 5391 for course information.

## EDL 5392 Higher Education & the Law (3)

Legal aspects and issues of constitutional, statutory, and case law concerning public and private two-year and four-year colleges, and universities; their boards, administrators, faculty and students. Interpretations, compliance issues, and implications for institutional practice and policy.

# EDL 5393 Supervision of Student Teachers (3)

A course designed to provide students with a study of the principles and procedures for effective supervision of student teachers. Special emphasis is given to the development of contemporary supervisory methods and skills.

# EDL 5394 Planning, Budgeting, & Human Resources in Higher Education (3)

Pre-requisite(s): EDL 5379 or consent of instructor

This course explores the interdependent relationship of university strategy formation, strategic planning, finance, and human resources. First, attention is given to theory-based literature from both business and higher education as it relates to strategy formation and planning. Second, financial issues related to college and university administration are examined, including the nature of costs, their impact on students, and the future of higher education. Finally, the course explores the importance of human resources, its relationship to planning and finance, and how a student affairs administrator can enact processes related to management, staff selection, training, evaluation, and productivity.

## EDL 5395 Student Services Administration: Practicum I (3)

Broad on-site experiences in a variety of student services in three or more private and public institutions of higher education.

# EDL 5396 Student Services Administration: Practicum II (3)

In-depth on-site experiences in two different student services areas. Up to one-half of this practicum may be earned through professionally supervised graduate assistantships in appropriate work settings.

# EDL 5399 Faith-Based Higher Education (3)

The course explores the history of higher education in the United States, with special attention to the interplay of forces that have led virtually every major academic institution to abandon historic Christian convictions. It includes reading and thinking about the lessons of history and discusses how to apply them to contemporary context. Topics include staff and faculty hiring and mentoring, student life programming, staff development, and crafting and implementing a Christian collegiate vision.

### EDL 5V19 Interpersonal Skills Lab (1-3)

Practical application of theories and skills related to effective interpersonal behavior of school leaders. The foci are motivating, mentoring, and managing human interaction and communication.

# EDL 5V21 Practicum: Functional Domains (1-3)

A field-based experience related to performance in the functional domains of leadership, problem-solving, decision-making, organizational management, technology, and research. May be repeated once with different topic not to exceed three credit hours.

## EDL 5V25 Practicum: Programmatic Domains (1-3)

A field-based experience that focuses on the programs of elementary and secondary schools with special emphasis on curriculum and supervision of instruction. Advancing Educational Leadership (AEL) and Texas Teacher Evaluation and Support System (TTESS) certifications are covered. May be repeated once with different topic not to exceed three credit hours.

## EDL 5V26 Practicum: Programmatic Domains (1-3)

A field-based experience which focuses on the programs of elementary and secondary schools with special emphasis on support services and the resource base.

#### EDL 5V64 Internship in School Administration (1-9)

(Required for both the principal and the superintendent.) Provides persons aspiring to become administrators with periods of practical clinical experience. Internships are conducted under the supervision of school, college, or other institutional administrators and professors.

# EDL 5V65 Internship--Superintendent (1-6)

Pre-requisite(s): Consent of department chairperson Individuals are assigned to school systems where opportunities will be effected to observe and participate in the superintendent's office, business office, board meetings, and other areas related to the duties and functions of the superintendent. Required for Superintendent's Certification.

# EDL 5V95 Special Problems in Education (1-4)

Designed to meet individual needs of graduate students. May be repeated.

## EDL 5V99 Thesis (1-6)

Credit received when the thesis is finally approved.

#### EDL 6118 Leadership Assessment and Professional Development (1)

A systematic process in which performance is assessed in critical skill areas of educational leadership. Assessment and feedback result in a leadership development plan for each student which is monitored throughout the program and becomes a part of the portfolio process.

# EDL 6129 Professional Portfolio Assessment (1)

Pre-requisite(s): EDA 6118 or consent of department Culminating assessment of professional and personal growth and development of students completing the Ed.D. as evidenced by student professional portfolios. Portfolio documents are presented by students and evaluated by faculty and practitioner panels. Review of research and use of professional portfolios are also required.

## EDL 6300 Research in Educational Leadership I (3)

Pre-requisite(s): EDA/EDP 5327

Topics related to the development of research projects in educational leadership and decision-making are presented, including the identification of problems to be investigated, the review of the literature, the development of research questions and/or hypotheses, and writing proposals. Skills in Historical, Correlational, and Descriptive Research are developed, including the supporting measurement theory and statistics.

## EDL 6301 Research in Educational Leadership II (3)

Pre-requisite(s): EDL 6300

Concepts and skills in experimental research applied to educational leadership and decision-making, development, experimental design, sampling, measurement considerations, probability theory, inferential statistics, and reporting results. Statistical package is utilized as a part of the instructional procedures.

# EDL 6302 Teaching and Learning in Higher Education (3)

Pre-requisite(s): Doctoral Standing

A doctoral seminar designed to introduce graduate students to teaching in higher education through the exploration of curricular issues, course development and content, teaching techniques, learning concepts and theories, and the nature of faculty work.

## EDL 6303 Seminar: Curriculum Management and Evaluation (3)

Pre-requisite(s): EDC 5321, 5344, 6310 or equivalent; or consent of instructor

Development, management, and evaluation of K-12 curriculum with attention to research and best practice related to providing leadership for improving student performance. Administrative/supervisory responsibilities for curriculum standards, policy development, and curriculum audit procedures are also emphasized.

## EDL 6304 Seminar. Politics, Policy and Governance of Education (3)

Pre-requisite(s): Doctoral student or consent of instructor
The political and governance structures of American education with
a particular emphasis on Texas. A study and analysis of local, state,
and federal policies and policy issues with an emphasis on the critical
dimensions of problem-solutions, power relations, and values and ethics.

## EDL 6305 Ethics and Values in Educational Leadership (3)

Ethics and values as applied to educational leadership and management, with related philosophical concepts and principles. Designed for advanced graduate students with classroom teaching experience and educational leadership experience.

# EDL 6306 Student Success in Higher Education (3)

This course examines the impact college has on students (college-impact models), as well as policies, programs, and practices that promote student learning and development in higher education. Theories concerning environmental or sociological origins of change in college students will be examined. Course topics include several sets of variables (including student, organizational, and environmental characteristics) presumed to influence student success (retention, engagement, achievement, and development).

## EDL 6309 Framing K-12 Problems for Inquiry (3)

Students develop a foundation for disciplined inquiry of a Problem of Practice, engage in educational research, and explore approaches to disciplined inquiry in school and organizational contexts.

# EDL 6310 Organizational Behavior and Leadership (3)

Students focus on learning about the complex behavioral world of public and private schools and school districts in the life of communities. Acquiring and applying skills necessary for understanding organizational behavior and leadership to engage effectively in executive roles.

# EDL 6312 Systemic Inquiry through Data Analytics (3)

Educational leadership students organize, manipulate, analyze, and interpret data specific to the Texas K-12 Public Education Information Management System (PEIMS) and the United States. Students communicate analytics findings relevant to an identified Problem of Practice through visualization of qualitative and quantitative data.

## EDL 6335 Research Practicum in Education (3)

Cross-listed as EDP 6335

See EDP 6335 for course information.

# EDL 6349 Advanced Studies in Human Resource Management in Education (3)

Pre-requisite(s): EDA 5349 or equivalent; or consent of instructor Theories and models supporting human resource activities. Topics are subject to change, but generally include equal employment opportunity laws and case rulings, recruitment, selection methods, corrective discipline, total compensation systems, performance evaluation, and conflict resolution. Emphasis is on application of theory to practice.

#### EDL 6350 Seminar: School Leadership (3)

Basic concepts of educational leadership for doctoral students and advanced studies for school executives.

#### EDL 6352 Trends in Educational Thought (3)

A general survey and evaluation of recent developments in the various fields of education in the present day.

## EDL 6359 Advanced Studies in Education Law (3)

Pre-requisite(s): EDL 5359 or equivalent; or consent of instructor Legal and regulatory applications as a context and constraint in educational leadership decision-making. Topics are subject to change, but generally include federal and state constitutional provisions; statutory standards and regulations; local rules, procedures, and directives; fundamentals of contract law; and the governance of educational institutions.

## EDL 6360 Seminar: Interprofessional Education and Practice (3)

An exploration of approaches to interprofessional care for children and families in school based settings. The seminar involves a study of human service professionals and approaches to collaborative practice using case analyses and field activities.

## EDL 6363 Advanced Studies in Educational Leadership (3)

The role of leadership in shaping the quality and character of educational institutions. Topics are subject to change, but generally include identification of personal and organizational values, culture and culture building, formulation of personal and institutional goals, the change process, and vision building.

## EDL 6370 Seminar in American Educational Thought (3)

Cross-listed as AMS 5395

Understanding the historical, philosophical, and sociological antecedents of current views on education and educational leadership is a vital link in the formulation of a philosophy of educational leadership. Historical and contemporary works in the general areas of educational history, educational philosophy, sociology of education, and educational leadership are studied.

# EDL 6380 Technology in Educational Leadership (3)

This course emphasizes taking a systematic approach to the use of data, communication, and video technology. A review of existing research creates a knowledge base upon which instructional and leadership decisions can be made. Students are encouraged to apply the knowledge and skills gained through class instruction to leadership and instructional duties that they perform. Students are introduced to a number of moral, ethical, and legal issues that require professional evaluation.

# EDL 6383 Organization and Administration of the Community College (3)

Doctoral student or consent of instructor. Internal and external relations, planning and development; faculty selection and development; budgeting and finance; basic administrative functions and leadership concepts of higher education and especially the community college.

# EDL 6384 Curriculum and Instruction in the Community College (3)

Pre-requisite(s): Doctoral student or consent of instructor Philosophy, objectives, curricular development, instruction, and administration in academic, technical, and continuing education programs in the community college.

## EDL 6385 Higher Education--Business and Finance (3)

Designed to provide the graduate student (or practitioner) with a practical knowledge of the business and financial aspects of higher education administration. Students will gain an understanding of key terminology that will be useful as they relate to financial administrators or seek advancement in the field. Students will learn to identify fiscal challenges facing colleges and will discuss effective means to face these challenges. Topics included are state and federal regulations, legislative issues, tax exempt financing, fund accounting and audits, budgets, legal issues, payroll and personnel, risk management, facilities construction, deferred maintenance, foundations and investments, grant management, and auxiliary enterprises and contracting.

## EDL 6386 The Community College (3)

Pre-requisite(s): Doctoral student or consent of instructor Higher education and the community college: its philosophy, history, present/future trends, administration, instructional programs, student services, finances, public relations, and students.

## EDL 6390 Seminar: Education (3)

Designed to meet individual needs of doctoral students. May be repeated.

## EDL 6V20 Clinical Experiences for Educational Leaders (1-2)

Students engage with a mentor in authentic field experiences that frame K-12 problems of inquiry and provide opportunities to address complex problems of practice.

# EDL 6V64 Internship in Educational Leadership (1-9)

Pre-requisite(s): Consent of department chairperson

A field-based experience designed to meet individual needs of doctoral students preparing for leadership roles in colleges, universities, and/or K-12 schools.

#### EDL 6V95 Special Problems in Educational Leadership (1-9)

Pre-requisite(s): Doctoral student or consent of department chairperson Designed to meet the individual needs of doctoral students. May be repeated when topic varies.

# EDL 6V99 Dissertation (1-9)

Research, data analysis, writing, and oral/written defense of an approved doctoral dissertation. This course may be taken for up to 9 hours per semester for a maximum of 24 hours applicable to degree.

# **Educational Psychology (EDP)**

# EDP 5182 Specialist Internship in School Psychology (1)

Pre-requisite(s): Admission to School Psychology program or consent of instructor

A field-based experience for students in the School Psychology program earning an Education Specialist degree. Experience must meet the requirements specified in the School Psychology program handbook. May be repeated. Graded on credit-non-credit basis.

# EDP 5183 Internship in School Psychology II (1)

Pre-requisite(s): EDP 5182

Continuation of EDP 5182. A field-based experience for students in the School Psychology program. Experience must meet the requirements specified in the School Psychology program handbook.

## EDP 5199 Non-Thesis Degree Completion (1)

To fulfill requirements for non-thesis master's students who need to complete final degree requirements other than coursework during their last semester. This may include such things as a comprehensive examination, oral examination, or foreign language requirement. Students are required to be registered during the semester they graduate.

## EDP 5301 Philosophy in Applied Behavior Analysis (3)

Pre-requisite(s): EDP 5358

This course provides students with an introduction to the philosophy behind the science of behavior analysis. We review the history of behaviorism and transition from methodological behaviorism to radical behaviorism. Students have the opportunity to explore the philosophical underpinnings of behavior analysis and gain a better understanding of what it means to be a behavior analyst.

## EDP 5302 Concepts and Principles of Applied Behavior Analysis (3)

This course provides students with an introduction to the concepts and principles of behavior analysis. Students examine the fundamental concepts including operant and respondent conditioning, reinforcement, punishment, extinction, stimulus control, and motivating operations. Students have the opportunity to gain the foundational knowledge necessary to design behavior analytic interventions.

# EDP 5308 Gifted Education and Talent Development (3)

This course surveys practices and models of gifted education, including the theories of individual differences, talent development, and differentiated learning. Students explore how these theories and models are applied to learning and development, assessment, curriculum and instruction, learning environments, educational programs, and professional learning.

# EDP 5310 Curriculum Development for the Gifted (3)

Development of differentiated curricula for gifted students. Students will learn the components of a scope and sequence in gifted programs, how to adapt for individual differences, how to organize thematic, interdisciplinary content, and how to teach higher-level cognitive skills.

# EDP 5311 Creativity and Strategies for Teaching the Gifted (3)

Concept of creativity and its relationship to the development of programs for the gifted and talented. Topics within this course will include instruments and techniques for identifying creativity, theories and models of creativity, instructional strategies for enhancing creativity, futuristics, and problems of creatively gifted.

## EDP 5320 Survey of Quantitative Methods (3)

This course provides a basic introduction to quantitative methods needed by educational practitioners to inform professional decisions and guide evidence-based practice. Topics include scientific method, internal and external threats to research validity, research designs, measurement, and statistical conclusion validity. The centrality of quantitative methods to competent practice is emphasized.

# EDP 5327 Educational Evaluation (3)

Cross-listed as EDL 5327

See EDL 5327 for course information.

# EDP 5328 Psychological Assessment of Children and Adolescents I: Cognitive (3)

Theories of intelligence, practical administration, and interpretation of intellectual measures, including giving, scoring, and interpreting test results.

# EDP 5329 Counseling Theories and Techniques (3)

Pre-requisite(s): Graduate standing

Basic theories, strategies, and techniques in counseling and helping relationships. Special focus on the role of the interventionist.

## EDP 5332 Human Growth and Development (3)

Cross-listed as AMS 5332

Processes and stages of human growth and development: physical, social, emotional, and intellectual. The impact of social, political, and economic factors on individuals and families is explored.

## EDP 5333 Psychology of Learning, Cognition, and Affect (3)

Cross-listed as AMS 5333

Philosophical and historical roots of theories of learning, cognition, and affect. Major constructs of current theories and their application in instructional, administrative, and counseling settings.

#### EDP 5334 Statistical Methods (3)

Exercises in the computation of the most commonly employed statistical indices in tabulation, graphic representation, and presentation of data in educational reports. The techniques used are also applicable to other fields.

# EDP 5335 Research in Education (3)

Cross-listed as AMS 5335

Historical, descriptive, and experimental inquiry. Emphasis on interpretation of research. Use of references and resources; the problem; expression of hypotheses; research design; organizing the review of literature; gathering data; statistical analysis of data; reporting and discussing findings; drawing conclusions. Writing style will be applied to the student's major field of study.

# EDP 5337 Psychological Assessment of Children and Adolescents II: Psychoeducational (3)

Pre-requisite(s): EDP 5328 and 5393

Continued knowledge and practice of intellectual assessment will be presented, as well as different types of academic assessment, including both norm-referenced and curriculum-based approaches. Integration of intellectual and academic assessment will be stressed within a problem-solving model.

# EDP 5339 Group Counseling Methods (3)

Pre-requisite(s): Consent of instructor

Group counseling theories and techniques. Analysis of group processes. Practice in leading simulated groups.

## EDP 5340 Measurement and Evaluation (3)

Overview of psychometrics and its application to psychological and educational decision making. Specific attention given to the design and development of specialized assessment instruments.

# EDP 5341 Professional Practice, Law, and Ethics for School Psychologists (3)

An overview of the profession of school psychology is addressed, including the history and foundations of the field as well as service delivery models. Emphasis is placed on the application of current ethical, legal, and professional standards to professional practice in schools and alternative settings.

# EDP 5344 Individual Brief/Crisis Counseling (3)

Overview of current methods of brief therapy and simulated experiences using brief therapy. Identification of situations having the potential for crisis, description of clients in crisis, consideration of theories devoted to explanation and possible amelioration of crises. Practice in counseling clients using brief therapy or crises interventions. Visits to appropriate settings.

## EDP 5346 Therapeutic Intervention (3)

Pre-requisite(s): EDP 5356

Provides an extended understanding of the philosophy and methodology of applied behavior analysis. Applied behavior analysis is an extremely well developed approach to solving problems in educational settings, and provides one of the best examples of a consistent model for being an accountable, scientifically-oriented practitioner. In this course, students learn to implement assessment and intervention techniques based on the science and theory of behavior analysis.

#### EDP 5351 Social/Emotional Needs of the Gifted (3)

Differential affective characteristics of gifted students; general counseling theories; communicating with the gifted; assessing affective needs; helping the gifted develop social and interpersonal skills; the defining role of the school in affective development; and measuring the potential of the gifted to achieve and contribute to society and the lives of others.

#### EDP 5352 Counseling in Religious Settings (3)

Pre-requisite(s): EDP 5329 or consent of instructor Integration of principles of religious faith with various counseling problems and psychotherapeutic systems. The course includes subject areas such as ethics, the identity of the counselor, and an evaluation of selected psychological theories for their usefulness in a religious setting and/or from a religious perspective.

# EDP 5353 Spirituality and Religion in Counseling (3)

This course is designed to help students increase their awareness and knowledge of diverse spiritual and religious traditions, the role of spirituality and religion to human development and mental health, and assessment and treatment approaches to counseling clients' spiritual and religious concerns.

## EDP 5354 Ethics in Applied Behavior Analysis (3)

The course provides information on the profession of behavior analysis, including the history, foundations, and ethical principles. The course emphasizes the ethical principles and professional expectations within the field of applied behavior analysis. This includes a detailed review of the Behavior Analysis Certification Board Professional and Ethical Compliance Code for Behavior Analysts.

# EDP 5356 Psychological Interventions with Children and Adolescents I: Behavior (3)

An overview of behavior management, including different beliefs as to why behavior occurs. The process of collecting data for the purpose of assessing individual and group behavior and making decisions about the education of children will be studied.

## EDP 5357 Single-Subject Research Design (3)

An initial course in the use of single-subject research methodology. Single-subject research designs are empirical designs rooted in the field of applied behavior analysis that are regularly used in the study of individuals with low incidence disabilities, but are also appropriate for other populations. This class examines the characteristics of single-subject research designs.

# EDP 5358 Teaching Individuals with Autism and Developmental Disabilities (3)

Covers specific teaching techniques utilized among individuals with developmental disabilities. Data collection techniques used to monitor progress will be introduced, as well as preference assessment(s) and communication intervention(s).

# EDP 5360 Psychological Interventions with Children and Adolescents II: Counseling (3)

An overview of developmentally appropriate evidence-based approaches to counseling children and adolescents in school and mental health settings. Addresses foundational techniques, assessment of treatment progress, working with parents and teachers, and ethical/legal considerations.

# EDP 5361 Challenging Behavior and Developmental Disabilities (3) Pre-requisite(s): EDP 5346 5356

Provides a general understanding of severe challenging behaviors, such as self-injury and aggression, including various reasons that individuals with disabilities develop and maintain such behaviors, as well

as assessment and treatment methods to address them.

EDP 5362 Psychological Interventions with Children and Adolescents III:

Academic (3)

An overview of evidence-based approaches to intervening with children and adolescents who have academic difficulties. Addresses foundational aspects of teaching and learning, assessment of intervention effectiveness, and ethical and legal considerations.

# EDP 5363 Teaching Associate Special Education (3)

Pre-requisite(s): EDP 5332

Clinical teaching experience in a local school where teacher candidates interact with special education students. Includes completion of content modules, conferencing with clinical instructor and university instructor, observation of lessons taught by master teachers, written lesson reflections, and preparation of and evaluation of benchmarks.

# EDP 5364 Psychological Interventions with Children and Adolescents IV: Cognitive Behavioral Therapy (3)

This course involves in-depth study of basic cognitive behavioral procedures and research specific to the treatment of a number of clinical problems of children and adolescents. This class consists of five units:

1) overview of cognitive behavioral therapy (CBT); 2) critical issues for the field; 3) special applications of CBT; 4) internalizing disorders and problems; and 5) externalizing disorders and problems.

## EDP 5366 Psychology of Exceptional Children (3)

Problems of the exceptional child in a developmental framework. Differences in intellectual functioning, academic achievement, and social relationships will be explored. A social psychological perspective will also be presented, i.e., the degree to which society accepts the exceptional and what effect this has upon their development.

# EDP 5367 Developmental Psychopathology (3)

Overview of behavioral and emotional disorders of childhood, adolescence, and emerging adulthood from a developmental perspective. This course focuses on the description, assessment, epidemiology, etiology, and evidence-based treatment of each disorder.

# EDP 5368 Methods for Teaching the Emotionally Disturbed (3)

Pre-requisite(s): EDP 5366

Techniques for the education of emotionally disturbed children and adolescents. Emphasis is placed on understanding classroom behavior, developing teacher-student relationships, and structuring classroom learning.

# EDP 5369 Methods and Media for Children with Learning Disabilities (3)

Pre-requisite(s): EDP 5366

Individual diagnosis of learning disabilities. Experiences will be provided in preparing individual educational plans and materials, both from developmental and remedial approaches.

# EDP 5370 Consultation, Collaboration, and Family-School Partnerships (3)

Knowledge of and skills for consulting with parents and teachers; collaborating with teachers, school administrators, and other professionals; and building family-school partnerships. Techniques are provided for gathering information regarding the needs of exceptional children and for involving teachers, parents, and others in better meeting these needs.

#### EDP 5374 Managing Behavior Change Programs (3)

This course teaches students to apply the principles of applied behavior analysis to develop goals and interventions based on integrated information, utilize a data-based decision-making model to evaluate efficacy of programs, and learn effective supervision techniques. Students learn skills needed to analyze cases and develop appropriate behavior change programs for clients' maximum desired performance.

# EDP 5376 Practicum with Exceptional Children (3)

All courses in the certification program. Field experiences with various types of exceptional children.

# EDP 5390 Seminar: Education (3)

Designed to meet individual needs of graduate students. May be repeated.

## EDP 5391 Cultural Issues in Higher Education (3)

Cross-listed as EDA 5391, EDL 5395

This course explores topics relevant to providing educational services to diverse student populations in higher education. Students will develop knowledge, attitudes, and skills needed to function within their own microculture, the United States macroculture, other microcultures, and the global community. Students will develop skills and understanding of effective strategies for academic assessment and intervention, and strategies to facilitate student success in higher education.

## EDP 5393 Cultural Issues with Children and Families (3)

An overview of the psychosocial and educational needs of ethnically and linguistically diverse children is discussed, including the impact of culture, cross-cultural assessment, and treatment models in a multisystems approach.

# EDP 5394 Psychological Assessment of Children and Adolescents III: Social-Emotional (3)

Pre-requisite(s): EDP 5337

An overview of social-emotional, behavior, and personality assessment techniques. Primary focus is on administering, scoring, and interpreting data from instruments for children and adolescents.

# EDP 5662 Internship Special Education (6)

Pre-requisite(s): EDP 5332

Full time teaching experience where teacher candidates interact with special education students. Includes completion of content modules, conferencing with mentor teacher and university instructor, observation of lessons taught by master teachers, written lesson reflections, and preparation of benchmark evaluations.

# EDP 5V54 Practicum with Gifted Students (3-6)

Three to six semester hours of practicum experience or two years of successful classroom teaching experience in an approved program for gifted and talented students to meet the requirement for an endorsement in this area. Regular consultation with program faculty to develop teaching skills is arranged in conjunction with the setting, May be repeated for credit.

## EDP 5V78 Practicum in School Psychology (1-3)

Pre-requisite(s): Admission to School Psychology program or consent of instructor

Supervised practicum in School Psychology. May be repeated. Graded on credit/no-credit basis

## EDP 5V95 Special Problems in Education (1-4)

Designed to meet individual needs of graduate students. May be repeated.

## EDP 5V98 Practicum in Applied Behavior Analysis (1-3)

A supervised practicum in applied behavior analysis. Throughout the practicum experience, students receive regular consultation with program faculty and instructors to develop applied assessment and interventions skills within the field experience. This course may be repeated for credit.

#### EDP 5V99 Thesis (1-6)

Credit received when the thesis is finally approved.

# EDP 6155 Reflection of Multidisciplinary Studies (1)

Pre-requisite(s): EDP 6154

Research resulting from the examination of contemporary issues, problems, and/or themes from a multidisciplinary perspective will be shared in a symposium.

## EDP 6156 Doctoral Seminar, Part 3 (1)

Pre-requisite(s): Completion of EDP 6354 and EDP 6255

In this course, students will develop ongoing plans for research, teaching, and service as they prepare for graduation. Students will learn how to develop a line of research to continue building on the framework of research initiated during the Ph.D. program. Additionally, students will learn how to identify and interpret academic job postings and prepare successful application documents.

#### EDP 6157 Doctoral Seminar, Part 3 (1)

Pre-requisite(s): Completion of EDP 6302 and EDP 6201

In this course students develop ongoing plans for research, teaching, and service as they prepare for graduation. Students learn how to develop a line of research to continue building on the framework of research initiated during the Ph.D. program. Additionally, students learn how to identify and interpret academic job postings and prepare successful application documents.

# EDP 6201 Doctoral Seminar Part 2 (2)

Pre-requisite(s): EDP 6302, Doctoral Seminar 1

This course provides students with skills necessary for dissemination in research. Students learn the skills associated with participating in peer review, present research, and publish research.

# EDP 6302 Doctoral Seminar Part 1 (3)

This course provides students with the skills necessary to begin a successful doctoral experience. This course introduces methods for systematically identifying existing literature, developing research questions, and producing meaningful lines of research.

#### EDP 6320 Concepts and Foundations of Behavioral Assessment (3)

This course introduces students to the fundamentals of measurement and evaluation in applied behavior analysis (ABA). Students learn the history of behavioral assessment as well as traditional concepts (e.g., reliability, validity) related to assessment development and research. Students also learn to critique and analyze measurement-related research for commonly used assessments in behavior analysis.

#### EDP 6325 Positive Behavior Interventions and Supports (3)

This course prepares students to work effectively within a positive behavior interventions and supports framework. Positive behavior interventions and supports is a school-wide approach to managing behavior that targets teaching and reinforcing desired, positive behavior among children in a classroom.

## EDP 6330 Seminar in Learning and Development Issues (3)

Pre-requisite(s): Doctoral standing

This seminar examines current issues in educational psychology from a historical and research perspective. Readings will focus on the application of psychological concepts to the educational process.

#### EDP 6332 Advanced Human Growth and Development (3)

Pre-requisite(s): EDP 5332

This course is an advanced study of human development from birth through adolescence. The relationships between the individual, the family, and society are explored within the context of social justice, as are the ways that these relationships vary within and across cultures. Key research studies are examined.

## EDP 6333 Advanced Study of Human Learning (3)

Pre-requisite(s): EDP 5333, 5334, and 5335

Individualized, directed study of topics in human learning. Topics include attention and perceptual learning, language acquisition, memory, and social learning. Students choose a research problem in human learning, do a review of the literature, and conduct a pilot study to investigate the problem.

# EDP 6335 Research Practicum in Education (3)

Cross-listed as EDA 6335, EDL 6335

Pre-requisite(s): EDP 5335

Educational research writing. Emphasis will be placed on the organization of the prospectus, the thesis, the dissertation, and the abstract which are typically required by graduate schools in professional fields. Individualized and critical assistance will be given in the research writing style and composition mechanics befitting the research design chosen.

# EDP 6336 Qualitative Research and Data Analysis (3)

Cross-listed as EDC 6336

Pre-requisite(s): EDP 5335 or EdD online student

The development of an in-depth understanding of the major methods of inquiry associated with qualitative research will be emphasized. These include participant observation, interviewing, and document analysis. Additionally, an appreciation for the strengths and limitations of engaging in qualitative research and a general understanding of the paradigms that undergird qualitative research and their implications for conducting qualitative inquiry will be cultivated.

# EDP 6337 Psychometric Theory and Test Construction (3)

Pre-requisite(s): EDP 5340

Review of the theoretical literature and construction of direct and indirect performance tests. Course will cover cognitive, affective, and psychomotor domains, theoretical assumptions underlying test design, criteria for the appropriate construction of discreet item forms, processes used to establish test validity and reliability, and use of test construction software.

# EDP 6338 Grant Writing (3)

Cross-listed as EDC 6338

Information about sources of external funding and instruction in the techniques of grant writing.

# EDP 6339 Ethnographic Research Methods in Education (3)

Cross-listed as EDC 6339

See EDC 6339 for course information.

## EDP 6340 Teaching in Higher Education (3)

Campus-based experiences in a higher education setting. Particular attention will be given to the design of courses of study and instructional strategies that encourage inquiry with the adult learner.

## EDP 6341 Practicum in Adult Learning: Field-Based (3)

In-depth experiences in a field-based educational or other setting. Particular attention will be given to the development, implementation, and evaluation of programs for adult learners.

# EDP 6343 Consultation and Supervision in Applied Behavior Analysis (3)

This course teaches students to apply the principles of applied behavior analysis to consultation, supervision, and management. Students learn skills needed to analyze cases and provide effective behavioral consultation. There is an emphasis on the practical application of consultation skills within a problem-solving, behavioral consultation framework.

## EDP 6345 Adult Learner-Advanced (3)

Characteristics of the young and mature adult learners with an emphasis on intellectual development. An analysis of theories of adult learning will be included.

# EDP 6349 Paradigms and Frameworks of Gifted Education (3)

This course explores historical and emerging paradigms of giftedness and gifted education. Topics include paradigms and conceptual frameworks that are based on theory and research. In this course students explore ways paradigms and frameworks influence policy, research, and practice.

# EDP 6350 History and Systems of Psychology and Educational Applications (3)

How systems of psychological thought develop in the context of the philosophy of science. Changing systems in psychology are examined, emphasizing their influence on theory, design, and the delivery of educational programs and psychological services.

## EDP 6353 Creativity and Problem Solving (3)

Focuses on how to teach and instruct from examining the basic theories, models, and research of creativity and problem solving and their applications to the development of individuals. Differences that result from an interaction among personality, creativity, and ecological factors will be related to the design of programs and curriculum that meet the changing abilities and needs of adult learners.

# EDP 6354 Advanced Single Case Design (3)

Pre-requisite(s): EDP 5357

An advanced study of single case research designs. The course prepares students to conduct single-case research utilizing advanced, combined, and modified designs. Additionally, students learn how to conduct meta-analyses of single-case reviews, employing a variety of advanced effect size measures. Finally, students learn to critique and analyze published research employing a variety of single-case designs.

# EDP 6355 Advanced Concepts in Applied Behavior Analysis (3)

Pre-requisite(s): EDP 5302

This course is an advanced study of applied behavior analysis. The content of the course is related to principles and advanced concepts in applied behavior analysis. Students learn how to gather information about an advanced topic and how to present that information to others.

## EDP 6356 Doctoral Seminar in School Psychology (3)

Pre-requisite(s): Advancement to candidacy for the Doctor of Philosophy degree in School Psychology

In this seminar advanced school psychology doctoral students convene to discuss and critically evaluate key professional and scientific issues. Students read and discuss seminal articles on topics of interest with the aim of generating future research projects to test theory or inform practice. Students learn how to prepare grant proposals, craft journal articles, navigate the peer review process, and integrate science and practice.

# EDP 6359 Mixed Methods Research Design and Analysis (3)

Cross-listed as EDC 6359

See EDC 6359 for course information.

### EDP 6360 Experimental Design I (3)

Pre-requisite(s): EDP 5334 and 5335

Course focuses on applied experimental designs that address the unique settings and systems of education, including data collection strategies for field work.

## EDP 6361 Experimental Design II (3)

Pre-requisite(s): EDP 5334, 5335 and 6360

Course focuses on unique models for research in education settings including advanced experimental designs, path analysis, general linear modeling, hierarchical linear modeling, and structural equation modeling.

# EDP 6362 Applied Multiple Regression/Correlation Analysis in Education (3)

Pre-requisite(s): EDP 5334

Applications of correlation and multivariate regression analysis procedures to issues in education research, such as building, evaluating, and validating multiple regression models.

# EDP 6363 Verbal Behavior (3)

This course is an advanced study of language conceptually based upon the principles of behavior analysis. The course develops an understanding of language according to the two primary theories in the field of behavior analysis, Skinner's verbal behavior and relational frame theory (RFT).

## EDP 6365 Latent Variable Models in Education (3)

Pre-requisite(s): EDP 5334, 6360, and 6362

An advanced statistics class that builds on general multiple regression models to extend to the measurement of latent variables, such as factor analysis and structural equation modeling.

# EDP 6366 Item Response Theory (3)

Pre-requisite(s): EDP 6337 and 6362

An advanced psychometrics class designed to introduce the development and testing of item response models, as well as applying the models to measurement instruments.

## EDP 6367 Individual Differences (3)

Pre-requisite(s): EDP 6337

An advanced psychometrics and statistics class, introducing selected topics in behavior genetics, intelligence, and personality research.

# EDP 6370 Case Study Research Methods and Analysis in Education (3)

Cross-listed as EDC 6370

See EDC 6370 for course information.

# EDP 6380 Community Experience in Developmental Disability Services (3)

Students complete a field experience within a publicly funded program for children with developmental disabilities. Approved placements include public school special education classrooms, early childhood services programs, and Mental Health Mental Retardation (MHMR) programs. Students complete activities associated with applied behavior analysis (ABA) and the therapeutic or educational services provided by the supervising entity.

#### EDP 6385 Internship in Applied Behavior Analysis (3)

A supervised internship in Applied Behavior Analysis (ABA). Students complete 150 hours of field experiences in a pre-approved placement. Students in this course are expected to complete activities associated with the practice of ABA as well as become actively involved in the research activities of the supervising entity. A Board Certified Behavior Analyst supervises all field experiences.

## EDP 6390 Seminar: Education (3)

Designed to meet individual needs of doctoral students. May be repeated.

## EDP 6V00 Dissertation proposal (1-9)

For doctoral students who have completed all required coursework but have not yet completed preliminary examinations. Students will prepare a doctoral research proposal. The course may be repeated up to three times.

# EDP 6V78 Advanced Practicum in School Psychology (1-4)

Pre-requisite(s): EDP 5V78

This course prepares health-service providers to support the academic development and psychological well-being of youth. It provides supervision and opportunities to reflect on the experiences of professional practice in school and clinic settings.

# EDP 6V82 Doctoral Internship in School Psychology (1-3)

Pre-requisite(s): Admission to school psychology program or consent of instructor

A field-based experience for doctoral students in school psychology. Experience must meet the requirements specified in the school psychology internship handbook. May be repeated. Graded on credit-non-credit basis.

# EDP 6V99 Dissertation (1-9)

Research, data analysis, writing, and oral/written defense of an approved doctoral dissertation. At least nine hours of EDP 6V99 are required.

# **Electrical & Comp Engineering (ELC)**

# ELC 5302 Engineering Analysis (3)

Cross-listed as EGR 5302, ME 5302

Pre-requisite(s): Graduate standing in Engineering Selected topics in applied engineering mathematics. Topics include advanced linear algebra, signal theory, and optimization methods.

# ELC 5311 Advanced Logic Design (3)

Pre-requisite(s): Graduate standing in Engineering Computer-automated design of digital circuits. Functional specification; structural and behavioral modeling using hardware description languages; simulation for design verification and timing analysis; circuit synthesis for FPGA implementation; testing and fault diagnosis.

#### ELC 5313 Advanced Computer Architecture (3)

Pre-requisite(s): ELC 4438 or consent of instructor

Advanced topics in computer architecture, including instruction set design, instruction pipelines, super scaler and very-long instruction word processors, cache and virtual memory systems, multiprocessor systems, large data storage systems and computer networks.

## ELC 5316 Real-Time Systems Design (3)

properties of guided waves, and antennas.

Pre-requisite(s): ELC 4438 or consent of instructor Hardware and software characteristics of real-time concurrent and distributed reactive control systems; design methodologies; performance analysis; case studies and development projects.

# ELC 5336 Advanced Engineering Electromagnetics (3)

Pre-requisite(s): ELC 3337 or consent of instructor
An in-depth study of electromagnetic fields and waves and their
applications in modern wireless communication and sensor systems.
Topics include Maxwell's equation for complex media, scalar and vector
potentials, non-ideal transmission lines, cylindrical waveguides, general

# ELC 5337 Principles of Microwave Sensing and Measurement (3)

Fundamentals of microwave sensor design and applications. Emphasis on understanding the basic principles, fundamental electrical and magnetic properties of materials, and the sensor configurations of RF/microwave instruments used in industrial and biomedical application.

## ELC 5338 High Frequency Electronics Design (3)

Design and analysis of solid-state electronic circuits at RF and microwave frequencies. Emphasis on operational characteristics and design procedures for two- and three-terminal semiconductor devices and the associated passive components and circuit fabrication techniques used for generating, amplifying, and processing signals in this frequency range.

## ELC 5339 High Frequency Electronics II (3)

Pre-requisite(s): ELC 5338 or consent of instructor

The design of linear amplifiers and oscillators at microwave frequencies, including an emphasis on design procedures for optimum gain, stability, and noise performance of amplifiers and the negative resistance method for oscillators.

# ELC 5340 Radar Engineering (3)

Pre-requisite(s): ELC 5336

Electromagnetics of radar, signal processing of radar, radar imaging, Doppler processing, and radar antenna arrays. Analysis and design principles, simulation, and measurement.

# ELC 5351 Multidimensional Signal Analysis (3)

Cross-listed as BME 5351 Pre-requisite(s): ELC 4451

Introduction to the processing and analysis of images in higher dimensions, including images and video. Characterization of higher dimensional signals. Multidimensional Fourier analysis, FFT's, systems and convolution. Reconstruction of images from projections. Tomography, Abel transforms, Radon transforms. Synthesis and restoration of signals using projection methods. Alternating projections onto convex sets.

# ELC 5353 Biomedical Signal Analysis (3)

Cross-listed as BME 5353

Pre-requisite(s): ELC 4451 or BME 4452

Applications of signal theory and digital signal processing concepts toward biomedical signals. Topics include filters, signal modeling, adaptive methods, spectral analysis and statistical signal processing methods.

#### ELC 5354 Random Signals and Noise (3)

Pre-requisite(s): ELC 3335 and consent of instructor

Foundational treatment of probability, random variables and stochastic processes used in the analysis of random signals and noise in many areas of engineering. Topics include the modeling and properties of probability, scalar and vector random variables, the central limit theorem, stochastic processes, stationarity, ergodicity, the Karhunen-Loeve expansion, power spectral densities, response of linear systems to random signals, and Markov chains.

## ELC 5356 Statistical and Adaptive Signal Processing (3)

Pre-requisite(s): ELC 5354

Unified introduction to the theory, implementation, and applications of statistical and adaptive signal processing methods. Key topics focus on spectral estimation, signal modeling, adaptive filtering, and signal detection.

#### ELC 5357 Cardiovascular Engineering and Instrumentation (3)

Cross-listed as BME 5357, EGR 5357, ME 5357

See BME 5357 for course information.

## ELC 5358 Introduction to Computational Intelligence (3)

Pre-requisite(s): Consent of instructor

Foundational knowledge of computational intelligence and its application to engineering problems. Discriminant analysis, artificial neural networks, perception training and inversion, fuzzy logic, fuzzy inference engines, evolutionary computation, particle swarms, intelligent agents, and swarm intelligence.

# ELC 5360 Linear Systems (3)

Pre-requisite(s): ELC 4332 or equivalent

Analysis of linear systems, including system modeling, state-variable representations, discrete-time systems, linear algebra, linear dynamic equations, stability, observability, controllability, state-feedback and state-estimators, realization, and pole placement.

# ELC 5362 Optimal Control (3)

Pre-requisite(s): ELC 5360 or equivalent

Optimal control problems, static optimization, optimal control of discretetime systems, the variational approach to optimal control, linear quadratic regulator problems, the maximum principle, extensions of LQR problem, time-optimal control problems, dynamic programming.

## ELC 5364 Intelligent Control (3)

Pre-requisite(s): ELC 4332 or 4335 or Graduate standing Introduction to intelligent control and optimization using a control-engineering approach. Topics include decision-making techniques, neural network architectures for modeling and control, system identification, fuzzy systems, evolutionary algorithms, and swarm intelligence.

# ELC 5370 Introduction to Information Theory (3)

Pre-requisite(s): ELC 4350 or instructor approval

Topics include: information models, entropy measures, data compression, coding theory, error correcting codes, the Kraft inequality, optimal codes, Shannon coding theorem, Burg's theorem, evolutionary informatics, Kolmogorov complexity, algorithmic information theory, and Chaitin's number.

## ELC 5381 Advanced Power Grid Interface Techniques (3)

Pre-requisite(s): ELC 4332 and either ELC 4340 or ELC 4345 Introduction to distributed power generation, power conversion topologies and their control, power factor correction circuits, harmonic concepts and power quality, modeling and control of grid-connected loads and filters, interconnection standards and control issues, and control systems for rotating machines.

# ELC 5390 Research Methods and Project Formulation (3)

Cross-listed as BME 5390, EGR 5390

Pre-requisite(s): Approval of student's proposed master's thesis or project advisor

Designed for students in the process of selection of thesis or project topic. Students will gain experience in literature and/or laboratory research methods and formulation of a project appropriate for their area.

## ELC 5396 Special Topics in Engineering (3)

Cross-listed as BME 5396, EGR 5396, ME 5396 See EGR 5396 for course information.

## ELC 5397 Special Projects in Engineering (3)

Cross-listed as BME 5397, EGR 5397, ME 5397 See EGR 5397 for course information.

#### ELC 5V99 Master's Thesis (1-6)

Pre-requisite(s): Approval of student's master's thesis advisor Students completing a master's program with a thesis must complete six hours of ELC 5V99.

# ELC 6V10 Doctoral Prospectus Research (1-6)

Pre-requisite(s): Instructor approval

Supervised research for developing a dissertation prospectus that will be the subject of the preliminary exam that will admit students to candidacy. A student may repeat this course for credit with a maximum of ten total hours. Registration for this course is sufficient for achieving full-time status.

#### ELC 6V99 Dissertation (1-12)

Pre-requisite(s): Consent of student's supervisory graduate committee and admission to doctoral candidacy

Required of all doctoral candidates. In no case will fewer than 12 semester hours be accepted for a dissertation. Students may not enroll for dissertation hours until they have been officially accepted into candidacy for the doctoral degree. After initial enrollment, students must register for at least one semester hour of dissertation every semester thereafter (summer semester excluded).

# **Emergency Medicine (MEM)**

# MEM 6142 Radiology (1)

Pre-requisite(s): MEM 6330

A rotation to orient the Emergency Medicine Physician Assistant Resident to the concepts of radiology in emergency medicine.

# MEM 6143 Oral-Maxillary Facial Surgery (1)

Pre-requisite(s): MEM 6330

A rotation emphasizing the management of head and neck disorders. Practicum and didactics in the disorders of the head and neck.

## MEM 6144 Toxicology (1)

Pre-requisite(s): MEM 6330

A rotation emphasizing toxicological presentations encountered in the emergency department.

# MEM 6210 Introduction to Emergency Medicine Resuscitation, Shock, and Anesthesia (2)

Pre-requisite(s): MEM 6330

This course studies the clinical side of resuscitation techniques, shock recognition and treatment, and anesthesia used in the emergency department.

# MEM 6211 Emergency Treatment of Orthopedic Injuries, Emergency Ultrasounds, and Emergency Radiology (2)

Pre-requisite(s): MEM 6330

Study of concepts of orthopedic conditions encountered in the emergency department.

## MEM 6212 Toxicology and Oral Maxillary Facial Disorders (2)

Pre-requisite(s): MEM 6330

This rotation studies concepts of toxicological presentations and oral maxillary facial disorders encountered in the emergency department.

# MEM 6213 Cardiovascular, Pulmonary, Hematologic, Oncologic, and Psychosocial Diseases and Disorders (2)

Pre-requisite(s): MEM 6330

The study of concepts of cardiovascular, pulmonary, hematologic, onocologic, and psychosocial diseases encountered in an emergency department environment.

# MEM 6214 Gastrointestinal, Genitourinary, Obstetrics, and Gynecology Diseases (2)

Pre-requisite(s): MEM 6330

The study of concepts in gastrointestinal, genitourinary, obstetrics, and gynecology diseases encountered in an emergency department environment.

# MEM 6215 Pediatric Non-Traumatic Musculoskeletal Disorders, Abuse, and Assault (2)

Pre-requisite(s): MEM 6330

The study of diseases, non-traumatic muscular skeletal disorders, assault and abuse in the pediatric emergency department patient.

# MEM 6216 Emergency Wound Management, Environmental Injuries, and Trauma (2)

Pre-requisite(s): MEM 6330

The study of concepts in wound management, environmental injuries, and trauma encountered in the emergency department.

# MEM 6217 Infectious Disease, Endocrinology, and Neurology (2)

Pre-requisite(s): MEM 6330

The study of concept in infectious diseases and endocrinologic, and neurologic disorders that are encountered in an emergency department.

# MEM 6220 Advanced Emergency Medicine, Resuscitation, Shock, and Anesthesia (2)

Pre-requisite(s): MEM 6210

This course builds upon MEM 6210 and studies the clinical side of resuscitation techniques, shock recognition and treatment, and anesthesia used in the emergency department.

# MEM 6221 Advanced Emergency Treatment of Orthopedic Injuries, Emergency Ultrasounds, and Emergency Radiology (2)

Pre-requisite(s): MEM 6211

Study of advanced concepts of orthopedic conditions encountered in the emergency department.

# MEM 6222 Advanced Toxicology and Oral Maxillary Facial Disorders (2) Pre-requisite(s): MEM 6212

This rotation studies advanced concepts of toxicological presentations and oral maxillary facial disorders encountered in the emergency department.

# MEM 6223 Advanced Cardiovascular, Pulmonary, Hematologic, Oncologic, and Psychosocial Disorders (2)

Pre-requisite(s): MEM 6213

The study of advanced concepts of cardiovascular, pulmonary, hematologic, oncologic, and psychosocial diseases encountered in an emergency department environment.

# MEM 6224 Advanced Gastrointestinal, Genitourinary Obstetrics, and Gynecology Diseases (2)

Pre-requisite(s): MEM 6214

The study of advanced concepts in gastrointestinal, genitourinary, obstetrics, and gynecology diseases encountered in an emergency department environment.

# MEM 6225 Advanced Pediatrics Non-Traumatic Musculoskeletal Disorders, Abuse, and Assault (2)

Pre-requisite(s): MEM 6215

The advanced study of diseases, non-traumatic muscular skeletal disorders, assault, and abuse in the pediatric emergency department patient.

# MEM 6226 Advanced Emergency Wound Management, Environmental Injuries, and Trauma (2)

Pre-requisite(s): MEM 6216

The study of advanced concepts in wound management, environmental injuries, and trauma encountered in the emergency department.

# MEM 6227 Advanced Infectious Disease, Endocrinology, and Neurology (2)

Pre-requisite(s): MEM 6217

The study of advanced concepts in infectious diseases, endocrinologic, and neurologic disorders that are encountered in an emergency department.

## MEM 6231 Emergency Department 1 (2)

Pre-requisite(s): MEM 6330

General emergency medicine rotation to apply the concepts of medical practice in an emergency department setting.

## MEM 6232 Emergency Department 2 (2)

Pre-requisite(s): MEM 6330

General emergency medicine rotation to apply the concepts of medical practice in an emergency department setting.

## MEM 6233 Emergency Department 3 (2)

Pre-requisite(s): MEM 6330

General emergency medicine rotation to apply the concepts of medical practice in an emergency department setting.

# MEM 6234 Emergency Department 4 (2)

Pre-requisite(s): MEM 6330

General emergency medicine rotation to apply the concepts of medical practice in an emergency department setting.

# MEM 6235 Emergency Department 5 (2)

Pre-requisite(s): MEM 6330

General emergency medicine rotation to apply the concepts of medical practice in an emergency department setting.

## MEM 6330 Orientation to Emergency Medicine (3)

A comprehensive orientation to the field of Emergency Medicine, with formal presentations/lectures, ACLS/PALS, Emergency Department administrative issues, Emergency Medical Services, ethics and professionalism, and an introduction to research in emergency medicine.

## MEM 6336 Emergency Department 6 (3)

Pre-requisite(s): MEM 6330

General emergency medicine rotation to apply the concepts of medical practice in an emergency department setting.

# MEM 6337 Emergency Department 7 (3)

Pre-requisite(s): MEM 6330

General emergency medicine rotation to apply the concepts of medical practice in an Emergency Department setting.

## MEM 6338 Emergency Department 8 (3)

Pre-requisite(s): MEM 6330

General emergency medicine rotation to apply the concepts of medical practice in an emergency department setting.

## MEM 6346 Clinical Research (3)

Pre-requisite(s): MEM 6330

The MEM 6346 rotation consists of a didactic phase during the first month of training, dedicated research blocks, and individual research days scheduled throughout the 18-month course. The research course is designed to familiarize the residents with the research process and, more importantly, to facilitate the development of the skills necessary to critically analyze published scientific articles.

#### MEM 6439 Pediatrics Emergency Department (4)

Pre-requisite(s): MEM 6330

A rotation emphasizing the clinical side of pediatric patients in the emergency department.

# MEM 6440 Pediatrics Emergency Department and Pediatric Intensive Care Unit (4)

Pre-requisite(s): MEM 6330

A rotation emphasizing the clinical side of pediatric patients in the Emergency Department and Pediatric ICU.

# MEM 6445 Emergency Ultrasound (4)

Emergency ultrasound is the medical use of ultrasound technology for the bedside diagnostic evaluation of emergency medical conditions; resuscitation of the acutely ill, critically ill or injured; and guidance of high risk or difficult procedures. Typically, emergency ultrasound is a goal-directed, focused ultrasound examination that answers brief and important clinical questions in an organ system or involving multiple organ systems.

# MEM 6447 Surgical Intensive Care Unit (SICU) (4)

Pre-requisite(s): MEM 6330

A rotation emphasizing the concepts and management of trauma and post-operative patients encountered in the Emergency Department.

## MEM 6448 Medical Intensive Care Unit (MICU) (4)

Pre-requisite(s): MEM 6330

A rotation emphasizing life threatening diseases encountered in the emergency department and managed in the MICU.

# MEM 6449 Cardiac Care Unit (CCU) (4)

Pre-requisite(s): MEM 6330

A rotation emphasizing the concepts of cardiovascular diseases encountered in the emergency department and managed in the CCU.

# MEM 6450 Trauma Surgery (4)

Pre-requisite(s): MEM 6330

A rotation emphasizing the concepts of trauma management and lifesaving surgery.

# **Engineering (EGR)**

# EGR 5001 Baylor Engineering and Research Seminar (0)

Pre-requisite(s): Admission to Engineering graduate program
A weekly forum for presentation by guest speakers, faculty and graduate
students on current research and other topics of interest. Graduate
students must enroll and attend two semesters or more as required by
their advisory committee.

#### EGR 5199 Non-Thesis Degree Completion (1)

To fulfill requirements for non-thesis master's students who need to complete final degree requirements other than coursework during their last semester. This may include such things as a comprehensive examination, oral examination, or foreign language requirement. Students are required to be registered during the semester they graduate.

## EGR 5302 Engineering Analysis (3)

Cross-listed as ELC 5302, ME 5302 See ELC 5302 for course information.

## EGR 5357 Cardiovascular Engineering and Instrumentation (3)

Cross-listed as BME 5357, ELC 5357, ME 5357

See BME 5357 for course information.

## EGR 5390 Research Methods and Project Formulation (3)

Cross-listed as BME 5390, ELC 5390

See ELC 5390 for course information.

# EGR 5396 Special Topics in Engineering (3)

Cross-listed as BME 5396, ELC 5396, ME 5396

Pre-requisite(s): Approval of department chair

Study of special topics in engineering. This course may be repeated for a total of four times with different topics.

#### EGR 5397 Special Projects in Engineering (3)

Cross-listed as BME 5397, ELC 5397, ME 5397

Pre-requisite(s): Consent of department chair

Graduate level topics and/or special project activities in engineering.

## EGR 5V98 Master's Project (1-6)

Pre-requisite(s): Approval of student's master's project advisor Students completing a master's program with a project must complete three or six hours of this course, as determined by the student's individual plan of study.

# **English (ENG)**

## ENG 5199 Non-Thesis Degree Completion (1)

To fulfill requirements for non-thesis master's students who need to complete final degree requirements other than coursework during their last semester. This may include such things as a comprehensive examination, oral examination, or foreign language requirement. Students are required to be registered during the semester they graduate.

# ENG 5301 Old English Language (3)

Pre-requisite(s): Graduate standing or permission of the instructor Introduction to the Old English language through intensive study of Old English grammar and reading of Old English texts. Required for doctoral candidates.

# ENG 5302 Old English Literature (3)

Pre-requisite(s): Graduate standing and at least one course in Old English language (ENG 5301 or equivalent) or permission of the professor Continuation of ENG 5301. Introduction to a wide range of Old English literary texts and the textual and critical discussion surrounding them. May be repeated one time for credit provided topic is different.

# ENG 5303 Studies in Linguistics (3)

Tools and methods for the analysis of language. Subject matter may include phonology, morphology, syntax, semantics, pragmatics and discourse, language in society, dialect and variation, or stylistics. Topic varies according to demand. May be repeated one time for credit provided topic is different.

## ENG 5304 Bibliography and Research Methods (3)

Cross-listed as AMS 5304

Practical introduction to the nature of printing and transmission of written material; a guide to the use of the libraries for graduate-level research; approaches to purposes for graduate studies. May be repeated one time for credit provided topic is different.

## ENG 5306 Literary Criticism: Seminar (3)

Cross-listed as AMS 5306

Issues in critical theory from Plato to the present with particular attention given to current practice and trends in literary analysis. May be repeated one time for credit provided topic is different.

#### ENG 5308 Independent Study in Literature (3)

Cross-listed as AMS 5308

Research or reading project undertaken by an individual student working under the direction of a professor. Project to concern literary topics beyond what is included in the defined seminars. Prospectus to be approved by the director of graduate studies in English. May be repeated one time for credit provided topic is different.

# ENG 5309 Seminar on Curriculum and Pedagogy in English (3)

Seminar designed for M.A. and Ph.D. students who intend to teach in higher education or secondary school as a career. While most graduate courses in the program focus directly on the contents of literary knowledge in the form of authors, genres, periods, styles, and so on, this course focuses on curriculum and pedagogy issues. May be repeated one time for credit provided topic is different. Maximum six semester hours.

# ENG 5310 Rhetoric and Composition: Seminar (3)

Issues in rhetoric from antiquity to the present, focusing on historical development and theoretical problems; contemporary studies in the production of texts and the teaching of writing. May be repeated one time for credit provided topic is different.

## ENG 5312 Middle English Literature: Seminar (3)

Study by seminar method of an aspect of Middle English literature: Chaucer, the alliterative revival, medieval drama, and romance. May be repeated one time for credit provided topic is different.

## ENG 5314 Creative Writing (3)

Workshop in creative writing and designed for thesis track and non-thesis track students actively engaged in creative writing. Course content varies according to instructor preference and expertise. May be repeated one time for credit provided topic is different. Maximum six semester hours.

# ENG 5324 Sixteenth-Century English Literature: Seminar (3)

Poetry, drama, and/or prose of a single author, or of a movement, or of a topic integral to sixteenth-century English literature. May be repeated one time for credit provided topic is different.

## ENG 5330 Seventeenth-Century English Literature: Seminar (3)

Selected works of Donne and other Metaphysical poets, Jonson and his followers, Milton, Bacon, Browne, Burton, Bunyan, and others to the Restoration Period. May be repeated one time for credit provided topic is different.

# ENG 5340 Restoration and Eighteenth-Century English Literature: Seminar (3)

Major writers, literary background, and cultural aspects of the Restoration and eighteenth century. Major emphasis varies with each offering. May be repeated one time for credit provided topic is different.

## ENG 5350 Early English Romantic Literature: Seminar (3)

One or more of the poets and essayists of the Early English Romantic period. May be repeated one time for credit provided topic is different.

## ENG 5352 Later English Romantic Literature: Seminar (3)

One or more of the poets and essayists of the Later English Romantic period. May be repeated one time for credit provided topic is different.

# ENG 5361 Victorian Poetry: Seminar (3)

Poetry of a single author or a movement or topic embracing several writers of nineteenth-century England. May be repeated once for credit provided topic is different.

#### ENG 5362 Victorian Prose: Seminar (3)

Selected works of fiction and/or non-fiction from the Victorian period. Course may emphasize a single author or a movement or topic embracing several writers of nineteenth-century England. May be repeated one time for credit provided topic is different.

# ENG 5364 Browning: Seminar (3)

Several key poems with an examination of the evolution of interpretation of these poems. Major focus on The Ring and the Book: its sources, structure, autobiographical content, and interpretation. Students are advised to complete ENG 4364 before registering for ENG 5364. May be repeated one time for credit provided topic is different.

## ENG 5371 Modern British Literature: Seminar (3)

Poetry, fiction, and/or drama of a single author or a movement embracing several British authors writing between 1900 and 1940. May be repeated once for credit provided topic is different.

# ENG 5372 Contemporary British Literature: Seminar (3)

Poetry, fiction, and/or drama of a single author or a movement embracing several British authors writing after 1940. May be repeated once for credit provided topic is different.

## ENG 5374 Studies in Literature (3)

American, British, or World literature as it crosses national boundaries or treats themes or movements that do so. Topic announced for each session. May be repeated one time for credit provided topic is different. Maximum six semester hours.

## ENG 5376 Religion and Literature Seminar (3)

Pre-requisite(s): Graduate standing in the doctoral Religion and Literature concentration or consent of the instructor

Designed to clarify the plurality of ways in which the integrative study of religion and literature may be engaged. Among the theoretical approaches to be examined, these are representative: humanist, feminist, atheist, Jewish, and Christian. The course will include at least one major theological aesthetician and two or three major literary texts that are susceptible of multiple religious readings. May be repeated one time for credit provided the topic is different.

# ENG 5377 English Religious Authors: Seminar (3)

Imaginative literature with religious concerns broadly defined, of a single author or complementary authors, writing in English. May be repeated once for credit provided topic is different.

# ENG 5391 Early American Literature (3)

Cross-listed as AMS 5391

Poetry or prose of a single author or of a movement or topic embracing several writers of eighteenth-century America. May be repeated one time for credit provided topic is different.

# ENG 5393 Nineteenth Century American Literature (3)

Cross-listed as AMS 5393, ENG 5390

Poetry or prose of a single author or of a movement or topic embracing several writers of nineteenth-century America. May be repeated one time for credit provided topic is different.

#### ENG 5394 Modern American Literature (3)

Cross-listed as AMS 5394, ENG 5392

Poetry, fiction, or drama of a single author or a movement embracing several writers from 1900-1940. May be repeated one time for credit provided topic is different.

## ENG 5395 Contemporary American Literature (3)

Cross-listed as AMS 5389

Poetry, fiction, or drama of a single author or a movement embracing several writers from 1940 to the present. May be repeated one time for credit provided topic is different.

## ENG 5396 American Studies: Seminar (3)

Cross-listed as AMS 5396

American studies, treating such subjects as literature, history, philosophy, psychology, theology, and education. The course focuses on examining texts as cultural documents. May be repeated one time for credit provided topic is different.

## ENG 5V99 Thesis (1-6)

Supervised research for the master's thesis. 1-6 semester hours; maximum ten semester hours.

# ENG 6374 Advanced Studies in Literature (3)

Pre-requisite(s): Twenty-one semester hours of English graduate courses

Specialized topics not ordinarily included in regularly scheduled graduate seminars, e.g., the Pre-Raphaelites, American Puritanism, Derridean influences. Topic announced for each semester or session.

## ENG 6V10 Prospectus Research (1-3)

Pre-requisite(s): Completion of required course work Supervised research for developing and writing a Dissertation Prospectus Proposal that will be subject to review and approval by the Supervisory Committee.

# ENG 6V99 Dissertation (1-12)

Supervised research for the doctoral dissertation. One to twelve semester hours; maximum seventeen semester hours.

# **Entrepreneurship (ENT)**

# ENT 5322 Accelerated Ventures Leadership (3)

Successful entrepreneurs must effectively manage scarce resources in an increasingly complex and global world. This course provides students with a wide range of financial skills to manage their resources more effectively. Specific issues critical to emerging businesses such as financial forecasting, effective financial management, sources of financing, bootstrapping, and exit planning are examined.

# ENT 5329 Entrepreneurial Finance (3)

Successful entrepreneurs must effectively manage scarce resources in an increasingly complex and global world. This course provides students with a wide range of financial skills to manage their resources effectively. Specific issues critical to emerging businesses such as ratio and free cash flow analysis, firm valuation, financial modeling, and sources of financing are examined.

# ENT 5341 Technology Entrepreneurship (3)

Technology Entrepreneurship examines the entire technology commercialization process, from concept to market. It is intended to prepare students in business, engineering, and the sciences to understand and participate effectively in the processes required for successful introduction of new technology products in the marketplace.

# ENT 5342 Corporate Entrepreneurship: Initiating and Sustaining Innovation (3)

Pre-requisite(s): This course is open to all Juniors/Seniors/Grads, all majors Exploration of the nature of innovation – its drivers, patterns, and impacts on society and organizations of all sizes and missions Use of tools and processes in a larger organizational context where selecting the best innovation target is critical.

## ENT 5354 Business Research in Latin America (3)

Pre-requisite(s): Instructor approval

Offered only as part of the Baylor in the Caribbean study abroad program, this course involves the development and exploration of business-related research questions as they apply to Latin America. Students combine insights gained from in-country experiences with research from secondary sources for their proposed projects.

## ENT 5363 Seminar in Mergers and Acquisitions (3)

Cross-listed as FIN 5363

See FIN 5363 for course information.

# ENT 5V98 Special Studies in Entrepreneurship (1-6)

Pre-requisite(s): Consent of instructor

Student may register for a maximum credit of six semester hours.

# ENT 6310 Seminar in Strategic Management (3)

This course involves a critical review of theory and research in the field of strategic management. The scope of the course is comprehensive, encompassing the following domains: strategic content, strategic processes, top executives, and corporate governance. Particular emphasis is placed on empirical study of strategic issues.

## ENT 6320 Seminar in Entrepreneurship (3)

This course offers a systematic overview of the research literature on entrepreneurship and its applications. The course takes an interdisciplinary approach, building on economics, management, sociology, psychology, history, and other academic disciplines.

# ENT 6330 Theoretical Perspectives in Strategy and Entrepreneurship (3)

This course exposes doctoral candidates to advanced theoretical perspectives, models, approaches, and critiques in the fields of business strategy and entrepreneurship. The course takes an interdisciplinary perspective, building on core insights from economics, sociology, psychology, political science, and other fields to develop an integrated framework for analyzing advanced topics in entrepreneurship, innovation, management, and organization.

## ENT 6340 Seminar in Research Methods (3)

This seminar prepares doctoral candidates to conduct research in the organizational and behavioral sciences. Special attention is paid to the topics of construct development and validation and the identification of the necessary conditions for establishing causal relationships. The major focus of the seminar is on methodological issues, as opposed to analytical issues.

# ENT 6350 Seminar in Organization Theory (3)

This interdisciplinary seminar introduces the major theoretical approaches and debates in organizational theory, drawing primarily on sociology and secondarily on economics and psychology, to explain how organizations form, survive and grow, interact, manage resources, and deal with internal and external issues.

## ENT 6V00 Dissertation Proposal and Prospectus (1-3)

Pre-requisite(s): Departmental approval required
Research for doctoral students studying for preliminary examinations,
preparing their topic proposals or writing their prospectuses in
anticipation of candidacy. The course may be repeated. The course
provides students full-time status.

## ENT 6V98 Entrepreneurship Research Practicum (1-6)

Pre-requisite(s): Entrepreneurship PhD students only Research course for PhD students in Entrepreneurship. This course is only for doctoral students who have not yet been admitted to candidacy. Students are required to coordinate with their PhD advisors and participate in activities such as literature reviews, paper writing, data collection, oral presentations, seminar participation, and professional activities.

# ENT 6V99 Dissertation (1-9)

Pre-requisite(s): Departmental Approval required Supervised research for the doctoral dissertation. A total of at least nine semester hours is required for the completion of the dissertation. Students register for dissertation hours during dissertation research and receive credit for them when the dissertation is approved.

# **Environmental Science (ENV)**

## ENV 5102 Current Advances in Environmental Science (1)

This seminar course includes applications of scientific inquiry to environmental science and development of policies that influence the quality of the environment. Graduate students attend seminars and engage the speaker on a weekly basis.

## ENV 5155 Advanced In-Situ Instrumentation Techniques (1)

Cross-listed as PHY 5155

See PHY 5155 for course information.

## ENV 5188 Advanced Laboratory Methods in Life Sciences (1)

Co-requisite(s): ENV 5288

Advanced Laboratory Methods in Life Sciences is a course for the advanced life sciences student. Course content explores biochemical and genetic techniques via classroom lectures and discussion as well as active demonstration/participation in the laboratory. Students learn principles and techniques used to evaluate a variety of endpoints across several disciplines.

# ENV 5199 Non-Thesis Degree Completion (1)

To fulfill requirements for non-thesis master's students who need to complete final degree requirements other than coursework during their last semester. This may include such things as a comprehensive examination, oral examination, or foreign language requirement. Students are required to be registered during the semester they graduate.

# ENV 5288 Concepts for Advanced Laboratory Methods in Life Sciences (2)

Co-requisite(s): ENV 5188

Concepts for Advanced Laboratory Methods in Life Sciences is a course for the advanced life sciences student. It explores laboratory methods via classroom lectures and discussion as well as active demonstration/participation in the laboratory. Students learn principles and techniques used to evaluate a variety of endpoints across several disciplines.

# ENV 5300 Integrative Seminar in Environmental Studies (3)

An in-depth interdisciplinary examination of environmental practices in six areas: the ecosphere, human ecosystems, principles and practices in areas such as the ecosphere, human ecosystems, natural resources and pollution, environment and society, methodology, and emerging themes.

# ENV 5301 Global Health and Environmental Aspects of Disater Risk Reduction (3)

Pre-requisite(s): Graduate standing or permission of instructor This course studies the global health and environmental concepts of disaster response and risk reduction. Lectures and discussions explore the practical aspects of recent disasters, disease outbreaks, and environmental incidents and the methods, strategies, and tools that could be used to mitigate future disasters.

## ENV 5302 Foundations of Environmental Health Science (3)

Cross-listed as HED 5302, PUBH 5302

Overview of current topics in environmental health, including environmental toxicology and disease, food security and safety, risk assessment, air and water quality, waste management, emerging contaminants and diseases, public health concepts of emergency preparedness, environmental regulation, and mitigation of environmental risks.

#### ENV 5303 Environmental Chemical Analysis (3)

Pre-requisite(s): ENV 3387 or CHE 3331; or consent of instructor Analytic chemistry techniques used in environmental science including sampling, wet chemistry, chromatography, and spectroscopic methods.

## ENV 5310 Agricultural Ecology (3)

Ecological basis for food production in both temperate and tropical countries with emphasis on understanding the nature of the vulnerability of agriculture to environmental disturbance and on possible mechanisms to improve the stability and sustained productivity of improve the stability and sustained productivity of agricultural systems.

# ENV 5315 Research Design and Methods (3)

Pre-requisite(s): Senior or graduate standing; or consent of instructor Research design and methods. Students produce a comprehensive research proposal in their major field(s) of study and submit for funding to appropriate agency or foundation.

# ENV 5321 Energy Economics (3)

Cross-listed as ECO 5321

See ECO 5321 for course information.

## ENV 5323 Research Design and Research Methods (3)

Cross-listed as PSC 5323

See PSC 5323 for course information.

# ENV 5325 Advanced Methods for Human Health Risk Assessment and Analysis (3)

Pre-requisite(s): Successful completion of ENV 4325, graduate standing, or approval by the instructor

This course introduces students to advanced concepts, data sources, and methodologies used in the field of human health risk assessment and provides them with an understanding of current issues in environmental sciences. Students conduct a quantitative risk assessment, which is demonstrated in the final project that includes a risk management proposal with uncertainty/sensitivity analysis.

## ENV 5330 Conservation Biology (3)

Cross-listed as BIO 5330

See BIO 5330 for course information.

#### ENV 5342 Ecological Risk Assessment (3)

Pre-requisite(s): Graduate standing or consent of instructor A thorough treatment of assessment procedures for quantifying hazardous effects of chemicals on the environment. Topics will include but are not limited to components of risk assessment paradigm, ecological risk assessment for contaminated sites, the precautionary principle, and other contemporary risk assessment issues.

## ENV 5350 The Environment and Third World Development (3)

This course introduces students to the field of environmental issues and Third World development with emphasis on sustainable development and ensured environmental security.

# ENV 5360 Biological Invasions: Ecology and Management (3)

Cross-listed as BIO 5360

See BIO 5360 for course information.

## ENV 5368 Integrated Energy Resource Systems (3)

Cross-listed as AVS 5368

A seminar approach which examines various examples of integrated energy systems combining different renewable and conventional resources.

## ENV 5370 Advanced Environmental Toxicology and Chemistry (3)

Pre-requisite(s): Two semesters each of university-level chemistry and biology or consent of instructor

Advanced principles of environmental toxicology, environmental fate of pollutants, and risk assessment. The course will focus on contemporary topics and methodology.

# ENV 5373 Advanced Environmental Biotechnology (3)

Pre-requisite(s): Two semesters each of university-level chemistry and biology; or consent of instructor

Special applications of biotechnology in the areas of degradation and remediation of environmental contaminants; environmental implications of genetic engineering.

# ENV 5376 Advanced Urban and Regional Comprehensive Environmental Planning (3)

Seminar which examines the application of the principles and practices of comprehensive planning at the urban and regional levels emphasizing the implications of the natural environmental characteristics of an area while addressing the social, economic, and physical environmental needs of a community.

# ENV 5377 Landscape Ecology (3)

Cross-listed as BIO 5377

See BIO 5377 for course information.

# ENV 5379 Ecosystem Management (3)

Pre-requisite(s): Graduate standing or permission of instructor A seminar in the application of ecological principles to the management of terrestrial, freshwater and marine communities and ecosystems. An overview for students from all environmental specialties with an emphasis on case histories.

## ENV 5387 Advanced Environmental Chemistry (3)

Pre-requisite(s): Four semesters of university-level chemistry; or consent of instructor

Sources and implications of chemical pollution, cost/benefit analyses, chemical implications of alternative energy sources, waste minimization, recycling, and decontamination considerations.

# ENV 5391 Measurement Methods and Data Analysis for Air Pollution Research (3)

Cross-listed as AVS 5391

Pre-requisite(s): CHE 1301 and 1302; or AVS 4320 and 4330; or consent of instructor

Measurement methods, such as spectroscopy, and statistical analysis used to characterize the chemical and physical properties of air to determine pollution levels and air quality.

# ENV 5393 Atmospheric Chemistry and Physics (3)

Cross-listed as AVS 5393

Pre-requisite(s): CHE 1301 and 1302; or AVS 4320 and 4330; or consent of instructor

Chemistry and physics of the troposphere and stratosphere, including photochemistry, chemical kenetics, aerosol formation, micrometerology, atmospheric modeling, and other advanced topics.

# ENV 5404 Wetland Ecology and Management (4)

Cross-listed as BIO 5404

See BIO 5404 for course information.

#### ENV 5405 Stream Ecology (4)

Cross-listed as BIO 5405

See BIO 5405 for course information.

## ENV 5413 Advanced Ecological Data Analysis (4)

Cross-listed as BIO 5413

See BIO 5413 for course information.

## ENV 5V52 Special Topics in Environmental Analysis (1-12)

The course may be repeated depending on the combination of semester hours up to a maximum of twelve semester hours.

#### ENV 5V90 Graduate Environmental Practicum (1-3)

Pre-requisite(s): Consent of instructor

A practicum supervised by an environmental professional. May be salaried or volunteer. Requires one hundred fifty to one hundred sixty hours of work per semester hour. Students are required to complete three hours of ENV 5V90 for their degree requirements.

#### ENV 5V98 Graduate Research (1-15)

Pre-requisite(s): Graduate standing

Required of all graduate students. For research credit associated with graduate research. Credit will be given for the amount of work done. May be repeated for credit through 45 hours.

# ENV 5V99 Research for Master's Thesis (1-6)

The course is required to be repeated depending on the combination of semester hours up to a minimum of six semester hours.

# ENV 6V98 Dissertation Proposal and Prospectus Research (1-3)

Pre-requisite(s): Graduate standing

For research credit, once coursework is completed, and prior to admission to candidacy for an advanced degree. May be repeated for credit up to 6 hours.

## ENV 6V99 Dissertation (1-9)

Research, data analysis, writing, and oral defense of an approved doctoral dissertation on a research topic in Environmental Science. Student must have been Admitted to Candidacy before registering for dissertation hours.

# **Family and Consumer Sciences (FCS)**

## FCS 5365 Cancer Biology (3)

See BIO 5409 for course description.

## FCS 5V99 Thesis (1-6)

Pre-requisite(s): Consent of instructor

Supervised research for, and writing and defense of the thesis.

# Film Digital Media (FDM)

# FDM 5199 Non-Thesis Degree Completion (1)

Course designated to fulfill requirements for non-thesis master's students when all other credits have been previously completed.

# FDM 5303 Internship in Film & Digital Media (3)

Pre-requisite(s): Consent of instructor

Provides graduate students the opportunity for application of film & digital media skills and knowledge carried out under the supervision of a professional employer in a media-related organization.

## FDM 5335 Media Psychology (3)

Study of the psychological effects of media on the thoughts, feelings, and actions of viewers and users. We consider the negative and positive impact of various types of media. Features a special focus on media use and well-being, as well as coverage of the usage and effects of interactive media.

#### FDM 5336 Seminar in Film and Electronic Media (3)

Selected topics in the film or electronic media. Topics may be chosen from the following: mass communication theory, film or broadcasting history, media effects, media regulation, new communication technologies, and political communication. May be repeated once with a different topic.

## FDM 5346 Seminar in Corporate Telecommunication (3)

Selected topics in corporate telecommunication. Topics may be chosen from the following: telecommunication management, training and development, diffusion of innovations, and impact analysis. May be repeated once with a different topic.

## FDM 5356 Seminar in Media Aesthetics and Criticism (3)

Selected topics in media aesthetic criticism. Topics may be chosen from the following: film theory, semiotic analysis, visual literacy, and approaches to film criticism (i.e., cinema). May be repeated once with a different topic.

### FDM 5366 Graduate Production Workshop (3)

Pre-requisite(s): Consent of instructor

Advanced production-oriented workshop with emphasis on enabling students to practice their craft and work towards completion of festival-worthy productions. Particular emphasis on preproduction, research and concept development, production, and post-production. May be repeated once in a different semester for a total of six semester hours.

# FDM 5376 Contemporary Film Theory (3)

Major issues and concepts that have been taken up by film theorists and critics in the years following World War II, with particular concentration on cultural studies, ideological criticism, race, gender, politics, spectatorship, and new digital technologies.

# FDM 5377 Storytelling in the 21st Century (3)

Exploration of current and emergent forms of storytelling in media, including analysis of the current state of motion picture and television industries, virtual and augmented reality, interactive media, transmedia, and streaming media distribution, with an emphasis on how changes in media consumption practices are changing storytelling forms.

# FDM 5V35 Problems in Film and Digital Media (1-6)

Designed to give individual students opportunities for additional work in their area of concentration in film and digital media. May be repeated in a different semester for up to a total of six semester hours.

# FDM 5V90 Professional Paper or Project in Film & Digital Media (1-3)

Satisfies the non-thesis option for the master of communication studies. Under the direction of a supervising professor, a student will select a problem or topic in film and digital media and will write a substantial paper or produce a substantial project for submission to the faculty. Maximum three credit hours.

#### FDM 5V99 Thesis (1-6)

Research, data analysis, writing, and oral defense of an approved master's thesis. At least six hours of FDM 5V99 are required.

# **Finance (FIN)**

# FIN 5161 Corporate Finance-Planning (1)

Pre-requisite(s): Admission to MBA program

An introductory financial perspective to (1) why a publicly-traded firm exists and (2) what is the optimal approach for managing a publicly-traded firm. Comparisons are made between how privately-held firms and public sector institutions are managed.

## FIN 5162 Corporate Finance-Implementation (1)

Pre-requisite(s): FIN 5161

This one-hour module builds on the principles of optimal project selection introduced in FIN 5161. Usage of the Capital Asset Pricing Model for determining project rates is demonstrated. Both internal financing decisions (dividend decisions) and external financing decisions (debt vs. equity) are introduced.

# FIN 5163 Financial Control (1)

Pre-requisite(s): FIN 5162

The concluding module on strategic Corporate Financial Management, exploring optimal strategies for financing the firm's projects. The theoretical linkage between the modern option pricing model, efficient capital markets, agency theory, and the theory of the firm is developed.

# FIN 5186 Practicum in Small-Cap Investing II (1)

Pre-requisite(s): Minimum grade of B- in FIN 5285

This course gives students valuable hands-on experience researching, analyzing, and managing a portfolio of small-cap stocks. The level of security research and valuation analysis mirrors that experienced working in industry. Students are required to produce stock research reports and present their recommendations to the other analysts managing the investment fund.

## FIN 5203 Business Foundations - Finance (2)

Co-requisite(s): BL 5104

This course is required for MBA and MSIS students who do not have an undergraduate degree in business from an AACSB-accredited institution. It provides students with a foundation in finance which is expected of all business graduate students.

# FIN 5220 Private Equity Investing (2)

Pre-requisite(s): Admission to the Executive MBA program
The central focus of the course is to gain an understanding of the
financing of entrepreneurial ventures, including ways investors identify
and commit the necessary resources to create and finance ventures.
To accomplish these objectives the course addresses specific skills,
concepts, and know-how relevant for attracting private equity financing to
an entrepreneurial venture.

## FIN 5260 Financial Decision Making (2)

Pre-requisite(s): Admission to the Executive MBA program A study of how firms create value for stockholders through long-term financial decisions, principally asset acquisition/divestiture decisions and debt/equity funding decisions. Specific topics include economic profit and cash flow, the time value of money, risk and return, options, agency, efficient markets, capital budgeting decision criteria, capital structure theory, and dividend policy theory.

#### FIN 5263 Managing for Value Creation (2)

Pre-requisite(s): Admission to Executive MBA program In this course we construct simulation models for use in evaluating uncertain project outcomes; utilize the method of comparables and discounted cash flow to estimate the intrinsic worth of a firm; evaluate the real option components of risky investment projects; evaluate firm performance in terms of shareholder value created; analyze the shareholder wealth consequences of corporate restructuring activities including mergers, leveraged buyouts, leveraged recapitalizations and initial public offerings; and discuss the ethical implications of corporate restructuring activities.

## FIN 5285 Practicum in Small-Cap Investing I (2)

Pre-requisite(s): A select number of students will be admitted into the class through an application process

FIN 5365 or equivalent coursework/experience is expected before applying. This course gives students valuable hands-on experience researching, analyzing, and managing a portfolio of small capitalization (small-cap) stocks by managing the fund. The level of security research and valuation analysis mirrors the experience working in the industry.

## FIN 5329 Entrepreneurial Finance (3)

Examines the intriguing process of financing the pursuit of opportunity and growth without regard to assets controlled currently. The major focus is on start-up or acquisition and the initial stages of growth. There is an emphasis on high-growth firms, and the central objective is to gain an understanding of how entrepreneurs obtain and use financial resources. The course also examines how value is created.

## FIN 5330 Seminar in Real Estate Valuation (3)

Valuation concepts and techniques necessary to appraise real estate. Topics include theoretical valuation models, regression-based models, the cost approach, market feasibility studies, and urban-growth models. Case studies require application of statistical techniques.

## FIN 5331 Seminar in International Finance (3)

A study of international financial management. Principal topics include issues in international business and finance; basic concepts, types, and issues of international financial markets; the mechanics of foreign exchange (FX) dealings and the effect of exchange rate fluctuations on corporate operations; currency derivatives and the implementation of FX risk hedging techniques; and short- and long-term financing decisions and risk management. With a focus on the enhancement of analytical skills based on the tools and theory of international finance, this course will promote critical thinking skills of the student.

## FIN 5332 Seminar in Employee Benefit Planning (3)

The rationale, design, implementation, and evaluation of employee benefit plans. Emphasis on employer-sponsored plans to provide benefits for death, medical and dental expenses, disability, and retirement; insurance and self-insurance funding arrangements; the taxation of employee benefits; legal requirements; integration with public programs and individually purchased insurance; labor union influences; and contemporary problems and issues. Consideration of new types of employee benefits, as well as such traditional benefits as paid vacations, sick leave, educational assistance, and other aspects of total compensation. Case studies are used to illustrate the process of balancing employer objectives, employee needs and desires and cost considerations.

# FIN 5333 Foreign Exchange Markets and International Monetary Institutions (3)

Cross-listed as ECO 5333 See ECO 5333 for course information.

#### FIN 5335 Seminar in Integrated Business Risk Management (3)

A study of business risk management, recognizing the relationship between risk management and the overall goals of the firm, through an integrated approach that combines the concepts and tools from both the insurance and the financial risk management disciplines. Emphasis is placed on the identification, evaluation, and management of corporate risks, defined broadly to include both operating and financial risks. Specific topics include traditional hedging strategies as well as techniques such as leveraging, post-loss financing, contingent financing, and diversification.

## FIN 5360 Seminar in Corporate Finance (3)

Cross-listed as ECO 5360

Pre-requisite(s): Admission to the MBA, MACC, or MTAX program, or consent of instructor

A study of how firms create value for stockholders through long-term financial decisions, principally asset acquisition/divestiture decisions and debt/equity funding decisions. Specific topics include economic profit and cash flow, the time value of money, risk and return, options, agency costs, efficient markets, capital budgeting decision criteria, capital structure theory, and dividend policy theory.

# FIN 5362 Seminar in Corporate Short-term Financial Management (3) Cross-listed as ECO 5362

This course covers the short-term financial management functions and responsibilities typical of a Corporate Treasurer. Areas covered include cash and liquidity positioning, credit extension and collections, payables management, bank relations, short-term investing and borrowing, and management of interest rate and foreign exchange risks, all with a focus on current business practices. Lectures and readings are reinforced with individual and group projects and cases. The class will also provide partial preparation for students wishing to take the Certified Treasury Professional (CTP) exam.

# FIN 5363 Seminar in Mergers and Acquisitions (3)

Cross-listed as ENT 5363

The merger and acquisition phenomenon, both domestic and international. The course focuses on the economic rationale for a merger from the perspective of the various "stakeholders," particularly from the view of shareholders. Significant attention is given to valuing a merger prospect as well as to determining how the "deal" is structured financially. Lectures are supplemented with group projects and cases.

# FIN 5365 Investment Management (3)

Cross-listed as ECO 5365

Theory and practice of portfolio investment with emphasis on stocks, bonds, and portfolio management. Major topics include portfolio theory, performance evaluation, market efficiency, equity and bond management strategies, the use of derivative securities in portfolio management, and mutual funds. Current readings and cases supplement the text.

# FIN 5367 Seminar in Financial Planning (3)

Personal financial planning, incorporating material from investments, insurance, retirement benefits, taxation, and estate planning into a coordinated financial planning process. Case analysis is used to demonstrate the complexities involved in solving financial planning situations. Formulation of financial plans and counseling techniques are also examined.

# FIN 5368 Seminar in Financial Markets (3)

Cross-listed as ECO 5368

U.S. money and capital markets, including international money markets, financial institutions, fixed-income analysis and management, bank funds management, options, futures, options on futures, investment banking, and mergers and acquisitions. Special emphasis is given to the management of interest rate risk in financial institutions.

## FIN 5370 Management of Financial Institutions (3)

Cross-listed as ECO 5370

A study of the major issues involved in managing financial institutions. Principal topics include the role of financial institutions as intermediaries between providers and users of investment funds; financial performance of such institutions; loan management, commercial credit analysis, and loan pricing; liquidity and reserve management; investment management; capital structure, liability management, and the cost of funds; and asset/liability management. The regulatory environment for financial institutions is also examined. Lectures and readings are supplemented with group projects and presentations.

## FIN 5380 Healthcare Finance (3)

Cross-listed as HPA 5380

See HPA 5380 for course information.

## FIN 5381 Practicum in Portfolio Management (3)

Pre-requisite(s): FIN 5365 or equivalent, and consent of instructor This practicum gives students valuable hands-on experience in securities research, valuation of risky assets, and asset allocation by managing the Philip M. Dorr and Alumni Endowed Investment Fund. Through readings and student-prepared research reports students develop skills in evaluating economic, industry, and firm data; integrating such data into securities analysis; and communicating their research results to others.

## FIN 5460 Fundamentals of Applied Business Finance (4)

An introductory course in the theory and principles of finance, which include planning and controlling functions (time value of money, pro forma budgeting, ratio analysis), balance sheet management (working capital budgeting, debt & equity financing), and cost management (cost classification allocation, break even & variance analysis), among other topics. This is an applied course that focuses less on the theoretical (textbook) concepts and more on practical tools that will be useful in the student's professional endeavors.

## FIN 5V97 Special Studies in Real Estate (1-6)

This course may be taken for one to six semester hours of credit.

## FIN 5V98 Special Studies in Finance (1-6)

Pre-requisite(s): Consent of instructor

This course may be taken for one to six semester hours of credit.

# FIN 5V99 Thesis (1-6)

Pre-requisite(s): Consent of instructor

# Finance (MFIN)

## MFIN 5340 Investments (3)

Through a study of portfolio theory and asset-pricing models, students acquire the analytical skills necessary to conduct valuations of equities, fixed income securities, and alternative investments. This course applies theoretical concepts to investment analysis and portfolio management.

# French (FRE)

#### FRE 5370 French for Graduate Students I (3)

Reading of intermediate-level French texts. No previous language experience required. Limited to graduate students or to undergraduates by petition. Does not count toward foreign language requirement for undergraduate students.

## FRE 5371 French for Graduate Students II (3)

Pre-requisite(s): FRE 5370 or consent of instructor

Continuation of FRE 5370. Reading of intermediate-level French texts. No previous language experience required. Limited to graduate students or to undergraduates by petition. Does not count toward foreign language requirement for undergraduate students.

# **Geology (GEO)**

# GEO 5050 Geology Technical Sessions (0)

A forum for. (a) outside speakers, (b) presentation of student research, (c) discussion of current geologic and geophysical literature, and (d) guidance in thesis preparation. May be repeated as required by the department. M.S. and M.A. students must attend at least four semesters. Ph.D. candidates must attend while in residence.

## GEO 5110 History of Geology (1)

Pre-requisite(s): Consent of the department

Evolution of geological thought. Required, or its equivalent, of all M.S., M.A., and Ph.D. candidates.

# GEO 5222 Grant Writing for Physical and Biological Sciences (2)

This 2-credit course for graduate students demystifies the process of grant writing and provides a systematic approach to preparing proposals for Federal grantmaking agencies and foundations. Eligible students are mentored through the preparation and submission of Graduate Research Fellowship Applications.

## GEO 5252 Seismic Stratigraphy (2)

Interpretation of seismic data for the purpose of inferring stratigraphic changes and depositional environments.

## GEO 5308 Advanced Studies in Earth Science (3)

Pre-requisite(s): Consent of instructor Special topics in earth science May be repeated once with change of content.

#### GEO 5314 Advanced Topics in Paleoclimatology (3)

Special topics in paleoclimatology, including discussions of climate change events in earth history and methods for reconstructing ancient climates including paleoclimate proxies and general circulation models. May be repeated once with change of topic.

## GEO 5315 Clastic/Carbonate Depositional Systems (3)

Pre-requisite(s): GEO 4328 and 3342

Criteria for the recognition of clastic and carbonate depositional environments.

# GEO 5318 Advanced Studies in Geophysics (3)

Pre-requisite(s): Consent of instructor

Special topics in geophysics. May be repeated with change of content.

# GEO 5320 Geochemistry (3)

Pre-requisite(s): GEO 3342, 3445 and CHE 1302

Advanced standing in geology. Application of isotope geochemistry, thermodynamics, and phase equilibrium studies to the solution of geological problems.

#### GEO 5321 Isotope Geochemistry (3)

Pre-requisite(s): Consent of instructor

Theory and application of stable and radioactive isotopes in geology with particular emphasis on the use of stable isotopes in solving environmental and hydrogeologic problems.

### GEO 5322 Organic Geochemistry (3)

Pre-requisite(s): CHE 1301 and 1101, 1302 and 1102

Investigate the chemical composition of organic matter in soils, sediments, and petroleum source rocks. Interpretation of biomarkers and molecular proxies. The course includes an intensive review of the requisite organic chemistry concepts and nomenclature.

#### GEO 5324 Geomicrobiology II (3)

Pre-requisite(s): Consent of Instructor

Advanced study of microbial physiology as it relates to evolution of the earth system. Study of interactions between microbes and minerals using tools of organic and inorganic geochemistry. Applications to the study of earth's climate system.

# GEO 5325 Advanced Studies in Geochemistry-Petrology (3)

Pre-requisite(s): Consent of instructor

Special topics in geochemistry-petrology. May be repeated with change of content

### GEO 5328 Geodynamics (3)

This course covers the various forces and types of deformation that act on the interior of the Earth and other planets, with applications to tectonic faulting and mantle flow. Topics include continuum mechanics, stress and strain, elasticity, mantle rheology, and heat transfer.

# GEO 5329 Igneous Petrology (3)

Pre-requisite(s): GEO 3427 and graduate standing

Intensive examination of igneous rocks. Format and subject material will vary from year to year, but will include descriptive and genetic aspects of igneous rocks and their relationships to tectonic settings. Laboratory and field trips.

# GEO 5331 Field Geology for Earth Scientists I (3)

Pre-requisite(s): Consent of instructor

Field experience in the American West. Designed with exercises to acquaint graduate earth science majors with the fundamentals of field geology. Offered in the field during summer sessions for three hours of credit.

# GEO 5332 Field Geology for Earth Scientists II (3)

Pre-requisite(s): Consent of instructor

Continuation of GEO 5331. Offered in the field during summer sessions for three hours of credit.

# GEO 5333 Modern/Ancient Depositional Environments I (3)

Pre-requisite(s): Consent of instructor

Field study of depositional systems and facies. Course participants will examine modern depositional environments varying from fluvial, deltaic, beach, and near shore systems to modern barrier and fringing reefs along the Gulf and Atlantic coasts and in the Caribbean. These depositional environments will be used to interpret ancient sedimentary facies examined in the field during the last portion of the course. Offered in the field during summer session for three hours of credit.

# GEO 5334 Modern/Ancient Depositional Environments II (3)

Pre-requisite(s): Consent of instructor

Continuation of GEO 5333. Offered in the field during the summer session for three hours of credit.

# GEO 5335 Principles of Micropaleontology (3)

Pre-requisite(s): GEO 3435

Taxonomy, morphology, evolution, paleoecology, and stratigraphic occurrence of important microfossils. Independent field and laboratory problems may be required.

### GEO 5336 Paleobiology (3)

Paleobiology encompasses the study of biological processes and concepts in deep time at various spatial and temporal scales. Concepts covered in the course aim to examine empirical and modeled data on evolutionary and ecological processes, as well as explore the interplay between biological systems and environmental conditions.

#### GEO 5337 Advanced Studies in Remote Sensing Geomorphology (3)

Pre-requisite(s): Consent of instructor

Special topics in remote sensing and geomorphology. May be repeated with change of content.

# GEO 5338 Advanced Studies in Paleontology (3)

Pre-requisite(s): Consent of instructor

Special topics in paleontology. May be repeated with change of content.

# GEO 5339 Sandstone Petrology (3)

Pre-requisite(s): GEO 4328 and graduate standing

Petrography of clastic sedimentary rocks. Includes mineralogical study, provenance analysis, and diagenetic interpretation. Field trips.

### GEO 5340 Paleopedology (3)

Pre-requisite(s): Undergraduate mineralogy, stratigraphy, and general chemistry; or consent of instructor

Field, microscopic, and geochemical analysis of fossil soils (paleosols) and comparison with modern analog soils; interpretation of changes in paleoweathering processes, paleoclimate, and paleoatmospheric chemistry over 4.6 billion years of earth history based on paleosols.

# GEO 5341 Cordilleran Tectonics (3)

Pre-requisite(s): GEO 3445 and consent of instructor Geologic history of the North American Cordillera from Precambrian to present, based on analysis of stratigraphic, structural, paleomagnetic, and paleobiogeographic constraints.

# GEO 5342 Micromorphology of Soils and Paleosols (3)

Pre-requisite(s): Undergraduate mineralogy, optical mineralogy, or consent of instructor

The description, interpretation, and measurement of components, features, and fabrics in soils and paleosols, at the microscopic level.

# GEO 5343 Advanced Field Sequence Stratigraphy (3)

Concepts of facies analysis and spatial prediction are presented within a sequence stratigraphic context. The course is conducted as a three-week field excursion to various locations within the southwestern USA. The course emphasizes both outcrop and subsurface problem solving, and is supplemented by extensive literature review.

# GEO 5344 Field Structural Geology I (3)

Instruction in advanced and specialized methods of structural analysis applied to a variety of problems in structural geology. Both local and regional structural relationships will be studied. Location of field study areas will be determined by instructor.

# GEO 5345 Advanced Sequence Stratigraphic Concepts (3)

Pre-requisite(s): GEO 3342 or equivalent transfer credit Instruction in the controls on sediment accumulation and distribution through time, and strategies for local and regional cyclostratigraphic correlation and associated stratal classification and interpretation.

# GEO 5347 Advanced Hydrogeology (3)

Pre-requisite(s): GEO 4346 or consent of instructor

Analytical techniques and concepts necessary for hydrogeologic research and problem solving. Areas of emphasis will include field methods, well hydraulics, and computer models of ground water systems. Occasional field trips will be required as part of the laboratory.

# GEO 5348 Applied Ground Water Modeling (3)

Pre-requisite(s): GEO 5347

Lectures on the theory of analytical and numerical models applied to hydrogeological research. Laboratory exercises will involve solving hydrogeological problems, using the models discussed in lecture.

### GEO 5349 Urban Geology (3)

Interrelationships between geological processes and urban development. Case histories and applied field projects will be examined in surrounding urban areas.

### GEO 5350 Geostatistics (3)

Advanced topics in spatial statistics. Knowledge of basic statistics is expected (e.g., calculation of mean, variance, and covariance). Fundamentals of variograms. Methodologies for best linear unbiased estimates with and without drift of the mean value. Major elements and applications of Kriging and coKriging algorithms.

### GEO 5368 Advanced Studies in Sedimentary Geology (3)

Pre-requisite(s): Consent of instructor

Special topics in sedimentary geology. May be repeated once with change of content.

### GEO 5369 Advanced Studies in Petroleum Geology (3)

Pre-requisite(s): Consent of instructor

Special topics in petroleum geology. May be repeated with change of content.

# GEO 5377 Advanced Studies in Structural Geology-Tectonics (3)

Pre-requisite(s): Consent of instructor

Special topics in structural geology-tectonics. May be repeated with change of content.

# GEO 5378 Advanced Studies in Hydrogeology (3)

Pre-requisite(s): Consent of instructor

Special topics in hydrogeology. May be repeated with change of content.

# GEO 5385 Climate Change and Society II (3)

Pre-requisite(s): GEO 4340

Examines humans as a geologic force and how human activity has altered climate, ecosystems, glaciers, sea level, rivers, and deserts. Examines climate and planetary models to understand changes in Earth systems in the past, present, and future.

# GEO 5387 Monsoon Climatology and Paleoclimatology I (3)

Pre-requisite(s): GEO 4340

Insights into the oceanic, atmospheric, and terrestrial controls of global monsoon circulation, and variations in the past 20,000 years and into the future.

# GEO 5388 Advanced Studies in Hydrology-Engineering Geology (3)

Pre-requisite(s): Consent of instructor

Special topics in hydrology-engineering geology. May be repeated with change of content.

### GEO 5389 Earth System Science (3)

Pre-requisite(s): Geology, geography, biology, archaeology, or environmental studies graduate students only; or consent of instructor The emphasis of this course is placed on climate changes and the associated environmental variations of different timescales and their forcing mechanisms (including human impacts). Defining the current climatic dynamics and predicting the future trends, based on the changing patterns of different timescales, are the concluding parts of this course.

### GEO 5398 Advanced Studies in Environmental-Urban Geology (3)

Pre-requisite(s): Consent of instructor

Special topics in environmental-urban geology. May be repeated once with change of content.

### GEO 5457 Gravity, Magnetic, and Electrical Exploration (4)

Theory and applications of gravitational, magnetic, and electrical techniques to subsurface exploration.

# GEO 5458 Seismic Exploration (4)

Seismic refraction and reflection techniques and their application to determining Earth structure.

### GEO 5459 Seismic Data Analysis (4)

Pre-requisite(s): GEO 4455 (Introduction to Seismology) or consent of instructor

Topics chosen from earthquake location, focal mechanism computation, surface wave dispersion measurement, 1D inversion techniques, regional tomographic inversion, receiver functions, ray theory in spherical geometry, seismic attenuation, seismic anisotropy, seismic focusing, reflected phases, stacking, and interpretations of seismic results in light of other geophysical constraints.

# GEO 5465 Petroleum Geology (4)

Pre-requisite(s): GEO 3442 and 3445 Origin, migration, and accumulation of petroleum

Exploration and production methods for hydrocarbon recovery.

# GEO 5656 Application of Geophysics to Environmental Engineering Problems (6)

Pre-requisite(s): Graduate standing

A field course in which seismic, gravity, magnetic, electrical, electromagnetic, well logging and ground penetrating radar techniques are used to solve problems associated with waste disposal, groundwater, and engineering characterizations.

# GEO 5V90 Special Problems in Geology (1-5)

Pre-requisite(s): Staff approval required

Individual course in which students solve a geologic problem and submit a written report. Staff approval required.

# GEO 5V98 Graduate Research (1-9)

Supervised directed research for students who have not yet advanced to candidacy for an advanced degree. A student may repeat this course for credit, for a maximum of 9 total hours.

# GEO 5V99 Thesis (1-6)

Pre-requisite(s): Staff consent required

Research, data analysis, writing, and oral defense of an approved master's thesis. At least six hours of GEO 5V99 are required.

### GEO 6V00 Dissertation Proposal Research (1-3)

Supervised research for designing dissertation project and for developing and writing a Dissertation Proposal that will be subject to review and approval by the Dissertation Committee. All coursework must be completed prior to registering for this course. A student may repeat this course for a total of 3 hours. Registration for this course is sufficient for achieving full-time status.

#### GEO 6V99 Dissertation (1-12)

Pre-requisite(s): Staff consent required

Required of all doctoral candidates. In no case will less than twelve semester hours be accepted for a dissertation. Students may not enroll for dissertation hours until they have been officially accepted into candidacy for the Ph.D. degree. After initial enrollment, students must enroll for at least one semester hour of dissertation every semester (summer semester excluded).

# German (GER)

### GER 5370 German for Graduate Students I (3)

Reading of intermediate-level German texts. No previous language experience required. Limited to graduate students or to undergraduates by petition. Does not count toward foreign language requirement for undergraduate students.

#### GER 5371 German for Graduate Students II (3)

Pre-requisite(s): GER 5370 or consent of instructor

Continuation of GER 5370. Reading of intermediate-level German texts. No previous language experience required. Limited to graduate students or to undergraduates by petition. Does not count toward foreign language requirement for undergraduate students.

# **Gerontology (GRT)**

GRT 5351 Nutrition and Aging (3)

Cross-listed as NUTR 5351

See NUTR 5351 for course information.

# **Global Engagement (GBL)**

# **GBL 5201 Teaching in English for International Teaching Assistants (2)** Teaching in English for International Teaching Assistants focuses on

the classroom presentation and pronunciation skills necessary for ITAs to be successful in an American university classroom. Priority is given to international graduate students who are seeking teaching assistant positions and who have speaking scores lower than 25 on the TOEFL or 7.5 on the IELTS.

# **Greek (GRK)**

# GRK 5301 Greek Poetry (3)

Representative works of ancient Greek poetry. May be taken five times, provided topics change.

# GRK 5302 Greek Prose (3)

Representative works of ancient Greek prose. May be taken five times, provided topics change.

# GRK 5317 Seminar in New Testament Greek (3)

Cross-listed as REL 5317

See REL 5317 for course information.

# GRK 5321 Greek Grammar for Reading Knowledge (3)

Intensive study of Greek inflection and syntax. Helps fulfill graduate language proficiency requirement.

# GRK 5322 Greek Prose for Reading Knowledge (3)

Pre-requisite(s): GRK 5321

Readings from Greek prose authors; review of syntax and inflection. Helps fulfill graduate language proficiency requirement.

# **Health Care Administration (HCA)**

# HCA 5101 Graduate Management Study Development 1 (1)

This is the first in a series of three (1) credit Graduate Management Study (GMS) writing courses for students on the Executive Clinical Leadership track. The goal of this specific course is completion of the GMS proposal.

# HCA 5102 Graduate Management Study Development 2 (1)

This is the second in a series of three (1) credit Graduate Management Study (GMS) writing courses for students on the Executive Clinical Leadership track. The goal of this specific course is completion of the GMS.

# HCA 5103 Graduate Management Study Development 3 (1)

This is the third in a series of three (1) credit Graduate Management Study (GMS) writing courses for students on the Executive Clinical Leadership track. The goal of this specific course is to use the GMS as a basis from which to submit an article to a peer reviewed journal.

#### HCA 5105 Ethics in Health Care (1)

This course begins with discussion of the major critical principles in bioethics and models for ethical decision-making and is followed by topical readings and discussion in the five core competencies is ethics recommended by the National Summit on the Future of Education and Practice in Health Management and Policy.

#### HCA 5106 Fundamentals in Graduate Studies (1)

This course teaches skills and design concepts necessary for employing the abilities and functions of Microsoft Excel programs and processing, understanding and manipulating the basic ability of SPSS to analyze and manipulate data points, using library and electronic resources for analyzing journal articles and basic research tools, and improving upon effective written communication tactics while focusing on proper APA formatting. Students learn through practical exercises with real data allowing them to create, manipulate, and use spreadsheets; work the interface between Excel and SPSS; and work with hands-on research tools and basic writing exercises to improve the basic skills required in graduate studies.

# HCA 5201 Residency Rotation (2)

During this required residency and under the guidance of a qualified preceptor, degree candidates are provided opportunities to study and analyze the functional elements of a hospital. Their managerial skills are developed through varied experiences, the performance of administrative tasks, and direct participation in the problem-solving process. They also perform special studies in functional areas and conduct one graduate management project.

# HCA 5211 Quantitative Analysis III: Decision Making with Statistics and Research (2)

Pre-requisite(s): HCA 5310 In this applied course, students apply the concepts from HCA 5310 and HCA 5312 in a real world environment Decision-making, selection, computation, and interpretation of analytical procedures and methods are emphasized. Given a management problem, students use appropriate secondary data and posit research questions, develop logical hypotheses, and provide analysis and conclusions based on data and theory.

# HCA 5213 Health Policy (2)

Pre-requisite(s): All MHA Core Courses

A comprehensive model of health policy analysis to include its major objectives and methods and its relationship to the field of health services research. An organizing framework is provided that integrates concepts and methods from the fields of epidemiology, economics, ethics, political science and related disciplines. Emphasis is on integrating policymaking with the major system performance objectives of effectiveness, efficiency, and equity. This course includes the impact of health policies on the health of individuals and populations, the political trade-offs and social dimensions of policy making and how future healthcare policy is likely to be affected by the political marketplace and the economy.

# HCA 5218 Finance III: Financial Applications (2)

This capstone course instructs healthcare leaders about their roles and responsibilities in operating and managing clinics and facilities within the financial environment of the healthcare system. The course provides opportunities to learn the business case analysis approach and further develop other decision-making tools and skills, building on sound financial, marketing, and strategic management practices learned in other courses.

### HCA 5301 U.S. Health Care Systems (3)

Conceptual dimensions for health services organizations/systems at the macro and micro level are considered. Various aspects of health delivery systems are examined including clinics and hospitals, as well as managed care systems and other third party payers. Provides a conceptual framework for identifying, analyzing, evaluating and managing factors that influence the design, structure and effective operation of hospitals and other health care organizations. Material for this course considers a historical perspective and is drawn from a variety of disciplines, including economics, sociology, and the behavioral and biological sciences.

### HCA 5306 Current Issues in Healthcare Quality (3)

Pre-requisite(s): All MHA Core Courses

Covers the historical evolution, current concepts, and future trends associated with monitoring and evaluation of health quality. Explores the major components of quality improvement to include patient care assessment, risk management, patient safety/environment of care, medical management, outcomes management, and process improvement.

# HCA 5307 Residency Rotation 2 (3)

Pre-requisite(s): HCA 5201 During this required residency and under the guidance of a qualified preceptor, degree candidates are provided opportunities to study and analyze the functional elements of a hospital Their managerial skills are developed through varied experiences, the performance of administrative tasks, and direct participation in the problem-solving process. Students also perform special studies in functional areas and conduct a graduate management project.

# HCA 5308 Lean Six Sigma (3)

Given the widely used lean six sigma tools in today's business environment, this course provides an understanding of lean processes and introduces students to the DMAIC cycle of process improvement. Classes are often hands-on and participative. Students will earn a green belt certificate of training for this course. They can earn a full green belt certification following successful completion of a project outside the course.

#### HCA 5309 Health Economics (3)

Pre-requisite(s): MECO 5331

This course is a study of the dynamics of our healthcare delivery system from an economics-based perspective. Students learn to apply economic principles to make effective decisions as healthcare practitioners in areas related to medical practice, education, research, and public healthcare policy.

### HCA 5310 Quantitative Analysis I: Statistics & Research Methods (3)

This overview course introduces the student to the use of data science and quantitative analysis in a management environment. Topics include probability, measurement theory, causal inference, experimental design, and critical evaluation of research. While primarily a statistics course, focus is on critical thinking skills in order to derive appropriate inferences from data.

#### HCA 5312 Issues in International Health (3)

Health policies and delivery mechanisms within representative countries. Cross-cultural analytical techniques are reviewed. International health organizations, programs, and other cooperative efforts are discussed. International issues concerning environmental health, health status, and health care activities are studied.

# HCA 5317 Health Management Information Systems (3)

Studies focus on information technology and systems, including historical development, for conceptual understanding of the evolution from reporting accounting data to newer broad-based information support applications in the delivery of health care. Emphasis is placed on the fundamental principles of collecting and analyzing data for the production of information that supports management, operations, planning and decision making. Discussion of case studies, including health care examples, leads to an understanding of appropriate and cost-effective applications of technology. Analytical study of a health care system and the design of a current medical information support system synthesize the content of the course.

# HCA 5322 Organizational Behavior and Theory (3)

The focus of this course is the application of resources, behaviors, and theory in the organizational setting. Emphasis is placed on the skills and competencies necessary for effective health services management as well as the functions performed by, and roles required of, middle and senior level managers. The course progresses from individual, group, and organizational dynamics.

### HCA 5329 Leadership in Complex Organizations (3)

This course is designed to explore a broad range of leadership issues. Students will have the opportunity to examine their own leadership qualities and develop ways to improve them. Readings will cover both theoretical bases for leadership and practical strategies for effective leadership. The format for the class will be group discussion. Each class the instructor or one of the students will present an article/book chapter on leadership and the class will discuss its relevance and importance.

# HCA 5330 Health Care Contracting and Negotiations (3)

The common law of contracts will be analyzed in the areas of formation, performance and discharge, breach and remedies, the statute of frauds, covenants, and third party rights. The bases of government contracting will be laid and followed by study of contract types, formation, administration, termination, remedies, and ethical problem areas. The study of negotiations will include the process and applicable techniques, strategies, and tactics.

# HCA 5334 Current Problems in Bioethics and Health Law (3)

The fundamentals of ethical decision making followed by study of current critical areas, such as abortion, the right to die; organ harvesting and transplanting; genetic screening, counseling, and engineering; other human subject research; and allocation of scarce resources or "the right to health care.

### HCA 5336 Health Care Jurisprudence (3)

The foundations of our legal system, the process of civil litigation, and tort law and contract law as they pertain to the health care system. Basic elements of contracting will be addressed, but the emphasis will be on tort law and the interface between tort law and contract law. More specific topics may include: the medical standard of care; federal tort law/liability of federal providers, informed decision-making; defining death and legal actions involving dead bodies; abortion/family planning; medical research; management of medical information; the right to practice; and anti-trust issues. Medical ethics will be distinguished from medical law and ethical aspects of classic cases will be noted.

### HCA 5340 Selected Topics in Financial Management (3)

Managing the external interface with markets (stock and bond valuation and issuing, endowment management, cash management and dividend policy) and advanced tools for managing financial resources (modeling and simulation, process costing, activity-based costing, transfer pricing and joint product costing).

# HCA 5342 Health Applications in Networking (Elec) (3)

Provides a conceptual framework for identifying, creating, applying resources and advances in networking, telecommunications, and telemedicine to specific diseases, problems in health care, and public health. Resources on the Internet will be used to develop HTML documents. Databases will be explored to develop in-depth reports on individual diseases, resources, public health and infrastructure deficiencies, and health related issues of concern to military operational planners and health care executives.

# HCA 5344 Advanced Research Methods (3)

Pre-requisite(s): HCA 5310 and 5311

Advanced Research Methods combines skills learned in research methods, statistics, and organization behavior into a blended class that integrates the three previous courses with large databases and statistical software. Students are expected to design research methodologies based on sound theoretical modeling techniques resulting in testable hypotheses reviewed through appropriate analytical assessments. Mathematical/Statistical proofs, operationalization & transformation of data, power and error analysis, and advanced techniques in MANOVA, regression and research design are emphasized.

# HCA 5353 Finance II: Financial Management of Healthcare Organizations (3)

Pre-requisite(s): HCA 5350

Planning and controlling functions (time value of money, pro formas and budgets, ratio analysis), balance sheet management (working capital budgeting, debt and equity financing), and cost management (cost classification allocation and apportioning methods, standard budgeting, break-even and variance analysis).

# HCA 5355 Law and Ethics of War and Terrorism (3)

With an emphasis on medical service, this course explores the ethical and legal aspects of military service through current literature, discussion, and film. It includes a study of that area of the law called just war theory and distinguishes terrorism from conventional war.

# HCA 5356 Organizational Ethics (3)

This course will review major ethical theories, principles, decision-making methods, and the relationship between ethics and leadership. Clinical ethics topics will be considered from an organizational perspective, and topics with a more definitive business focus will be addressed. Case studies will be developed, analyzed, and discussed

### HCA 5357 MEDCOM Analytics (3)

This class introduces healthcare leaders to current critical topics and techniques in US Army Medical Command (MEDCOM) Analytics. Though focused on MEDCOM analytics, the material will have substantial applicability to other students in the military health system. The course enhances critical thinking and develops student abilities to conduct data analysis, using M2 as the primary platform.

# HCA 5358 Quantitative Methods II: Modern Data Science (3)

Pre-requisite(s): HCA 5310

This course is a study of how to match appropriate data science approaches, methods, and techniques to analyze the increasing volume and variety of healthcare data to extract actionable insights for making improvements to our healthcare delivery systems.

# HCA 5359 Seminar in Human Resources Management (3)

Study of human resource management with emphasis on issues confronting health care administrators. Examination of emerging practices affecting procurement, compensation, retention, evaluation, training, and development of the human resources needed to provide health care and labor management relations. Emphasis on case studies, current trends and practical applications.

# HCA 5389 Population Health & Homeland Security (3)

Introduces students to epidemiology as a diagnostic discipline of population health. Material discussed will prepare students to communicate concepts of risk and understand epidemiological information. Common tools will be introduced to evaluate health problems and policies at a population level. In addition, the course will examine medical readiness and explore the boundaries of the twenty-first-century national security mission. This will be accomplished by examining the threats, actors, and organizational structures and resources required to defend the American homeland.

# HCA 5390 Consulting Practicum in Health Care Administration (3)

A work group project course where students personally observe, analyze, synthesize, evaluate, and report on various real-world healthcare problems in local health services facilities. Students are expected to integrate acquired knowledge, skills, and analytical tools previously obtained in the didactic year regarding the management of health services. The course focuses on significant problems and evolving trends in the local community and their implications for efficient and effective healthcare delivery.

# HCA 5450 Finance I: Financial and Managerial Accounting in Healthcare Organizations (4)

Basic principles and applications of healthcare finance, including function and organization of the financial resource department, purpose and methods of financial accounting, and particular characteristics of financial management in the healthcare industry (personnel and employment incentives, third-party payers and insurers, price or rate setting, cost shifting, taxation and healthcare incentives, and alternative organizations).

#### HCA 5961 Administrative Residency (9)

Pre-requisite(s): All Didactic Phase Courses

During this required residency and under the guidance of a qualified preceptor, degree candidates are provided opportunities to study and analyze the functional elements of a hospital and/or healthcare organization. Their managerial skills are developed through varied experiences, the performance of administrative tasks, and direct participation in the problem-solving process. Students also perform special studies in functional areas and conduct graduate management projects. Approval of the proposal and the completed research is secured from the program's Residency Committee.

# HCA 5V92 Special Studies in Health Care Administration (1-3)

Advanced work jointly planned by the professor and student in any of the various disciplines of health care administration represented by members of the graduate program faculty. The course provides students with a structured study in the selected topic area and permits advanced application of prior course work. May be repeated with a different topic for up to twelve hours credit.

# **Health Education (HED)**

# HED 5377 Principles and Philosophy in Health, Human Performance and Recreation (3)

Bases of principles, the evolution of principles and philosophies, and the interpretation and application of principles to program development and conduct.

# HED 5V74 Professional Literature Seminar in Health, Human Performance and Recreation (1-6)

Cross-listed as HP 5V74, RLS 5V74 See HP 5V74 for course information.

# **Health Services Research (HSR)**

### HSR 6220 Legal and Ethical Issues in Health Services Research (2)

Pre-requisite(s): Enrollment in PhD program in Health Services Research or consent of instructor

Legal and ethical principles related to conducting health services research and their implications. Health services research stages: design, funding and proposals, execution of health and health care delivery-related projects (including recruitment of study subjects, data acquisition) under Institutional Review Board approval and legal compliance. Production of meaningful results and their dissemination to stakeholders in the health care arena.

# HSR 6310 Epidemiology and Evidence-Based Medicine in Health Services Research (3)

Pre-requisite(s): Enrollment in PhD Program in Health Services Research or consent of instructor

Epidemiologic principles and techniques relevant to the design and analysis of health services research epidemiologic studies. Epidemiologic concepts, methods and related basic biostatistical approaches required to conduct robust health services research.

# HSR 6315 Health Economics & Policy: Demand (3)

A foundational course in health economics and health policy. Topics covered span consumer behavior, sources and markets for health insurance, health behaviors, environmental and population health, and some elements of international development.

#### HSR 6320 Health Economics & Policy: Supply (3)

A foundational course in health economics and health policy. Topics covered span provider markets, provider incentives, provider regulation, and market consolidation across a variety of key industries (e.g., physicians, hospitals, post-acute care providers, and pharmaceutical firms).

# HSR 6330 Economic Evaluation: Decision Analysis in Health Services Research (3)

Pre-requisite(s): Enrollment in PhD program in Health Services Research or consent of instructor

Application of economic evaluation methods when conducting health services research (HSR), including cost-effectiveness analysis (CEA), cost-benefit analysis (CBA), and cost-utility analysis (CUA). Economic evaluation, emphasizing identification of health care costs and outcomes measures, data sources, understanding of utility theory, quality of life measures, Bayes' Theorem, ROC curves, and development of Markov and simulation models in HSR.

# HSR 6340 Experimental and Quasi-Experimental Design in Health Services Research (3)

Pre-requisite(s): HSR 6330 or consent of instructor

Experimental and quasi-experimental designs in health services research; randomization of treatments/interventions; explicit and implicit treatment. Internal validity and external validity. Application to real-world research with appropriate critique of articles.

# HSR 6V00 Dissertation Proposal and Prospectus (1-3)

Pre-requisite(s): Permission of Director of Health Services Research PhD program

Research for doctoral students preparing their topic proposal or writing their prospectus in anticipation of candidacy.

# HSR 6V90 Research Practicum in Health Services Research (1-6)

Pre-requisite(s): Health Services Research PhD students only, and permission of instructor

Research course for PhD students in Health Services Research. Must be taken twice as part of degree requirements. Only for doctoral students who have not yet been admitted to candidacy. Initiation and completion of an applied research project addressing a specific issue of relevance to a healthcare organization or an issue identified by the student's faculty research advisor.

# HSR 6V98 Special Studies in Health Services Research (1-3)

Pre-requisite(s): Permission of Director of Health Services Research PhD program

Specialized study for PhD students in Health Services Research. May be taken more than once provided the content differs substantially from that of any prior offering of the course that the student has taken.

# HSR 6V99 Dissertation (1-12)

Pre-requisite(s): Permission of Director of Health Services Research PhD program

Supervised research for the doctoral dissertation.

# **Healthcare Policy and Adm (HPA)**

HPA 5001 Executive Leadership in Healthcare Administration I (0)

Pre-requisite(s): Enrollment in MBA-Healthcare Administration Program Presentation and discussion of leadership issues in healthcare administration.

# HPA 5002 Executive Leadership in Healthcare Administration II (0)

Pre-requisite(s): Enrollment in MBA-Healthcare Administration Program Presentation and discussion of leadership issues in healthcare administration.

#### HPA 5003 Executive Leadership in Healthcare Administration III (0)

Pre-requisite(s): Enrollment in MBA-Healthcare Administration Program Presentation and discussion of leadership issues in healthcare administration.

# HPA 5105 Marketing for Healthcare Professionals (1)

Co-requisite(s): MKT 5210

Healthcare organizations face marketing challenges more complex than those faced by businesses in other industries. Patients are often physically and emotionally vulnerable, and frequently must make important decisions with incomplete information. Providers' performance outcomes depend on patient engagement, yet patients often grapple with conflicting goals. Third party pay structures distort pricing. Government is actively involved.

# HPA 5120 Principles and Methods of Healthcare Delivery System Research (1)

Pre-requisite(s): HPA 5310

This course will prepare students for selection by a leading healthcare organization for a paid six-seven month internship. Students will be provided guidance to help them successfully apply MBA core concepts in the dynamic healthcare industry environment. Students will also be afforded the opportunity to participate in an American College of Healthcare Executives (ACHE) competition with other university students and attend the annual ACHE educational conference in Chicago.

# HPA 5121 Current Issues in Healthcare Administration (1)

Pre-requisite(s): HPA 5V90

Current Issues in Healthcare Administration is designed to expose students to major US healthcare initiatives through a series of seminars led by leading healthcare executives. The Healthcare Administrative Residency will be a focus of discussion with students using site-specific information to evaluate health system strategies.

# HPA 5125 Contemporary Issues in Healthcare (1)

This course is designed to expose students to major contemporary US healthcare issues, initiatives, and reforms through a series of seminars.

# HPA 5126 Social Issues in Healthcare Administration (1)

Pre-requisite(s): HPA 5310

Concepts and processes of social issues most directly applicable to the work of a healthcare executive. Speakers, field experiences, projects, readings and in-class discussions expose students to a variety of social and public health issues including end-of-life care, abuse, chaplaincy, long-term care, and disaster planning.

# HPA 5130 Legal Issues in Healthcare (1)

A study of the legal and regulatory environment related to healthcare law, including an introduction to the legal system, tort law, and liability of healthcare institutions. Covers relevant topics such as fraud, antitrust, consent, federal reimbursement programs, medical records, and confidentiality with an analysis of relevant case law.

# HPA 5150 Aligning IT Healthcare Enterprises (1)

This course examines the evolution and past and current roles of technology (IT) in healthcare organizations, current trends in healthcare, and best practices to insure firms' ability to maximize the value achieved from IT investments.

# HPA 5180 Healthcare Finance Lab (1)

Co-requisite(s): HPA 5380

This course serves as the lab for HPA 5380 Healthcare Finance and offers additional practical application.

# HPA 5220 Healthcare Law: Application and Strategy (2)

This course is a study of the application of healthcare related laws to managerial decisions and the relationship between legal and business strategy. It is designed to provide students with sufficient understanding to identify and manage legal and ethical issues in the healthcare industry.

# HPA 5230 Healthcare Operations (2)

A survey of medical operations and systems, designed for MBA executive students expanding their career and knowledge of operational management in healthcare organizations. Students will gain a basic understanding of the various healthcare models in the United States and their organizational financing, executive management, corporate oversight, and governance.

### HPA 5250 Analysis of Healthcare Economic Conditions (2)

Students will examine the health care delivery system and its implications for medical practice, education, research, and policy. Economic perspectives will be applied to public policy in health and medical care.

# HPA 5280 Healthcare Financial Management (2)

This course extends financial management principles such as time value analysis, risk & return, debt & equity financing, cost of capital, and capital budgeting to a healthcare context. Healthcare-specific topics will be the central themes of the course. The course will utilize a combination of learning techniques such as lectures and discussions.

# HPA 5295 Healthcare Policy and Future Directions (2)

The capstone course for the Executive MBA Healthcare Administration Specialization. Its objective is to amalgamate concepts students were taught throughout the program by exposing them to economic concepts as they apply to national healthcare policy issues.

# HPA 5310 Healthcare Administration (3)

Pre-requisite(s): Admission to MBA program

A survey of the United States healthcare system, designed for MBA students pursuing careers in healthcare administration. Students will gain a basic understanding of the various healthcare models in the United States, their organization financing, executive management, and oversight. Students will also be challenged by healthcare executives in a series of leadership seminars — one or more of which will take place in the context of visits to major health institutions in the United States.

# HPA 5320 Marketing Strategy for Healthcare Professionals (3)

Healthcare organizations face marketing challenges more complex than those faced by businesses in most other industries. This course explores ways that marketing frameworks can help healthcare leaders improve quality and access to care while reducing costs. Broad introduction to marketing concepts and decision making in the context of healthcare as well as other industries.

### HPA 5330 Healthcare Law and Ethics (3)

Pre-requisite(s): Admission to MBA program

A study of the legal and regulatory environment related to healthcare law, including an introduction to the legal system, tort law, and liability of healthcare institutions for administrators or executives. Covers additional reimbursement programs, medical records, and confidentiality relevant topics such as fraud, antitrust, consent, federal reimbursement programs, medical records, and confidentiality with an analysis of relevant case law. It will also help students prepare to enter their internship with the ethical and legal knowledge necessary to perform safely in an active healthcare organization.

# HPA 5350 Health Economics (3)

Cross-listed as ECO 5350

See ECO 5350 for course information.

### HPA 5367 Managerial Epidemiology (3)

Cross-listed as STA 5367

This course presents the basic principles of epidemiology with particular emphasis on applications in healthcare management. Topics include specific tools of epidemiology used for purposes of planning, monitoring, and evaluating population health. These include identification and of disease, measures of incidence and prevalence, study designs, confidence intervals, p-values, statistical interaction, causal inference, and survival analysis. Methods for managing the health of populations using an understanding of the factors that influence population health are discussed. Strategies that health care organizations and systems can use to control these factors are also considered.

### HPA 5380 Healthcare Finance (3)

Cross-listed as FIN 5380 Pre-requisite(s): FIN 5161

This course extends financial principles to healthcare markets, including accounting statements for healthcare institutions as sources of information, and analysis of third party payment systems as sources of funds. Decision making tools through spreadsheet analysis is emphasized.

### HPA 5395 U.S. Healthcare Directions (3)

Pre-requisite(s): HPA 5V90

U.S. Healthcare Directions is the capstone course for the MBA Healthcare Administration Specialization. Its focus is to appraise and evaluate concepts students were taught in both the didactic and residency elements of the program and interpret them in support of the great issues of healthcare policy. Special focus is given to explaining, justifying, and summarizing principles of efficient policy intervention and relating them to national healthcare policy.

# HPA 5V90 Healthcare Administrative Internship (1-9)

Pre-requisite(s): Admission to MBA program; HPA 5120 and 5310 Students will be afforded the opportunity for selection by a leading United States healthcare organization for a paid six-seven month internship. Under the guidance of a practicing healthcare executive preceptor, students will apply knowledge gained in their MBA core studies and begin work on a major paper which will contribute to the body of knowledge for health systems.

# **Hebrew (HEB)**

# HEB 5309 Selected Documents from the Hebrew Scriptures (3)

Cross-listed as REL 5309

Pre-requisite(s): HEB 3301; or equivalent

Exegesis of selected portions of the Hebrew scriptures with careful attention given to grammar, syntax, history, and theology. The course may be taken up to three times when content differs.

# **History (HIS)**

# HIS 5320 Seminar in European History (3)

May be taken five times provided topics change.

# HIS 5348 Independent Study in European History (3)

Pre-requisite(s): Graduate standing and consent of instructor A tutorial course for M.A. and Ph.D. students in history. The course is designed for intensive study of a period or topic in European history. The student and professor in the student's field of interest will jointly develop a student program. Students may take up to fifteen hours provided topics change.

#### HIS 5350 Seminar in Latin American History (3)

Emphasizes critical reading skills using topics and literature related to Latin American history. May be taken up to two times for credit toward the master's degree provided different topics are examined.

# HIS 5360 Seminar in United States History (3)

Cross-listed as AMS 5360

May be taken five times provided topics change.

# HIS 5365 Seminar in Public History (3)

Cross-listed as AMS 5365

Field of public history, with emphasis on practical applications of historical methodology and the work of historians outside academia.

# HIS 5367 Seminar in Oral History (3)

Cross-listed as AMS 5367

Literature and methods of recent United States oral history, with emphasis on the philosophy behind the oral history movement and the personal involvement of the student in the gathering of oral memoirs.

### HIS 5369 The Historian's Craft (3)

Introduction to the history profession focusing on the philosophy of history, the methodology of history, and the craft of writing and teaching history.

### HIS 5370 Advanced Graduate Research and Writing (3)

Cross-listed as AMS 5370

Seminar for first-year students focusing on historical research skills, independent learning, critical thinking, and effective paper presentations.

# HIS 5371 Religion in the American South (3)

Cross-listed as AMS 5371

Religion in the American South from the colonial period to the present, with emphasis on readings and primary research.

# HIS 5388 Independent Study in American History (3)

Pre-requisite(s): Graduate standing and consent of instructor A tutorial course for M.A. and Ph.D. students in history. The course is designed for intensive study of a period or topic in American history. The student and professor in the student's field of interest will jointly develop a study program. Students may take as many as five times, provided topics change.

# HIS 5390 Archival Research in History (3)

This course prepares advanced graduate students to work as professional historians in the archives, including the mechanics of the archives (applications, finding resources, paleography), grant writing, introduction to digital research, and production of a thesis or dissertation prospectus or chapter based on archival work.

# HIS 5391 History Pedagogy (3)

Prepares graduate students to teach world and U.S. history survey courses at the college level, to deal with students effectively, and to enhance their understanding of their calling as teachers of history.

# HIS 5393 Seminar in Global History (3)

Pre-requisite(s): Graduate Standing

Global history is defined as the history of the non-western world, including Latin America. The seminar will focus on a Global topic–i.e. Latin America, the Muslim world, Asia, Africa, or any other specific non-western area. The course will consist of readings and research within one of the Global fields of history. May be taken five times provided topics change.

# HIS 5V99 Thesis (1-6)

hrs.

#### HIS 6V85 Preliminary Readings (1-6)

Pre-requisite(s): Completion of course work for the Ph.D Independent readings for Ph.D. preliminary qualifying examinations. Preliminary exams allow a student to move to candidacy. A student may repeat this course up to four times.

### HIS 6V99 Dissertation (1-12)

Pre-requisite(s): HIS 6V85 and completion of course work for Ph.D Supervised research for doctoral dissertation.

# **Human Performance (HP)**

# HP 5110 Clinical Education (1)

Pre-requisite(s): A "C" or better in HP 5302

Students gain hands-on experience in athletic training through the completion of clinical education hours. Students are exposed to a variety of healthcare settings and patient populations. Additionally, students' entry-level clinical skills are assessed in accordance with accreditation standards.

#### HP 5199 Non-Thesis Degree Completion (1)

To fulfill requirements for non-thesis master's students who need to complete final degree requirements other than coursework during their last semester. This may include such things as a comprehensive examination, oral examination, or foreign language requirement. Students are required to be registered during the semester they graduate.

### HP 5201 Administrative Topics in Athletic Training (2)

Pre-requisite(s): A "C" or better in HP 5304

Students obtain a foundational understanding of local, state, federal, and institutional/organizational laws and regulations pertaining to the delivery of healthcare services. Students apply business principles to the management of financial resources, strategic planning, physical facilities, and sources of risk related to athletic training.

# HP 5301 Introduction to Patient Care (3)

Pre-requisite(s): Acceptance into the Master's of Athletic Training program

Introduction to the profession of athletic training. Students learn important concepts of patient care related to cultural competence, ethical practice, risk management, and documentation. Additionally, students learn how lifestyle choices can affect patient outcomes.

#### HP 5302 Evaluation and Diagnosis in Athletic Training I (3)

Pre-requisite(s): Admission into the Master of Athletic Training program Foundational understanding of the evaluative procedures related to the face and distal extremities. Perform a complete physical exam of a patient to formulate a clinical diagnosis and treatment plan that is relevant to specific areas of the human body.

# HP 5303 Therapeutic Interventions I (3)

Pre-requisite(s): HP 5301 with a grade of C or higher Theoretical foundation for the application of therapeutic modalities and therapeutic exercise to establish best practices in patient care. Concepts related to practice patterns, quality assurance, and cost effective healthcare.

# HP 5304 Concepts in Injury Management (3)

Pre-requisite(s): A "C" or better in HP 5402

Students obtain a foundational understanding of the evaluative procedures related to select general medical conditions and acute conditions, including triaging those that are life-threatening or otherwise emergent. Students are taught to use a variety of techniques to manage acute conditions appropriately.

# HP 5305 Advanced Patient Care (3)

Pre-requisite(s): A "C" or better in HP 5307

Students obtain a foundational understanding of a variety of contemporary therapy techniques used for patient care. Students develop and implement intervention strategies for improving or maintaining a patient's health and quality of life.

### HP 5306 Research Project in Athletic Training (3)

Pre-requisite(s): Athletic Training Program Director approval Research project to fulfill the degree requirements of the Master of Athletic Training program. Course must be taken twice for a total of six hours.

#### HP 5307 Interdisciplinary Approach to Healthcare (3)

Pre-requisite(s): A "C" or better in HP 5402 and HP 5403

This course provides students with the theoretical foundation for the application of public health and mental health principles used to establish best practices in patient care. Students also learn concepts related to working within an interdisciplinary healthcare team to evaluate, treat, and support patients with a variety of healthcare concerns.

# HP 5308 Professional Preparation and Current Topics in AT (3)

Pre-requisite(s): A "C" or better in HP 5201

In this course students are prepared for the BOC exam through a comprehensive review of the athletic training domains. Students are also prepared for a transition to practice by learning issues related to professional development and state/federal healthcare regulations.

# HP 5320 Nutritional Biochemistry (3)

Advanced study of the biochemistry of nutrition related to macronutrient and micronutrient synthesis and metabolism. Biochemical structures and pathways involved in conducting nutrition research will be studied.

# HP 5322 Exercise, Nutrition, and Endocrinology (3)

The study of the relationship between exercise, nutrition and the endocrine system and how this relationship affects exercise performance and good health. The influence of hormonal functions on fluid regulation, immunology, substrate utilization, stress responses, biological rhythms and physical performance will be studied.

# HP 5324 Muscle Physiology and Metabolism (3)

Advanced study of the microstructure, function, and metabolism of human muscle with attention to molecular, histochemical, and biochemical assessment methodology used to assess the effects of exercise, training, and/or nutritional interventions on muscle physiology and biochemistry.

# HP 5326 Macronutrients, Micronutrients, Exercise and Health (3)

Advanced study of the roles of carbohydrate, fat, protein, vitamins, and minerals on exercise, performance, and health. The course focuses on how dietary manipulation of macronutrients and micronutrients affects resting and exercise metabolism, disease prevention, and/or disease management.

# HP 5328 Physiology of Exercise I: Neuromuscular Aspects (3)

Neuromuscular physiology, its relationship to exercise, muscle physiology, energy production, and nerve transmission.

# HP 5330 Physiology of Exercise II - Cardiovascular Aspects (3)

Cardiovascular physiology, its relationship to exercise, cardiovascular structure and function, stress testing, cardiopulmonary system, and cardiovascular disease.

# HP 5331 Laboratory Skills in Exercise Physiology (3)

Laboratory experience with tests and measures commonly employed in human performance research laboratories. The selected lab tests are designed not only to reinforce the basic principles learned in the lecture courses but also to teach the basic principles and skills of measurement and evaluation in the field of exercise physiology. Practical experiences include cardiovascular tests, ECG, blood analysis techniques, body composition, electromyography, and respiratory tests.

# HP 5332 Prevention and Rehabilitation of Leisure-Related Sport Injuries (3)

Nutritional and physiological principles in the prevention of and the rehabilitation of leisure-sport injuries, including cardiac rehabilitation.

#### HP 5333 Exercise Testing and Prescription (3)

Pre-requisite(s): Six semester hours of graduate exercise physiology Exercise testing and prescription that emphasizes the necessary preparation for certification by the American College of Sports Medicine.

# HP 5334 Pedagogy & Physical Education (3)

In this course students develop an understanding of the tools of inquiry of physical education/coaching; the ability to design, deliver and evaluate a variety of instructional strategies and processes that incorporate learning resources, materials, technologies, and state and national standards appropriate to physical education/coaching; the ability to assess student learning in physical education/coaching; and the ability to apply this knowledge, skills, and attitudes to real life situations and experiences.

### HP 5335 Sport Pedagogy (3)

This course examines the development and application of the research conducted in physical education and coaching settings.

# HP 5340 Biochemistry in Exercise Science (3)

An advanced overview of the role of exercise and training on metabolic pathways, energy production/regulation, signaling, muscle excitation-contraction, metabolism and adaptation focusing on how various biochemical markers can be assessed at rest, during, and following exercise using various biochemical assays and techniques.

# HP 5348 Psychology of Physical Activity (3)

The study of the theoretical foundations and research base for physical activity behavior change and exercise adherence. Innovative methods for affecting attitudes, knowledge, and behavior regarding exercise initiation and adherence in individuals and groups will be discussed.

# HP 5352 Principles of Exercise and Sport Nutrition (3)

The advanced study of the interrelationships between nutrition and health. Particular attention will be given to the role nutrition plays as a means to enhance health and performance in sport.

# HP 5353 Obesity and Weight Management (3)

Advanced study of obesity including the medical, emotional and psychological conditions that involve weight problems. Effective and age-appropriate weight management techniques will be investigated in terms of the life cycle stage. Current theories, methods, and techniques related to weight loss, weight management, and conducting obesity research will be studied.

#### HP 5354 Methods of Strength and Conditioning (3)

Physiological responses and adaptations associated with strength training are covered in conjunction with laboratory demonstrations and specific practical experiences. Mechanical and force/torque/work/power relationships are emphasized in laboratory demonstrations including isokinetic dynamometry, free weights, resistance machines and fundamental Olympic lifts.

#### HP 5355 Power Speed Agility Quickness Training (3)

The purpose of this course is to address physiological responses and adaptations associated with power, plyometrics, speed and agility which are covered in conjunction with laboratory demonstrations and specific practical experiences based on available scientific research. Practical mastery as well as theoretical understanding is required.

# HP 5356 Periodized Program Models of Strength Training and Conditioning (3)

Pre-requisite(s): HP 5354

The purpose of this course is to study current scientific principles and procedures relating to periodized strength training and conditioning. Emphasis will be placed on many aspects of periodized training which include but are not limited to the background/history, concepts, variations, and application of periodization models.

# HP 5357 Exercise Programming for Individuals with Chronic Diseases and Disabilities (3)

A study of the pathophysiology of common heart diseases and other ambulatory sensitive conditions with the concentration in design, implementation and administration of a multidimensional therapeutic exercise prescription approach.

# HP 5358 Environmental Physiology (3)

The study of physiological regulation during exercise in stressful environments. The ability of the body to maintain optimal health and fitness during work or exercise in the following conditions will be investigated: heat, high altitude, humidity, air pollution, cold, wind-chill, variations in day length, air ions and hyperbaric conditions.

# HP 5363 Manual Therapies in Orthopedic Rehabilitation (3)

A course for athletic trainers on advanced manual techniques in sports medicine: proprioceptive neuromuscular facilitation, joint mobilization, therapeutic massage, myofascial manipulation, muscle energy techniques, and strain/counterstrain techniques are included.

# HP 5368 Motor Skill Learning and Performance (3)

Pre-requisite(s): Graduate standing

The study of the processes and variables that influence skill acquisition and the mechanisms which are involved in performing coordinated movements. Topics will include principles of human movement behavior, motor learning, motor programs and system dynamics.

# HP 5370 Sport Psychology (3)

Study and application of psychological principles which influence behavior, enhance skill acquisition, and maximize sport performance of athletes, coaches, and others involved in sport.

# HP 5377 Issues and Trends in Human Performance and Sport Management (3)

Investigation of current issues and trends in the fields of Human Performance and Sport Management and how these issues and trends may impact the future.

# HP 5379 Research Methods in Health, Human Performance, and Recreation (3)

Developmental theory, investigation and gathering of data, statistical analysis and evaluation, and research reporting as these relate to research in health, human performance, and recreation.

# HP 5384 Biomechanics of Human Movement (3)

Pre-requisite(s): HP 4384

Review of current research on the biomechanics of human movement. Practical experience in the methods of biomechanical research.

#### HP 5401 Evaluation and Diagnosis in Athletic Training II (4)

Pre-requisite(s): HP 5302 with a grade of C or higher

Foundational understanding of the evaluative procedures related to the pelvis, shoulder, knee and elbow. Students develop an understanding of specific areas of general medicine. Students learn to perform a complete physical exam of a patient to formulate a clinical diagnosis and treatment plan that is relevant to specific areas of the human body.

### HP 5402 Evaluation and Diagnosis in Athletic Training III (4)

Pre-requisite(s): HP 5401 with a grade of C or better

Foundational understanding of the evaluative procedures related to the head and spine. Instruction on the procedures used to evaluate, treat, and manage brain injuries. General medical conditions related to the respiratory, cardiovascular, and neurological systems are also reviewed.

# HP 5403 Therapeutic Interventions II (4)

Pre-requisite(s): HP 5303 with a grade of C or higher Students obtain a foundational understanding of the application of therapeutic modalities and therapeutic exercise related to the practice of athletic training. Students learn to use a variety of techniques to create an effective treatment plan for diverse patient populations.

# HP 5V65 Research Seminar (1-6)

Provides an opportunity for students and doctoral program faculty to discuss current research in kinesiology, exercise nutrition, and health promotion as well as various professional issues (e.g., grant writing, research funding, employment opportunities, teaching techniques, tenure process, presentation methods, etc.) The seminar also provides an opportunity for students to make research proposals and/or presentations.

# HP 5V70 Special Topics in Health, Human Performance, and Recreation (1-6)

Cross-listed as HED 5V70, RLS 5V70

Opportunities for intensive, in-depth study of areas of health, human performance, or recreation of special professional interest and need to the student. Supervision and support will be given by selected resource persons.

# HP 5V74 Professional Literature Seminar in Health, Human Performance and Recreation (1-6)

Cross-listed as HED 5V74, RLS 5V74

Supervised readings in health, human performance, and recreation. May be repeated once.

# HP 5V75 Seminar in HHPR (1-3)

hrs.

# HP 5V90 Internship (1-6)

Cross-listed as HED 5V90, RLS 5V90

Full-time experience in an agency, corporation, or hospital for on the job training in a professional field. Minimum requirement -- 400 clock hours; and consent of advisor.

# HP 5V94 Practicum in HHPR (1-3)

Cross-listed as HED 5V94, RLS 5V94

Part-time experience in an agency, corporation, or hospital for exposure to various professional areas of employment. May be taken twice. May not be taken if HHPR 5690 is taken. Minimum requirement - 200 clock hours and consent of adviser.

#### HP 5V99 Thesis (1-6)

Cross-listed as RLS 5V99

Credit received when thesis approved. A total of six hours will be required.

#### HP 6000 Doctoral Research Seminar (0)

Provides an opportunity for doctoral students to present and discuss current research in Kinesiology, Exercise Nutrition, and Health Promotion and to help enhance their research development.

# HP 6300 Research Methods in Exercise and Nutrition Sciences (3)

Pre-requisite(s): Doctoral graduate student standing or consent of instructor

This course provides a comprehensive overview of existing and emerging research methods and techniques involved in conducting doctoral research in Kinesiology, Exercise Nutrition, and Health Promotion.

# HP 6397 Christianity, Ethics and Research with Human Participants (3)

An examination of ethical issues of conduct surrounding research involving human participants in Kinesiology, Exercise Nutrition, and Health Promotion. Ethical principles will be examined from secular constructs and Christian perspectives.

# HP 6V70 Directed Research in Kinesiology, Exercise Nutrition and Health Promotion (1-6)

Pre-requisite(s): Doctoral graduate student standing or consent of instructor

This course provides students with an opportunity to participate in individualized research within the department, university, and/or various collaborative clinical research centers conducting research on specific areas within Kinesiology, Exercise Nutrition and/or Health Promotion. A total of 15 hours of directed research is required for the program.

# HP 6V99 Dissertation (1-9)

Supervised research for the completion of the doctoral dissertation and doctoral degree.

# **Information Security (ISEC)**

# ISEC 5305 Seminar in Information Security Foundations (3)

Pre-requisite(s): Graduate standing

Covers fundamental concepts in information security through providing students with a common body of knowledge in key information security knowledge domains. Coverage of these knowledge domains prepares entry-level professionals in both technical and non-technical disciplines with the key skills and concepts needed to contribute to the information security posture of their organization.

# ISEC 5310 Cyber Security Human Factors: Ethics, Integrity, Practices, Policies, and Procedures (3)

Pre-requisite(s): Graduate standing

This course explores the areas of ethics and integrity to assure that the practices, policies, and procedures are in place in an organization to secure the firm's information.

# ISEC 5320 Cyber Security Technology Factors (3)

Pre-requisite(s): ISEC 5305 or equivalent

This course provides a roadmap of the paths available to organizations for deploying various security devices and tools. The course goes beyond the narrow technical view and offers a full context for the deployment of security technologies. Six key areas of network security will be covered, with each section covering a tool that will play a part in a company's overall information assurance program.

# ISEC 5330 Cybersecurity Policy and Planning (3)

Pre-requisite(s): Graduate standing

This course examines how the information security function is best managed from an organizational perspective. The class will cover a variety of topics to help students understand some of the best practices for how the security function should operate within the context of the overall organization.

# ISEC 5340 Cyber Warfare, Threats, Vulnerabilities and Countermeasures (3)

Pre-requisite(s): Graduate standing

This course presents material relevant to understanding the various types of information security risks faced by organizations. Students are also exposed to concepts for developing a corporate security plan designed to mitigate these various information security risks and cyber-attacks.

### ISEC 5405 Cyber Security Fundamentals (4)

Introduces students to the foundational aspects of cybersecurity, and how these aspects relate to the organizational and business environment. Students will be able to describe the major "domains" of cyber security and how these domains can be applied to the organization or workplace.

# ISEC 5430 Enterprise Cyber Security Planning and Policy: A Strategic Approach (4)

This course examines how the enterprise cyber security function can be managed from a strategic perspective to ensure effective risk mitigation in an environment where the nature of cyber risks is continually evolving. The course focuses on the importance of treating cyber security as a strategic organizational function and provides students with tools, best practices, and security frameworks to help safeguard organizational information assets.

# **International Business (INB)**

# INB 5333 Global Business Development (3)

A study of the international dimensions of American enterprise and the background of the international environment. Includes international trade concepts, cultural dynamics, business customs, multinational markets, development markets, and influence of political, legal, and geographic factors on international marketing.

# **International Business (MINB)**

# MINB 5450 International Business (4)

Pre-requisite(s): All MHA Core Courses

The objective of this course is to familiarize students with the environment in which international companies operate. Students will be introduced to the special problems and complexities of operating in the global marketplace, addressing issues in the fields of accounting, economics, finance, law, marketing, organizational behavior, politics, production, and strategy.

# Journalism (JOU)

# JOU 5199 Non-Thesis Degree Completion (1)

To fulfill requirements for non-thesis master's students who need to complete final degree requirements other than coursework during their last semester. This may include such things as a comprehensive examination, oral examination, or foreign language requirement. Students are required to be registered during the semester they graduate.

#### JOU 5310 Research Methods in Mass Communication (3)

Cross-listed as AMS 5310

Pre-requisite(s): Graduate standing

Intensive study of and practice in research methods used in the study of mass communication, including content analysis, survey research, experimental designs, historical and qualitative methods. Classic and current research in mass communication will be reviewed.

### JOU 5320 Theory of Mass Communication (3)

Cross-listed as AMS 5320

Pre-requisite(s): Consent of director of graduate studies

To study the origins of, evidence for, and applications of various mass communication theories; to study the logic, problems and techniques of theory building; to study the societal implications of mass media research; to extend theoretical assumptions.

### JOU 5350 Seminar in Mass Communication (3)

Cross-listed as AMS 5350

Pre-requisite(s): JOU 5310 or AMS 5310

Research seminar in selected areas of mass communication. May be repeated when topic changes.

# JOU 5365 Social Media for Strategic Communication and Journalism (3)

This course explores the influence of social media in public relations, marketing, advertising, organizations, and society. Through theory, practice, and case studies, students identify a strategic process for integrating social media into marketing, advertising, public relations, and other business operations.

# JOU 5385 Data Analytics & Visualization (3)

Understanding how to analyze and interpret data and then prepare graphic visualizations is a critical skill in public relations and advertising today. This course covers the fundamentals such as common tools used for data analysis and visualization, best practices in data visualization design, social media data mining, and social media network analysis.

# JOU 5388 Master's Project (3)

Pre-requisite(s): Journalism graduate faculty approval Research, writing, and defense of a publication-quality journalistic series.

# JOU 5389 Practicum in Journalism (3)

Practica will be satisfied at publication, public relations, television, radio, other program-approved sites, depending upon the specialization pursued by the student. If the student has at least a half-time position at a media outlet for at least one semester during the program of study, the position may count as the practicum with previous approval of the graduate director.

# JOU 5395 Crisis & Issues Management (3)

Students become familiar with a variety of types of public relations crises and communication theories and practices appropriate to understanding crisis communication tactics. Upon completion of the course, they will understand and be able to develop the various components of an overall crisis communication plan.

# JOU 5V01 International Journalism Internship (1-12)

One semester spent within the student's international area specialization and devoted to university work at a non-American institution, to employment with a U. S. or non-U.S. news organization, to independent study, or to a combination of all three; to an association with Christian mission posts, with public relations and advertising agencies, or with a wide range of foreign-based American firms. Subject to approval of the director of graduate studies.

# JOU 5V90 Independent Study in Mass Communication (1-3)

Cross-listed as AMS 5V90

A conference course for graduate journalism students in which students work under the tutelage of a graduate faculty member. Major research project and extensive required readings chosen from an area of the student's major interest. Written report submitted for publication required. The course is designed for intensive study of a topic jointly agreed upon by the professor and graduate student and subject to the approval of the director of graduate studies.

#### JOU 5V99 Master's Thesis (1-6)

Pre-requisite(s): Journalism graduate faculty approval Writing and defense of faculty-approved Master of Arts in Journalism thesis.

# Latin (LAT)

### LAT 5301 Latin Poetry (3)

Representative works of Latin poetry. May be taken five times, provided topics change.

#### LAT 5302 Latin Prose (3)

Representative works of Latin prose. May be taken five times, provided topics change.

# LAT 5303 Latin Paleography (3)

Introduction to manuscript studies and Latin scripts from Roman through Humanistic times.

# LAT 5321 Latin Grammar for Reading Knowledge (3)

Intensive study of Latin inflection and syntax. Helps fulfill graduate language proficiency requirement.

#### LAT 5322 Latin Prose and Poetry for Reading Knowledge (3)

Readings from Latin prose and poetic authors; review of syntax and inflection. Helps fulfill graduate language proficiency requirement.

# Management (MGT)

# MGT 5131 Operations Strategy: Concepts and Fundamentals (1)

This module introduces a framework for defining a company's operating system and evaluating its operations strategy, and provides an overview of key diagnostic and analytical tools for identifying, framing, and solving strategic operating issues.

# MGT 5132 Operations Strategy: Structuring the Operating System (1)

This module covers key tools for resolving the challenges of operational networks, setting capacity levels and allocating capacity within the network, and establishing a strategy for operational improvement, and examines the key issues that a firm faces in establishing its operations strategy.

### MGT 5133 Operations Strategy: Managing Operational Focus (1)

This module provides frameworks for decisions on how firms should approach the execution of fundamental changes in their operating systems and addresses how various processes and systems are designed and managed in a way that builds superior and rapidly improving performance. Particular attention is placed on ways to balance the competing objectives of operational focus and growth.

### MGT 5136 Global Human Capital Leadership (1)

Pre-requisite(s): Admission to the Executive MBA program
Participants learn to manage people and lead organizations to
gain competitive advantage through human capital. Objectives
include understanding, analyzing, and implementing human resource
management practices through collaboration across functional areas,
and apply human resource principles to improve global organizational
performance.

# MGT 5184 Negotiations: Power and Influence (1)

Pre-requisite(s): Admission to Executive MBA program

This course focuses on the structure of the negotiation and brings in the impact of power, influence, and politics in organizations. Students will participate in class discussions, simulations, and role play, as well as being exposed to the latest research in the area of negotiation.

# MGT 5186 Strategic Planning (1)

Pre-requisite(s): Admission to MBA program

Discovery of how businesses and corporations develop their strategic plan using a framework for how companies approach customers, competitors, and employees. Throughout this course, students will seek to identify issues and problems facing companies in the development of their plans in domestic and international arenas. In addition, the various components of a strategic plan will be studied by using examples of companies that succeeded or failed.

### MGT 5187 Strategy Implementation (1)

Pre-requisite(s): MGT 5186

Insight into putting the strategic plan into action. Students will build upon the ideas discussed in MGT 5186 and will assess the effectiveness of the strategy implementation in companies recognized in domestic and international markets. In contrast, companies that have not implemented their strategies will also be assessed.

# MGT 5188 Strategic Control (1)

Pre-requisite(s): MGT 5187

Development of an understanding pertaining to companies competence in maintaining high performance, and their adaptation to the dynamics of their industries.

# MGT 5191 Leading Organizational Change for High Performance (1)

Pre-requisite(s): Admission to Executive MBA program

This course is intended to help managers and leaders better understand and diagnose behavior in organizations. They can apply this information in an ethical manner to influence positive organizational change.

# MGT 5284 Negotiations: Maximizing Multi-Party Outcomes (2)

Pre-requisite(s): Admission to Executive MBA program Enhances individual effectiveness in the workplace and marketplace through the development of negotiating skills and advanced understanding of negotiation when there are more than two parties. Emphasis is on practical application of theory through a variety of skill-building exercises. Topics include distributive and integrative bargaining tactics, leverage, framing, and cognitive biases, within a multi-party setting, and team negotiations.

# MGT 5307 In Residence: Global Strategy: Building & Sustaining Competitive Advantage (3)

Co-requisite(s): MGT 5406

During this in-residence experience students engage with global organizations and leaders to expand their depth of knowledge related to all aspects of strategic management. Culture, leadership, operations, strategy, societal impact, and their intersections are explored as students build their critical-thinking skills and consider the challenges faced by executives of global enterprises.

# MGT 5310 Management of Organizational Behavior (3)

Management of Organizational Behavior enhances students' knowledge regarding behavioral science concepts relevant to the study of organizational and managerial behavior. The design of the course is active learning through developing skills as a manager, role play, and an extensive hands-on organizational analysis project with local organizations. Topics examined include, but are not limited to, leadership, motivation, teams, talent development, individual differences, global issues, ethics, and organizational change. The framework used is one of organizational development as students are prepared to manage human capital effectively.

# MGT 5311 Leading with Integrity (3)

Pre-requisite(s): Admissions to Executive MBA Program
This course is intended to help managers and leaders better understand
the theories of leadership by utilizing leadership development tools,
models of ethical decision making, and organizationally-relevant applied
projects.

### MGT 5320 Manufacturing and Service Operations (3)

Examines various tools, techniques, and concepts that are linked with successful operations practices in today's firms. Manufacturing resource planning, just-in-time concepts, and synchronous manufacturing philosophies for the firm are emphasized. In addition, the critical role of quality assurance for firms in both manufacturing and service industries is evaluated. Experiential and computer-based simulation exercises are employed to sharpen students' abilities to identify and solve problems. Sharpens students' abilities to identify and solve problems.

# MGT 5325 International Management (3)

Strategies and strategic responses of individual firms operating internationally. The evolution of global industries, global competition, and global strategies is emphasized throughout. A major portion of the course is devoted to case analysis of U.S. and foreign firms.

# MGT 5330 Management Decision Models (3)

Application of analytical models and computer simulation to managerial problems in various functional areas. Topics examined include mathematical programming, network analysis, decision theory, waiting line validation, and implementation of computer simulation models.

# MGT 5331 Project Management (3)

Cross-listed as MIS 5331

This course covers issues important in effective project management. It considers project planning, budgeting, evaluation, and auditing. It also examines methods for monitoring projects, analyzing risk, and allocating resources. [This course also prepares students for the Certified Associate in Project Management and Project Management Professional certification exams.]

# MGT 5336 Seminar in Human Resource Management (3)

Cross-listed as SOC 6350

Subjects discussed are: changing equal employment opportunity laws and case rulings, recruitment, selection methods, total compensation systems, performance evaluation, and organizational justice. Emphasis throughout is on practical application of the theory for organizational effectiveness.

# MGT 5337 Management of Employee Relations (3)

Analysis of union-management relations in both private and public sectors. Subjects include negotiation techniques and strategies, discipline and discharge, discrimination, sexual harassment, labor contract interpretation, EAP programs, safety, management rights, seniority systems, working conditions, and others. Role playing, negotiations simulation, and analysis of arbitration cases are used. Research paper required.

# MGT 5340 Negotiation and Conflict Resolution (3)

Enhances individual effectiveness in the workplace and marketplace through the development of negotiating skills and advanced understanding of negotiation and persuasion. Emphasis is on practical application of theory through a variety of skill-building exercises. Topics include distributive and integrative bargaining tactics, team and multiparty negotiations, leverage, framing, and cognitive biases.

#### MGT 5350 Organizational Design and Development (3)

Fundamentals of designing/redesigning an organization. Major issues include: designing individual jobs and subunits, handling interdependencies among jobs and subunits through coordination and control techniques, dealing with resistance to change, and promoting flexibility. Creating/maintaining a high level of organizational effectiveness is the overarching theme. Students interested in general management, management consulting, and positions in organization development departments would benefit in particular from the course.

#### MGT 5355 Management Consulting (3)

This course is designed for individuals interested in business and management consulting. It uses live consulting projects with local businesses that require the application of skills taught in a master's program. It also emphasizes soft skills utilized in management consulting such as teamwork, customer relationship management, and change management. Other topics include resolving critical conflicts and utilizing strategic frameworks.

### MGT 5385 Strategic Management and Business Policy (3)

A case problem and discussion seminar focused on developing and sustaining a competitive advantage in dynamic environments. The course examines how firms analyze external forces such as local and global trends, technological change, and competition as well as their own firm's position to compete effectively and create value for stakeholders. Both individual and group projects are emphasized.

### MGT 5402 Negotiation (4)

This class enhances critical thinking skills, particularly in the context of group interactions and negotiation. It focuses on understanding the theory and practice of negotiation in a variety of settings. Students learn to develop skills experientially and analogically and to understand negotiation in useful analytical frameworks.

# MGT 5406 Global Strategy: Building and Sustaining Competitive Advantage (4)

Co-requisite(s): MGT 5307

Global Strategy: Building and Sustaining Competitive Advantage provides the opportunity to extend the work completed in previous courses for the purpose of analyzing the problems and issues encountered by executives of the global enterprise.

### MGT 5410 Managing For Higher Performance (4)

This course teaches students to connect organizational behavior theory with current management practice to implement improved management skills in current and future careers.

#### MGT 5420 Operations Management (4)

This course develops skills in describing and understanding operating processes and measuring and analyzing those processes, and the ability to develop and evaluate plans for positively changing those operating processes within the context of the entire organization and in harmony with the firm's strategic mission.

# MGT 5445 Global Supply Chain Strategy (4)

Course provides students with key concepts and strategies for coordination of suppliers, factories, warehouses, distribution centers, and retail outlets to produce and distribute items to the right customers, at the right time, and at the right price to minimize costs while satisfying a certain target service level. Strategic management decisions include the linkages among demand planning, global sourcing, and distribution channel management.

#### MGT 5485 Strategic Management and Business Policy (4)

This course provides students with an opportunity to understand strategic management in organizations in a variety of industries by studying competition, resources, capabilities, innovation, alliances, mergers, acquisitions, and company structures.

### MGT 5630 Integrative Executive Decision Making (6)

Pre-requisite(s): Acceptance into the executive MBA program Integration of operational analysis with other functional areas. Computer models simulate the effects of various strategies on manufacturing plants, information flow environments, and distribution systems. The first half of the course focuses on individual skill development for use in the second half analyzing and solving core problems within the student's company.

#### MGT 5V98 Special Studies in Management (1-6)

This course may be taken for one to six semester hours of credit.

#### MGT 5V99 Thesis (1-6)

Pre-requisite(s): Consent of instructor

# MGT 6310 Doctoral Seminar in Organizational Behavior (3)

Pre-requisite(s): Doctoral student standing

This course takes a holistic view to understand how the behaviors, attitudes, and emotions of individuals affect and are affected by the organizational context. Psychological theories of human behavior are reviewed in order to examine the mechanisms driving human behavior within organizational contexts at the individual, group, and organizational levels.

# **Management (MMGT)**

### MMGT 5162 Seminar in International Management (1)

Pre-requisite(s): MINB 5350

This seminar analyzes strategies and strategic responses of individual firms operating internationally. The evolution of global industries, global competition, and global strategies is emphasized throughout. Special emphasis is placed on the cultural differences between countries and their implications for international management efforts.

# MMGT 5325 Strategic Management (3)

Pre-requisite(s): All MHA Core Courses

This capstone course is oriented toward the successful application of strategic management concepts and principles in the field of management and health administration. The course integrates knowledge content from across the curriculum, including economics, finance, quantitative analysis, marketing, leadership, and health systems. Primary topic areas of strategic management are formulation, implementation, and evaluation.

# MMGT 5460 Operations Management and Research (4)

Pre-requisite(s): HCA 5410

This course provides an introduction to the concepts and analytic methods that are useful in understanding the management of a firm's operations. It provides basic definitions of operations management terms, and tools and techniques for analyzing operations and making operational decisions. The course emphasizes application of concepts, techniques and methodologies from the field of operations management to organizations in service industries.

# Management Info Systems (MIS)

#### MIS 5111 MSIS Career and Professional Development (1)

Pre-requisite(s): Admission to MSIS Program

This course consists of a variety of career exploration and development experiences designed to help students identify their career interest and prioritize and focus their job search efforts, as well as develop their leadership, communication, and personal marketability skills.

### MIS 5145 Excel Modeling Fundamentals (1)

Pre-requisite(s): Admission to graduate business program
This course provides students with essential spreadsheet (Excel)
modeling skills in preparation for coursework in graduate business
programs. Special attention is given to navigating the Excel environment,
formatting and basic functions, data analysis, charts, and modeling best
practices

# MIS 5151 Technical Foundations of Information Systems (1)

Part one of this course provides an overview to examine the role of information technology (IT) in business organizations, its impacts, and potential for enhancing a firm's competitive positioning. Part two exposes students to the four underlying technical elements of IT infrastructure: hardware, software, databases, and networks. This technology overview provides students with basic literacy in technology concepts to enable effective communication with technical specialists in the business environment.

# MIS 5152 The Innovative Tech Leader (1)

Pre-requisite(s): Admission to MBA Program

Course examines the role of information technology (IT) in creating competitive advantage, enhancing value, and driving innovation in organizations with a focus on examining the cross-functional leadership skills required to successfully plan, develop, deploy, and lead IT projects in enterprise environments. Students build skills in assessing risk, dealing with ambiguity, and understanding the strategic role IT plays in organizations.

# MIS 5153 Managing the IT Resource (1)

Pre-requisite(s): MIS 5152

Part one of this course examines principles and practices related to effective systems development practices from the standpoint of a non-technical manager. We begin the section with a discussion of the systems development life cycle (SDLC) and augment this with a discussion of emerging systems development trends and practices as well as an examination of traditional systems development methodologies. Part two of the course examines various IT risk management and security issues.

# MIS 5301 Seminar in Object-Oriented Business Programming (3)

Students will survey object-oriented concepts currently used in the development of business applications. Emphasis will be placed on programming logic, data structures, and program analysis.

# MIS 5310 Business Telecommunication and Networking (3)

The use of telecommunications to network and integrate various information technology platforms. Beginning with the media and hardware used in digital communications, the course moves through the ISO model to the presentation and application layers. Hands-on projects are utilized throughout the course to illustrate how various network operating systems are implemented and to provide training on the more popular platforms.

# MIS 5315 NET Systems Development (3)

Pre-requisite(s): MIS 5301

Presents current technological solutions to business information needs. The course focuses on tools available to IS professionals to develop business applications that can run on networks and client/server systems. Emphasis will be placed on "NET" development of client/server systems.

### MIS 5316 Development of Object-Oriented Business Systems (3)

The objective of the course is to present a total client-server approach to development. The thin-client portion of the course is directed towards browser hosted data collection and presentation using JavaScript. The course presents fundamental JavaScript control syntax, function definition and HTML form processing. The server-side concentrates on PHP for server processing with languages like PERL and C added to the course as time allows.

#### MIS 5317 Seminar in Java Development (3)

Pre-requisite(s): MIS 5301

Seminar in client-side application development using the Java programming language. Topics include object-oriented design, essential language syntax, and developing user, file, and Internet interfaces for business systems to support e-commerce initiatives.

### MIS 5319 Development of Mobile Applications (3)

Study of applications development in a cross-platform mobile computing environment.

# MIS 5322 Advanced Python for Analytics (3)

Preprequisite(s): MIS 5301 or equivalent. Study of advanced topics in the Python programming language. Focus is on data analytics and data science. Main topics include data visualization, array processing, data mining, machine learning, natural language processing, and web application development. Projects cover game development using PyGame and web app development using Django.

# MIS 5325 Information Systems for Management (3)

Emphasizes the importance of information and information technology in managing firms today. The case-oriented course includes topics such as information technology types and trends, the assessment and management of information systems projects, and the relationship of technology to organizational strategy, structure, controls, and effectiveness.

# MIS 5330 Global Dimensions of Information Systems (3)

As business becomes more global in nature, information systems and technology will become increasingly important to the successful management of business enterprises. This course will examine the international business environment and how information systems and technology can be utilized in that environment. Specific topics to be covered include international standards, problems with transnational flows of data and information, international standards, telecommunications and global connectivity, strategic planning to gain global competitive advantage, and human resources related to global information systems.

### MIS 5331 Project Management (3)

Cross-listed as MGT 5331

See MGT 5331 for course information.

# MIS 5335 Information Systems Analysis and Design (3)

To acquaint students with the concepts, problems, and possible solutions for all stages of the systems development life cycle. Emphasis on object-oriented analysis and design techniques. Topics include modeling with UML, the role of the IS professional in the development of successful systems, and project management.

# MIS 5340 Database Management Systems (3)

Pre-requisite(s): Graduate level standing

The use of database techniques to represent and manipulate data in the development of information systems. Includes rationale and objectives of the database approach; conceptual data modeling; logical database design; mapping logical design to the relational data model; physical design and implementation of databases; manipulating information in databases; database administration; and connecting applications to databases, including web-enabled applications.

#### MIS 5341 Advanced Database Management (3)

Pre-requisite(s): MIS 5340 or consent of instructor This course will cover advanced topics in database design and implementation, including the storage, access, and management of business information to facilitate decision-making. Topics may include advanced SQL commands, application data access using PL/SQL and/or ASP, advanced topics in database systems such as XML and data warehouses, and database administration topics. A technical presentation may be required.

#### MIS 5342 Business Intelligence (3)

Business Intelligence (BI) is the discovery of patterns and relationships hidden in large volumes of data. This hands-on course is designed to provide practical analytic skills that may be applied in almost any workplace. The course explores the analytical techniques for making intelligent business decisions in data-rich organizations. A key component of the course is the use of BI software tools with techniques such as correlation analysis, data visualization, linear regression, classification, and clustering to address common problems in marketing, customer relationship management, risk management, finance, and operations.

# MIS 5343 Seminar in Data Visualization (3)

Covers basic theories of cognition and data visualization, including how data types influence the decision to use a particular representation, when to use various chart types, how to structure data visualizations, and visualization evaluation. Emphasis on ethical use of visualizations.

# MIS 5345 Decision Making Using Excel (3)

This computer applications course provides students with advanced data analysis and modeling skills necessary for manipulating, sharing, and presenting data to support business decision making. Major topics include basic statistical concepts in Excel, complex queries, importing external data, data cleansing, pivot tables, macros, text manipulation, multiple applications linking, simulation modeling, decision making under uncertainty, and special topics.

# MIS 5346 Data Warehousing (3)

Pre-requisite(s): MIS 5340 or consent of instructor
This course focuses on data warehouses as a component of
business intelligence. The course will cover techniques for designing,
implementing, and analyzing data in data warehouses using a hands-on
approach. The course also discusses managerial and ethical issues in
implementing data warehouses.

# MIS 5347 Text Analytics (3)

Pre-requisite(s): QBA 5131 or consent of instructor

Text Analytics analyzes unstructured responses such as those from open-ended surveys, blogs, and online communities, to identify underlying themes and sentiment that are not immediately apparent. This analysis discipline has current application in market research, intelligence and security, healthcare and life science, recruiting, and legal compliance. The course gives particular attention to developing a process for using text analytics technology to yield valid and reliable results.

# MIS 5355 Management of Information Systems (3)

Pre-requisite(s): Admission to MS/IS program

Future information systems leaders and managers focus on understanding the issues involved in deploying information systems in organizations, the evaluation and adoption of emerging information and communication technologies (ICTs), the strategic role of the IS function, and the relationship of IS with the overall enterprise. Course coverage includes in-depth analysis of current issues in the field of information systems.

#### MIS 5375 Business Process Planning (3)

This course explores the history of Business Process Reengineering/ Redesign, the use of BPR in today's business environment, and how BPR can enable changes inherent in moving to Enterprise Resource Planning, E-Commerce and Customer Relationship Management. The course involves students in the analysis of real business processes from case studies and local businesses. CASE tools are used to develop both "as is" and "to be" business scenarios for understanding the change process.

#### MIS 5390 Ethics in Data Analytics (3)

Pre-requisite(s): QBA 5330, STA 5300, or equivalent Ethical decision-making in data analytics and contemporary issues. Topics include ethics theory, American Statistical Association Ethical Guidelines for Statistical Practice, ethics issues in statistical analyses and presentation of data, ethical consideration in the information age, and data ethics in contemporary issues.

### MIS 5450 Management of Information Systems (4)

This course deepens student's understanding and appreciation of the strategic role that information technology plays in organizations and provides key concepts for effectively planning, building, deploying, and managing information resources in enterprise environments. The course is relevant for students seeking career opportunities in IT management or consulting and individuals aspiring to a career in general (non-IT) management.

# MIS 5V95 Internship in Information Systems (1-6)

Pre-requisite(s): Consent of instructor

Provides students with a carefully directed real-world learning experience. A project developed jointly by the sponsoring company and faculty provides experience in various IS functions and business activities.

# MIS 5V98 Special Studies in Information Systems (1-6)

Pre-requisite(s): Consent of instructor

Offered on demand for one to six semester hours of credit.

# MIS 5V99 Thesis (1-5)

Pre-requisite(s): Consent of instructor

Research, data analysis, writing, and oral defense of an approved master's thesis. At least five hours of MIS 5V99 are required.

# MIS 6310 Foundations in Information Systems Research (3)

A seminar covering key classical information systems readings and theoretical perspectives designed to help students critically think and constructively criticize research papers in the field.

# MIS 6320 Quantitative Methods in Information Systems Research (3)

This course is designed to provide doctoral level students with an introduction to the major methodological issues and techniques associated with quantitative research. Emphasis is given to the techniques that are most commonly used in information systems research.

# MIS 6325 Quantitative Methods: Survey Research Using PLS Analysis (3)

This course focuses on the understanding and use of Partial Least Squares (PLS) methodology in IS research contexts. PLS is used by students to simulate path analysis procedures using data gathered by the professor. Requirements of the course include learning the fundamental statistical foundations underlying structural equations modeling and soft modeling and survey methods. This course provides direction for the successful completion of an independent research project using PLS that will be submitted to an IS conference and/or journal.

# MIS 6330 Theoretical Perspectives in Information Systems Research (3)

A seminar designed to provide doctoral students across different disciplines a broad introduction to key management, organizational, and behavioral research issues, and challenges in topics of information technology (IT). The course is designed for both information systems (IS) and non-IS Ph.D. students.

#### MIS 6340 Qualitative Methods in Information Systems Research (3)

A seminar designed to provide doctoral level students with an introduction to the major methodological issues and techniques associated with qualitative research. Emphasis is given to case research strategies, both positivist and interpretive, but the course will also discuss action research.

# MIS 6345 Qualitative Methods: Collecting and Analyzing Case Study Data (3)

The course covers the conceptual foundations of the qualitative research process that includes gaining access to a field site, conducting interviews, writing field notes, coding and analyzing data using a qualitative analysis software tool, and writing research results. Additionally, students will have the opportunity to code and analyze real-world data using a qualitative data analysis tool.

# MIS 6350 Conducting Effective Literature reviews: A Doctoral Seminar for pre-Dissertation Students (3)

A course to help doctoral students learn to write theory-building literature reviews. Doctoral students taking this class will read and discuss a variety of review papers published primarily in MIS quarterly, but also in several other journals from management literature.

### MIS 6370 Contemporary Issues in Information Systems Research (3)

This course aims to help doctoral students gain exposure to the latest in IS research. The emphasis will be given on the research published in the highest quality IS journals over the past year as well as research appearing in the top conferences in the past year.

# MIS 6372 Seminar in Group Communication and Decision-making (3)

This course is designed to provide the participant with a basis for developing a rich understanding concerning the nature of information systems in support of group communication and decision-making within the organization. The primary focus involves the interaction of these systems with the behavioral systems within the firm.

# MIS 6374 Organization Theory and its Application in Information Systems Research (3)

A seminar designed to acquaint students with the theories used to examine phenomena related to the introduction, adoption, use, and exploitation of information systems in organizations. The bulk of the material covered will be at the organizational level of analysis.

#### MIS 6380 Ethics in Contemporary Topics in Information Systems (3)

This doctoral seminar examines ethical issues and dilemmas in contemporary and emerging topics within information systems. The course takes an interdisciplinary approach to eight areas related to information systems.

# MIS 6398 Research Apprenticeship I (3)

Pre-requisite(s): Completion of first year of Ph.D. program Students are assigned to a research mentor to facilitate understanding of the research process with the goal of producing a manuscript suitable for submission to a conference proceedings or journal article.

#### MIS 6399 Research Apprenticeship II (3)

Pre-requisite(s): MIS 6398; completion of second year of Ph.D. program Students are assigned to a research mentor to facilitate understanding of the research process with the goal of producing a manuscript suitable for submission to a conference proceedings or journal article.

### MIS 6V00 Dissertation Proposal (1-9)

Pre-requisite(s): Completion of all required coursework for PhD in MIS Research for doctoral students who have completed their required coursework but are not yet registered for MIS 6V99. The course may be repeated.

# MIS 6V98 Special Studies in Information Systems (1-6)

Specialized study for PhD students in Information Systems. Special studies are offered on demand and may count for one to six semester credit hours. They may be taken more than once provided the title and content substantially differ from prior special studies courses.

#### MIS 6V99 Dissertation (1-12)

Pre-requisite(s): Completion of coursework and comprehensive exam Supervised research for the doctoral dissertation.

# Marketing (MKT)

### MKT 5111 Seminar in Marketing Administration-Planning (1)

Pre-requisite(s): Admission to MBA program

Taught from the perspective of a mid-to upper-level marketing manager. Students will develop an understanding of marketing strategy and its role in today's complex business environment. Topics include an overview of the marketing planning process with an emphasis on target market selection and marketing plan development and the strategic aspects of marketing management.

# MKT 5112 Seminar in Marketing Administration-Implementing (1) Pre-requisite(s): MKT 5111

Presentation of the strategies and tactics involved in a marketing program from the perspective of a mid-to upper-level marketing manager. The course content assumes a basic understanding of marketing principles while using lectures, readings, and case analyses. Product, pricing, promotion and distribution issues will be discussed with an emphasis on the interrelationships between marketing decisions. Marketing ethics and social responsibility and their importance in marketing decision-making will also be discussed.

# MKT 5113 Seminar in Marketing Administration-Adapting (1)

Pre-requisite(s): MKT 5112

This seminar will be taught from the perspective of a mid-to upperlevel marketing manager using lectures, readings, and case analyses presenting a variety of topics involving the adaptation of current marketing practices in differing situations. Topics will include interfunctional relationships, international marketing, total quality management, and the assessment of marketing expenditures.

### MKT 5210 Decision Based Marketing (2)

Co-requisite(s): HPA 5105

This course will confront the challenge of designing and implementing a successful combination of marketing variables to make informed decisions about the firm's strategy in its target markets. The course also addresses the importance of companies being market-driven and customer-focused as well as presenting current marketing management practices. As decision makers, the students will learn to implement analytic perspectives, decision models, and marketing concepts to assist with decisions involving communications strategies, product offering, pricing, and distribution channels.

# MKT 5310 Seminar in Marketing Strategy (3)

Pre-requisite(s): MKT 3305

Role of marketing decision making in achieving corporate objectives; planning and implementing the marketing program; product research and development, distribution problems, promotional strategies, and pricing analysis. Attention will be given to the new marketing application of quantitative methods and the behavioral sciences.

# MKT 5315 Seminar in Comparative Marketing (3)

Pre-requisite(s): MKT 3305

Marketing structures, functions, and institutions in different national environments. Emphasis is placed on the manner in which different economic systems condition and shape the nature of marketing.

# MKT 5325 Seminar in Marketing Research (3)

Pre-requisite(s): MKT 3305

First-hand experience with real-life marketing research problems, including such areas as research design, sampling, experimental design, parametric and nonparametric data analysis techniques, and computer statistical programs.

# MKT 5330 Marketing Communications (3)

Pre-requisite(s): BUS 5602 or equivalent

Statistical techniques and their applicability to business decision making. Topical coverage includes multiple regression, analysis of variance, factor analysis, discriminant analysis, cluster analysis, and multidimensional scaling.

# MKT 5335 Business to Business Marketing (3)

Pre-requisite(s): BUS 5602 or equivalent

Marketing by firms to organizations rather than to households. Negotiation strategies are emphasized along with management of relationships, purchasing, distribution channels, and distribution logistics.

# MKT 5340 Product Strategy (3)

Pre-requisite(s): BUS 5902 or equivalent

New product development, management of existing products, product elimination decisions, and pricing at all stages of the life of a product. Emphasis is placed on decision making as it applies to product and pricing strategy and tactics.

# MKT 5341 Theory and Practice in Customer Relationship (3) The understanding of systems, dependencies, variability, and

interrelationships—including the ability to manage systems—is an essential element in customer relationship management (CRM). Therefore, the organization and the supply chain as interrelated systems is the starting point for this course. From that foundation, students will move into assessing measurements, the tools for analyzing an organization's current business processes and flows, and the means for integrating these into customer management initiatives. The "nuts-and-bolts" issues in the course address new customer data collection, using CRM for customer acquisition and retention, call management, segmenting the customer base, and creating a customer-driven web site. Behavioral changes as well as the impact of organizational policies on the ability to provide a satisfying customer experience will be examined.

#### MKT 5345 Seminar in Consumer Behavior (3)

Pre-requisite(s): MKT 5310

The role of consumer behavior in marketing strategy is emphasized. The course builds on foundations from a variety of disciplines including psychology, sociology, cultural anthropology, economics, and semiotics.

### MKT 5398 Directed Studies in Marketing (3)

Special topics in marketing of interest for individual students. May be repeated twice with change of topic.

# MKT 5410 Strategic Marketing Planning (4)

This MBA marketing strategy course provides participants the opportunity to develop a better understanding of marketing strategy and its role in today's complex business environment. The course covers the decisions in a well-integrated marketing program, demonstrates the importance of marketing strategy and the interrelationships between the marketing unit and other functional units, covers the essential elements of marketing analysis, and emphasizes the major components of a marketing plan.

# MKT 5440 Strategic Brand Management (4)

This MBA marketing course provides participants the opportunity to develop a better understanding of branding strategy and its role in today's complex business environment. The course covers the leading theories, models, and other tools to make better branding decisions, and how to plan and evaluate branding strategies. It also provides a forum for students to apply these principles.

# MKT 5460 Marketing Analytics (4)

Students learn how to use data analytics to guide business decisions that will build value for customers and corporations. The course explores the leading theories, models, and techniques underlying marketing analytics.

# MKT 5V95 Internship in Marketing (1-6)

Pre-requisite(s): Consent of instructor

Practical marketing work under supervision in an approved commercial or industrial firm. This course may be taken for three to six semester hours of credit. Consent of major adviser required.

# MKT 5V99 Thesis (1-6)

Pre-requisite(s): Consent of instructor

# Marketing (MMKT)

#### MMKT 5171 Seminar in International Marketing (1)

Pre-requisite(s): HCA 5315 and MINB 5350

Explores environmental/cultural approach to international marketing and important global marketing trends, including growth/expansion of the world's big emerging markets, rapid growth of middle income market segments, and steady creation of regional market groups. Case studies are used to develop global and strategic thinking in terms of the marketing 4Ps.

### MMKT 5370 Advanced Marketing Practicum (3)

Pre-requisite(s): HCA 5315

This distance learning course provides students an additional opportunity to apply more advanced marketing principles and concepts through the use of marketing case studies and a computer-assisted marketing simulation game. Emphasis will be placed on both analytical and quantitative approaches to marketing decision-making during the student's residency year.

# MMKT 5371 Marketing Management (3)

Concepts and theories pertaining to marketing management. A comprehensive approach to translating the strategic plan of the organization into a functional marketing plan that can be implemented in an effective manner in order to increase the market share of the target public. Emphasis will be placed on both analytical and quantitative approaches to marketing.

# **Masters Program Nutrition (MPN)**

# MPN 5303 Research Methods II (3)

Pre-requisite(s): MPN 5401

This course includes a combination of lecture and practical exercises that emphasize the steps and principles of research. Students will participate in all steps of research, working individually as well as in small groups. Steps include the protocol approval process, volunteer recruitment, data collection, data analysis/interpretation, and preparation of written and oral presentations of research findings.

# MPN 5305 Protocol Development (3)

Co-requisite(s): MPN 5401

Students will explore topics for protocol development. Hypotheses will be generated and supported by literature reviews.

# MPN 5307 Nutrition in Stability Operations (3)

This course is designed to provide students with in-depth knowledge of nutrition issues confronted in complex emergencies and within the developing world. Emphasis will be placed on macronutrient and micronutrient malnutrition, assessment of nutritional needs, nutritional surveillance and food distribution programs.

# MPN 5311 Leadership and Management Development (3)

This course is designed to explore a broad range of leadership topics and issues, and to help students develop their executive skills for future roles as managers in clinic and food service operations. Students will have the opportunity to examine their own leadership qualities and develop ways to improve them. Readings will cover both theoretical bases for leadership and practical strategies for effective leadership in the diagnosis, prediction, and analysis of human behavior in organizations.

#### MPN 5401 Research Methods I (4)

This course is designed to introduce students to the basic and advanced concepts, techniques, and technologies used in the scientific inquiry of applied clinical research.

# MPN 5404 Advanced Nutrition and Critical Care (4)

This course provides an in-depth review of the study and application of nutrition principles related to the critically ill patient with an emphasis on trauma and burn. Course includes lab.

# MPN 5409 Advanced Anatomy & Physiology (4)

In this course, students will explore anatomy, physiology and pathophysiology of the gastrointestinal, urinary, respiratory, cardiovascular, endocrine and reproductive systems.

### MPN 5410 Force Health Protection (4)

Course explores measures to promote, improve, or conserve Soldiers' mental and physical well-being. Students will take a more in-depth and practical approach to evaluating operational Army unit capabilities and physical demands as well as interdisciplinary teamwork to achieve optimal health outcomes.

### MPN 5411 Effective Scientific Writing (4)

This course introduces the evidence-based medicine analysis process and provides a structured format for interpretation and application of current research. The course develops and/or builds on skills to find relevant peer-reviewed journal articles for a specific topic; critically evaluate peer reviewed journal articles and determine their appropriateness to the topic being addressed; and write a clear, concise, and coherent literature review.

# MPN 5503 Nutrition and Performance (5)

This course provides students with an in-depth knowledge of how nutrition variables can impact both physical and cognitive performance. Topics include exercise physiology, exercise screening, fuel mobilization (carbohydrate, fat, and protein), micronutrients (vitamins and minerals), hydration, body composition, supplements, and energy balance. Course includes lab.

# MPN 5504 Advanced Energy Metabolism (5)

Co-requisite(s): MPN 5505

Introduction to various topics in energy disorders, energy metabolism, and biochemistry; apply evidence-based practice in a variety of energy-related disease states and disorders; critically-assess the validity and logic behind weight loss claims and advertisements; explore human weight management; familiarization with gene expression, nutrigenomics, and molecular diagnostics.

# MPN 5505 Medical Nutrition Therapy (5)

The course uses lecture, discussions, case studies, and simulations to emphasize the implementation of the nutrition care process (NCP) and the provision of medical nutrition therapy (MNT) to patients with various disease states. The course emphasizes the technical skills needed for nutrition documentation, counseling, and education that includes multiple opportunities to practice interview and counseling.

# MPN 5V98 Master's Research Project (1-9)

Student will participate in a group research project (data collection, analysis, and presentation).

# MPN 5V99 Master's Thesis (1-9)

Student will complete an individual research protocol (data collection, analysis, and presentation).

# **Mathematics (MTH)**

# MTH 5310 Advanced Abstract Algebra I (3)

Pre-requisite(s): MTH 4314 and consent of the instructor Finite groups, Sylow theorems, nilpotent and solvable groups, principal ideal domains, unique factorization domains, and sub rings to algebraic number fields.

### MTH 5311 Advanced Abstract Algebra II (3)

Pre-requisite(s): MTH 5310

Field theory, Galois theory, modules, finitely generated modules, principal ideal domains, homological methods, and Wedderburn-Artin theorems.

# MTH 5316 Linear Algebra and Matrix Theory (3)

Pre-requisite(s): MTH 3312

Matrix calculus, eigenvalues and eigenvectors, canonical forms, orthogonal and unitary transformations, and quadratic forms. Applications of these concepts. A course project is required and will be specified by the professor at the beginning of the course.

### MTH 5323 Theory of Functions of Real Variables I (3)

Pre-requisite(s): MTH 4327

Borel sets, measure and measurable sets, measurable functions, and the Lebesque integral.

### MTH 5324 Theory of Functions of Real Variables II (3)

Pre-requisite(s): MTH 5323

Function spaces, abstract measure, and differentiation.

# MTH 5325 Theory of Differential Equations (3)

Pre-requisite(s): MTH 3325 and 5323

Initial value problems for ordinary differential equations: existence, uniqueness, continuous dependence, stability analysis, oscillation theory, general linear systems, phase plane analysis, limit cycles and periodic solutions. Topics of current interest in dynamical systems.

### MTH 5326 Theory of Partial Differential Equations (3)

Pre-requisite(s): MTH 5324 and 5325

Linear and quasilinear first order equations; shocks, characteristics, the Cauchy problem, elliptic, hyperbolic, and parabolic equations, maximum principles, Dirichlet problem, operators, Sobolev spaces, distributions.

#### MTH 5330 Topology (3)

Pre-requisite(s): Graduate standing

Topological spaces, continuous functions, metric spaces, connectedness, compactness, separation axioms, Tychenoff theorem, fundamental group, covering spaces, metrization theorems.

# MTH 5331 Algebraic Topology I (3)

Pre-requisite(s): MTH 5330

Homology theory, simplicial complexes, topological invariance, relative homology, Eilenberg-Steenrod axioms, singular homology, CW complexes.

# MTH 5332 Algebraic Topology II (3)

Pre-requisite(s): MTH 5331

Cohomology theory, homology with coefficients, homological algebra, kunneth theorem, duality in manifolds.

### MTH 5340 Differential Geometry (3)

Pre-requisite(s): MTH 4327, 5316, and 5330

Differentiable manifolds, submanifolds, vector fields, tensor fields, integration on manifolds, Riemannian geometry.

# MTH 5345 Functional Analysis (3)

Pre-requisite(s): MTH 5324

Banach spaces, Hilbert spaces, linear operators, and spectral theory.

# MTH 5350 Complex Analysis (3)

Comoplex numbers, complex functions, analytic functions, linear fractional transformations, complex integration, Cauchy's formula, residues, harmonic functions, series and product expansions, gamma function, Riemann mapping theorem, Dirichlet problem, analytic continuation.

### MTH 5351 Applications of Complex Analysis (3)

Pre-requisite(s): MTH 5350

Poisson summation, Mellin transformation, zeta function of Riemann, special functions, zeta functions associated with ezjen value problems, heat kernel, asymptotic expansion of the heat kernel, metamorphic structure of zeta functions, theta functions, elliptic functions.

### MTH 5360 Applied Mathematics I (3)

Pre-requisite(s): Graduate standing

Dynamical systems (discrete and continuous), linear and nonlinear systems theory, transform methods, control theory and optimization, calculus of variations, stability theory.

#### MTH 5361 Applied Mathematics II (3)

Pre-requisite(s): Graduate standing

Eigenvalue theory, projections for linear equations, iteration and multilevel methods, fast Fourier Transforms, approximations of differential equations, grid adaptation and numerical stability, weak solutions and Sobolev space, wavelets.

# MTH 5375 Linear Programming (3)

Pre-requisite(s): MTH 2311 and FORTRAN, or consent of instructor Introduction to the theory and applications of linear programming, including the simplex algorithm, duality, sensitivity programming, including the simplex algorithm, duality, sensitivity analysis, parametric linear programming, integer programming, with applications to transportation and allocation problems and game theory. A course project is required and will be specified by the professor at the beginning of the course.

# MTH 5376 Nonlinear Programming (3)

Theory and algorithms for the optimization of unconstrained problems including gradient and Quasi-Newton methods; and constrained problems to include feasible direction methods, Lagrange multipliers, and Kuhn-Tucker conditions. Students must have a knowledge of linear algebra, third-semester calculus, and FORTRAN.

#### MTH 5380 Statistical Methods for Research (3)

Pre-requisite(s): For graduate students from various disciplines Introduction to the more common statistical concepts and methods. Emphasis is placed on proper applications of statistical tools. Topics include: interval estimation, tests of hypotheses, linear regression and correlation, categorical data analysis, design of experiments and analysis of variance, and the use of computer packages.

# MTH 5390 Special Problems in Mathematics (3)

Project course for the project option in the M.S. degree.

# MTH 5V91 Special Topics in Algebra for Graduates (1-3)

May be repeated for credit up to 18 hours.

# MTH 5V92 Special Topics in Analysis for Graduates (1-3)

May be repeated for credit up to 18 hours.

# MTH 5V93 Special Topics in Mathematics for Education Students (1-3)

Pre-requisite(s): Consent of departmental chair and the course instructor May be repeated for credit for a maximum of nine semester hours if under different topics.

# MTH 5V95 Special Topics in Topology-Geometry (1-3)

May be repeated for credit for a maximum of 9 semester hours.

# MTH 5V96 Special Topics in Graph Theory (1-3)

Introduction to graph theory; Euler tours, matching, connectivity, planar graphs, coloring, and random graphs. Additional topics may vary by semester.

# MTH 6310 Commutative Rings and Modules (3)

Pre-requisite(s): MTH 5311

Noetherian rings, quotient rings, primary decomposition, integral dependence and valuations, Dedekind domains, and discrete valuation rings, completions, dimension theory.

### MTH 6311 Non-Commutative Rings and Modules (3)

Pre-requisite(s): MTH 6310

Semi-simple rings and modules, radicals, chain conditions, decomposition of modules, Goldie's theorem, density and Morita theory.

# MTH 6312 Abelian Group Theory (3)

Pre-requisite(s): MTH 5311

An introduction to the fundamental theory of torsion, torsion-free, and mixed abelian groups.

# MTH 6315 Homological Algebra (3)

Pre-requisite(s): MTH 5311 or consent of instructor

Categories, chain complexes, homology and cohomology, and derived functors. Detailed examination of Ext, Tor, adjoint functors, and direct and inverse limits for categories of modules. Kunneth formula and universal coefficient theorems. Cohomology of groups.

# MTH 6322 Approximation Theory (3)

Pre-requisite(s): MTH 4322 and 4328

Approximation of real functions including polynomial and rational interpolation, orthogonal polynomials, Chebysher approximation, the fast Fourier transform, splines, wavelets, and tensor product interpolation.

#### MTH 6325 Numerical Solutions of Partial Differential Equations (3)

Pre-requisite(s): MTH 4322 and 4328

Finite difference and finite element methods for elliptic, parabolic, and hyperbolic problems in partial differential equations.

#### MTH 6340 Compact Lie Groups (3)

Pre-requisite(s): MTH 5310 and 5340

Compact Lie groups, Lie algebras, representation theory, orthogonality relations, Peter Weyl theorem, structure theory, roots, Weyl character formula.

### MTH 6341 Lie Algebras (3)

Pre-requisite(s): MTH 5310 and 5316

Lie algebras, semisimple Lie algebras, root systems, conjugecy theorems, classification theorem, representation theory, Chevalley algebras.

# MTH 6342 Semisimple Lie Groups (3)

Pre-requisite(s): MTH 6340 and 6341

Structure theory for noncompact groups, induced representations, tempered representations, Langland's classification of irreducible admissible representations.

# MTH 6350 Set and Model Theory (3)

Pre-requisite(s): MTH 5311

Propositional and predicate calculus, Loewenheim-Skolem theorems, properties of ultraproducts, model completeness, Goedel's completeness/incompleteness proofs, infinitary language, axioms of set theory, ordinal and cardinals arithmetic, models of set theory and large cardinals.

# MTH 6362 Fourier Analysis on Euclidean Spaces (3)

Introduction to Fourier Analysis; singular integrals, pseudodifferential operators, Lp estimates, and applications to partial differential equations. Additional topics may vary by semester.

# MTH 6363 Analytic Number Theory (3)

Unique factorization, quadratic reciprocity, arithmetical functions, Dirichlet series, distribution of prime numbers. Additional topics may vary by semester.

#### MTH 6364 Algebraic Number Theory (3)

Class field theory, cyclotomic fields, p-adic L functions, and elliptic curves. Additional topics may vary by semester.

# MTH 6365 Topics in Combinatorics (3)

Graphs, Ramsey theory, extremal set theory, generating functions, and partitions. Additional topics may vary by semester.

# MTH 6366 Topic in Noncommutative Analysis (3)

Introduction to Positive definite matrices, Matrices of the trace class and the Schatten-p classes, Lp spaces associated with von Neumann algebras, Markov semigroup of operators, Noncommutative Hardy/BMO spaces, Free Fourier Multipliers, Shannon entropy, and Fisher information. Additional topics may vary by semester.

# MTH 6367 Topics in Complex Analysis: Elliptic and Automorphic Functions (3)

Topics which may vary by semester include periodic meromorphic functions, elliptic Weierstrass functions, elliptic Jacobi functions, modular functions, Picard's theorems, modular group, automorphic functions, and applications to completely integrable systems

# MTH 6368 Topics in Spectral Theory I (3)

Maximal and minimal operators, Weyl-Titchmarsh theory, spectral functions for second-order ODE operators, eigenfunction expansions. Topics may vary by semester.

# MTH 6369 Topics in Operator Theory II: Compact Operators (3)

Compact operators, canonical decomposition of compact operators, singular values, I^p-based Schatten-von Neumann trace ideals, (regularized) Fredholm determinants, applications to the spectral theory of differential operators. Topics may vary by semester.

# MTH 6V13 Advanced Topics in Algebra (1-3)

Pre-requisite(s): Consent of instructor May be repeated for credit up to 18 hours.

# MTH 6V23 Advanced Topics in Analysis (1-3)

Pre-requisite(s): Consent of instructor May be repeated for credit up to 18 hours.

# MTH 6V24 Advanced Topics in Applied Mathematics (1-3)

Pre-requisite(s): Consent of instructor May be repeated for credit up to 18 hours.

# MTH 6V28 Advanced Topics in Numerical Analysis (1-3)

Pre-requisite(s): Consent of instructor May be repeated for credit up to 18 hours.

# MTH 6V30 Advanced Topics in Topology (1-3)

Pre-requisite(s): Consent of instructor

Topology is the study of abstract mathematical spaces with the ultimate goal of finding invariants that are preserved under continuous transformation. This course is intended for doctoral candidates with a strong interest in topology. May be repeated for credit.

# MTH 6V43 Advanced Topics in Representation Theory (1-3)

Pre-requisite(s): Consent of instructor May be repeated for credit up to 18 hours.

### MTH 6V99 Dissertation (1-12)

Supervised research for the doctoral dissertation.

# **Mechanical Engineering (ME)**

#### ME 5199 Non-Thesis Degree Completion (1)

To fulfill requirements for non-thesis master's students who need to complete final degree requirements other than coursework during their last semester. This may include such things as a comprehensive examination, oral examination, or foreign language requirement. Students are required to be registered during the semester they graduate.

### ME 5302 Engineering Analysis (3)

Cross-listed as EGR 5302, ELC 5302 See ELC 5302 for course information.

### ME 5323 Introduction to Finitie Element Methods (3)

Introductory course on the theory and techniques of finite element analysis for numerical solutions of partial differential equations beginning from energy concepts and foundational constitutive equations. Numerical implementations and solutions are demonstrated by user-created code using modern computer technologies.

# ME 5324 Advanced Dynamics (3)

Pre-requisite(s): Graduate standing in Engineering
An advanced study of the mechanical dynamics of systems involving
multiple, interconnected rigid bodies. Topics include mathematical
expressions of body kinematics, various methods to derive dynamic
equations of motion, three-dimensional inertial properties, and dynamic
motion constraints.

#### ME 5325 Advanced Finite Element Methods (3)

Pre-requisite(s): ME 3321 (or equivalent), 4324 (or equivalent), and 4345 (or equivalent)

Advanced analysis of the finite element theory with emphasis on nonlinear applications for thermal and fluidic applications. Course will formulate the finite element form from several classes of constitutive equations, discuss solution methods, and construct and implement algorithms for solving the finite element form.

# ME 5338 Experimental Methods in Heat Transfer and Fluid Flow (3)

Pre-requisite(s): ME 4335 or consent of instructor

Consideration of experimental methods including experiment planning and design, error and uncertainty analysis, temperature measurement (in fluids and solids), flow rate measurement, flow visualization, and advanced data analysis; selected experiments conducted.

# ME 5339 Tribology (3)

Pre-requisite(s): C or better in ME 3321

Experimental, analytical, and computational analysis of tribology, the study of friction, lubrication, wear, and fatigue between contacting and sliding surfaces. Topics include the nature of rough surfaces, contact mechanics between noncomformal and nominally-flat surfaces, nature of friction, lubricants and lubrication theory, and surface damage and fatigue. Computational analyses of surfaces and lubricant flow are performed using Python.

# ME 5340 Intermediate Fluid Mechanics (3)

Pre-requisite(s): ME 3321

Introduction to vectors and tensors, deformation and stress in fluids, kinematics of fluid flows, conservation laws, Navier-Stokes equations, energy equation, introduction to computational fluid dynamics (CFD), introduction to vorticity dynamics and selected topics in compressible fluid flow.

#### ME 5341 Intermediate Heat Transfer (3)

Pre-requisite(s): ME 4345 (or equivalent)

Study of conduction, convection, and radiation. Steady and transient one - and multi-dimensional heat transfer with emphasis on analytical methods, numerical techniques, and approximate solutions.

### ME 5342 Inviscid Flows (3)

Pre-requisite(s): ME 5340 or concurrent enrollment Introduction to the dynamics of inviscid, incompressible fluids; vector representation theorems; vorticity transport theorem; solution methods to steady and unsteady, two-dimensional, axisymetric and three-dimensional flows; computational methods for inviscid flows; and forces and moments on bodies in two-dimensional flows.

### ME 5343 Computational Fluid Dynamics (3)

Pre-requisite(s): ME 3321

Study of numerical methods tailored to solve thermo-fluids governing equations. Classification of partial differential equation (PDE). Finite difference method. Basic concepts of discretization, consistency, and stability. Applications of numerical methods to selected model PDE. Numerical methods for inviscid flow, boundary-layer flow, and the Navier-Stokes equations. Applications include supersonic compressible and subsonic incompressible flows. Turbulence modeling. Finite volume method. Completion of ME 3321 Fluid Mechanics or equivalent recommended.

# ME 5344 Viscoelasticity (3)

The Theory of Viscoelasticity is fundamental in the study of time rate dependent materials, with specific emphasis on applications to engineering systems with plastics and materials with polymeric behavior.

# ME 5346 Introduction to Aeronautics (3)

Introduces the applied science of atmospheric flight. The course teaches about airplanes and how they fly from a design and application perspective. Included are topics in fluid dynamics, airfoil and wing theory, aircraft performance, stability, and aircraft design.

### ME 5347 Analysis and Design of Propulsion Systems (3)

Pre-requisite(s): ME 3321, 3345

Introduction to compressible flow, including flows with simple area change, heat addition, friction, and shock waves. Analysis, parametric design, and performance of ramjets, turbojets, turbofans, and turboprops. Introduction to the operating principles of major engine components. Introduction to rockets.

# ME 5348 Wind Energy (3)

This course presents fundamentals about wind turbines, both commercial and residential. Included are topics in aerodynamics, structures, power generation, control economics, environments, noise, and design.

# ME 5351 Intermediate Numerical Methods (3)

Pre-requisite(s): MTH 2311 and 3326 Introduction to engineering computational methods for design, from theory to algorithm to implementation

Topics will include: roots of equations, optimization, linear systems, integration and differentiation, curve-fitting, and systems of ordinary differential equations.

# ME 5352 Theory of Elasticity (3)

Pre-requisite(s): ME 3320, 3321, and MTH 3326

The Theory of Elasticity is fundamental to the study of linear and nonlinear solid mechanics. This course introduces the foundations of elasticity for a deformable body, including the concept of deformation and stress using tensor calculus.

# ME 5353 Continuum Mechanics (3)

Pre-requisite(s): ME 3320 and Graduate standing

Introductory course into the mechanics of a continuous medium. Topics include the foundational concepts of stress, strain, and constitutive relationships presented in Cartesian tensor notation. Studies will focus on both solid and fluid mechanics.

### ME 5357 Cardiovascular Engineering and Instrumentation (3)

Cross-listed as BME 5357, EGR 5357, ELC 5357 See BME 5357 for course information.

#### ME 5360 Renewable Energy Devices (3)

Educates graduate students from engineering disciplines in the design and applications of various renewable energy sources, materials, and devices. Introduces the basic concepts, principles, potentials, and limitations of several energy conversion and storage devices with a particular focus on solar cells, fuel cells, batteries, and supercapacitors.

# ME 5364 Introduction to Additive Manufacturing (3)

This course introduces various aspects of additive manufacturing, which has become prominent in industry over the past two decades. The course gives the students a basic understanding of additive manufacturing and its use in design, both for rapid prototyping and for functional manufacturing. The course highlights the advances that additive manufacturing makes upon traditional manufacturing techniques.

ME 5365 Properties and Processing of Electronic Materials (3) Study of the design and applications of conventional and advanced electronic materials ranging from typical Si and electroceramics to complex oxides and conducting polymers. Fundamental issues controlling their properties, processing, and reliability are addressed. In addition, a variety of thin film deposition techniques such as dc/rf magnetron sputtering, thermal/e-beam evaporation, and chemical vapor deposition are covered.

# ME 5382 Mechanical Behavior of Polymers and Polymeric Composites (3)

Pre-requisite(s): ME 3320 or equivalent and ME 3322 or equivalent Elastic and viscoelastic behavior of polymers and polymeric composites, predicting long-term behavior from short-term tests using time-temperature-superposition; relating chemical structure to mechanical properties for thermosets, thermoplastics, and semi-crystalline plastics; relating processing to mechanical properties; and predicting stiffness and strength from properties of fibers and polymeric matrices.

# ME 5383 Deformation and Fracture in Metals (3)

Pre-requisite(s): ME 3320 or equivalent and ME 3322 or equivalent This course introduces students to advanced theories of deformation and fracture that limit lifetimes in service of components and structures made of metals and alloys. Fracture mechanics are introduced as a tool in the life prediction of components that develop cracks before catastrophic failure. Plastic collapse, creep, fatigue, and environmental stress cracking are covered. Failure analysis methodology and tools are introduced and illustrated.

# ME 5385 Failure Analysis: Theory and Practice (3)

Pre-requisite(s): ME 3322

Introduction to basic failure theories and their application to the analysis of component and system failure in service; methodology of systematic failure analysis of actual service failures; introduction to tools used in failure analysis; case studies used extensively for teaching and assignments.

# ME 5396 Special Topics in Engineering (3)

Cross-listed as BME 5396, EGR 5396, ELC 5396 See EGR 5396 for course information.

# ME 5397 Special Topics in Engineering (3)

Cross-listed as BME 5397, EGR 5397, ELC 5397 See EGR 5397 for course information.

#### ME 5V99 Master's Thesis (1-6)

Students completing a master's program with a thesis must complete six hours of ME 5V99.

#### ME 6V97 Engineering Research (1-12)

Pre-requisite(s): Consent of student's supervisory graduate committee and admission to doctoral candidacy

Doctoral students may enroll in up to 12 semester hours of engineering research hours prior to taking the preliminary exam and being accepted into candidacy for the doctoral degree. These engineering research hours will count toward the degree.

### ME 6V99 Dissertation (1-6)

Required of all doctoral candidates. In no case will fewer than 12 semester hours be accepted for a dissertation. Students may not enroll for doctoral research hours until they have been officially accepted into candidacy for the doctoral degree. After initial enrollment, students must register for at least one semester hour of doctoral research every term thereafter (summer term excluded).

# Military General Surgery (MGS)

# MGS 6210 Surgical Basic Principles (2)

Historical surgical perspective on basic cellular, physiological principles of surgery.

#### MGS 6211 Perioperative Management (2)

Basis of surgery is evaluation of the risk factors of a potential surgical patient. Perioperative management focus on the risk, benefits, and infections of surgery and the complications of anesthesia.

# MGS 6212 The Abdomen (2)

The anatomy and physiological process that occur within the abdomen (abdominal wall, umbilicus, peritoneum, mesenteries, omentum, retroperitoneum, hernia, acute abdomen, and acute gastrointestinal hemorrhage).

# MGS 6213 Surgery of the Esophagus and Stomach (2)

Anatomy, physiology, disease process, and surgical treatments of the stomach and esophagus, along with hiatal hernia and gastroesophageal reflux disease.

# MGS 6214 Surgery of the Small Intestine, Large Intestine, Rectum, and Anus (2)

Surgical anatomy, pathophysiology, disease process, and treatment of the small intestine, large intestine, rectum, and anus.

# MGS 6215 Surgery of the Liver and Biliary Tract (2)

Anatomy, pathophysiology, disease process, and treatments of liver and biliary tract.

# MGS 6216 Surgery of the Pancreas and Spleen (2)

Anatomy, pathophysiology, disease process, and treatments of the pancreas and spleen.

# MGS 6217 Endocrine Surgery (2)

Anatomy, pathophysiology, disease process, and treatment of thyroid, parathyroid, adrenal glands, and endocrine of the pancreas.

# MGS 6218 Breast Surgery (2)

Anatomy, pathophysiology, disease process, and treatment of the breast.

#### MGS 6219 Neurosurgery, Pediatric Surgery (2)

Anatomy, pathophysiology, disease process, and treatments in neurosurgery and pediatric surgery.

#### MGS 6220 Burn/Critical Care Surgery (2)

Anatomy, pathophysiology, disease process, and treatments associated with burn surgery.

# MGS 6221 Trauma Surgery (2)

Anatomy, pathophysiology, disease process, and treatment related to trauma surgery.

# MGS 6222 Surgical Critical Care (2)

Anatomy, pathophysiology, disease process, and treatments related to surgical critical care.

# MGS 6223 Surgery on the Lung, Chest Wall, and Mediastinum (2)

Anatomy, pathophysiology, disease process, and treatments related to the lung, chest wall, and mediastinum.

# MGS 6224 Surgical Oncology (2)

Anatomy, pathophysiology, disease process, and treatment of surgical oncology.

# MGS 6225 Vascular Surgery (2)

Anatomy, pathophysiology, disease process, and treatment in vascular surgery.

# MGS 6330 Orientation to General Surgery (3)

This rotation emphasizes the clinical skills of providing care and treatment to patients with surgical disease.

# MGS 6331 General Surgery Team A (Colorectal, General Surgery, Pediatric) (3)

Rotation is a block emphasizing colorectal and pediatric surgery cases presenting to the General Surgery Department.

### MGS 6332 General Surgery Team B (Minimally Invasive Surgery) (3)

This is a clinical block of instruction emphasizing minimally invasive surgery for general surgery and bariatric cases.

# MGS 6333 General Surgery Team C (General Surgery) (3)

This rotation is a block emphasizing minimally invasive and bariatric cases presenting to the General Surgery Department.

# MGS 6334 General Surgery (WH) (3)

This rotation is a block emphasizing general surgery cases presenting to the General Surgery Department.

# MGS 6335 General Surgery Team D (Surgical Oncology) (3)

This rotation is a block emphasizing surgical oncology cases presenting to the General Surgery Department.

# MGS 6336 Interventional Radiology (3)

This rotation is a block emphasizing interventional radiology cases presenting to the Interventional Radiology Department.

# MGS 6337 Trauma Surgery (Rotation 1) (3)

This rotation is a block emphasizing trauma surgery cases presenting to the Trauma Surgery Department.

# MGS 6338 Vascular Surgery (3)

This rotation is a block emphasizing vascular surgery cases presenting to the Vascular Surgery Department.

# MGS 6339 Burn Surgery/Burn Critical Care (Rotation 2) (3)

This rotation is a block emphasizing burn surgery/burn critical care cases presenting to the Burn Surgery Department.

# MGS 6340 Plastic Surgery (3)

This rotation is a block emphasizing plastic surgery cases presenting to the Plastic Surgery Department.

# MGS 6341 Neurosurgery (3)

This rotation is a block emphasizing neurosurgical cases presenting to Neurosurgery Department.

#### MGS 6342 Trauma Surgery (Rotation 2) (3)

This rotation is a block emphasizing trauma surgery cases presenting to the Trauma Surgery Department.

# MGS 6343 Trauma/Surgical Intensive Care Unit (Rotation 1) (3)

This rotation is a block emphasizing trauma/surgery intensive care unit (STICU) cases presenting to the Trauma Surgery Department.

# MGS 6344 Trauma/Surgical Intensive Care Unit (STICU) (Rotation 2) (3)

This rotation is a clinical block emphasizing trauma/surgical intensive care unit (STICU) cases that present to the Trauma Surgery Department.

# MGS 6345 Burn Surgery/Burn Critical Care (Rotation 1) (3)

This rotation is a clinical block emphasizing burn surgery/burn critical care cases presenting to the Burn Surgery Department.

# MGS 6346 Elective Concentration (3)

This rotation is a block emphasizing an elective concentration rotation for the resident.

#### MGS 6347 Clinical Research (3)

In this course, students develop the knowledge to plan, organize, conduct, and submit for publication an approved Investigative Review Board (IRB) research project.

# MGS 6348 Neurosurgery (Rotation 2) (3)

Clinical Rotation in Neurosurgery evaluating Neurosurgery trauma, performing Neurosurgery procedures, interventions, and treatment.

# MGS 6349 Orthopaedic Trauma (Rotation 1) (3)

Clinical Rotation evaluating orthopaedic trauma and performing orthopaedic trauma procedures, interventions, and treatments.

# MGS 6350 Orthopaedic Trauma (Rotation 2) (3)

Clinical rotation evaluating orthopaedic trauma and performing orthopaedic trauma procedures, interventions, and treatments.

# **Military Occupational Therapy (MOT)**

# MOT 6116 Management of Combat and Operational Stress Control Residency (1)

Pre-requisite(s): Acceptance into the US Army Doctor of Science Program in Occupational Therapy

Provides application and integration of knowledge and skills attained in the in-depth study of combat operational stress control and the role of the occupational therapist; experienced through forty-eight hours of assessment and intervention in the soldier's work environment.

# MOT 6128 Clinical Management in Army Occupational Therapy (1)

Pre-requisite(s): Successful completion of DScOT third semester courses

The Clinical Management in Army Occupational Therapy course exposes the student to the supervisory and leadership responsibilities and demands faced by clinical managers in military occupational therapy clinics. The student examines and analyzes evidence-based solutions for routine and complex managerial problems and demands in order to develop a clinical management plan.

# MOT 6132 Burn and Trauma Rehabilitation Residency (1)

Pre-requisite(s): Successful completion of DScOT semesters I II courses Applies the didactic learning from the evaluation and intervention course to the clinic setting with emphasis on assessment and intervention to minimizing devastating and lifelong disability and maximizing patient functional outcome.

# MOT 6212 Behavioral Health Residency (2)

Pre-requisite(s): Acceptance into the US Army Doctor of Science Program in Occupational Therapy

Focuses on the application of evidence-based concepts and skills for selection of occupational therapy behavioral health assessment and intervention in the clinical and operational setting and promotes the role of the occupational therapist as a member of the behavioral health team.

# MOT 6213 Evaluation and Intervention: Post-Traumatic Stress & Polytrauma (2)

Pre-requisite(s): Acceptance into the US Army Doctor of Science Program in Occupational Therapy

Emphasizes the evaluation and intervention of individuals experiencing polytrauma including post-traumatic stress disorder, traumatic brain injury, and amputation. Focuses on evaluating the occupational function, cognitive and social performance, behavioral health, amputee rehabilitation, post-surgical limb care, prosthetic selection, assistive technology associated with prosthetics, prosthetic fitting, training, and management including interventions for ADL and IADL, cognitive retraining, communication and interpersonal skills, and community reintegration. Students explore the current literature to evaluate and apply current evidence-based assessment tools and intervention methods that support occupational performance, role competence, and adaptation, quality of life, and client satisfaction outcomes incorporating to utilize for patients experiencing polytrauma. Students learn to integrate evidence-based knowledge to strengthen and/or modify occupational therapy assessment and intervention. Focuses on the special rehabilitation needs of patients with polytrauma in all settings, who enter both the military and civilian health care environments. Methods of instruction include lecture, discussion, readings, and case study analysis.

# MOT 6214 Post-Traumatic Stress & Polytrauma Residency (2)

Pre-requisite(s): Acceptance into the US Army Doctor of Science Program in Occupational Therapy

The Post-Traumatic Stress Disorder (PTSD) & Polytrauma Residency focuses on the evaluation and intervention of individuals experiencing post-traumatic stress disorder and polytrauma, including TBI and amputation. This course integrates behavioral science knowledge as it relates to occupational therapy and occupational performance in the clinical setting, assessment and intervention including cognitive (i.e., executive functioning), ADL & IADL performance, and social/behavioral performance, and is monitored by a DScOT faculty. Students analyze evidenced-based assessments and intervention methods for their ability to address patient needs and quarantee positive outcomes in the polytrauma patient's occupational performance, role competence, adaptation, quality of life, and/or client satisfaction in the clinical, community, and work settings. The course allows for the clinical application of knowledge gained in the behavioral health and posttraumatic stress, the TBI, and the amputee course that focuses on the evaluation and intervention of polytrauma clients. This residency includes 80 hours of clinical assessment and intervention in a clinical environment. Areas of patient assessment and intervention include cognitive (i.e., executive functioning), ADL & IADL performance, and social/behavioral performance. The student learns to integrate evidencebased knowledge to strengthen and/or modify occupational therapy assessments and interventions of the Soldier, retiree, and family member diagnosed with a Traumatic Brain Injury.

# MOT 6221 UE Occupation Centered Intervention & Cultural Awareness Residency (2)

Prerquisite(s): Successful completion of DScOT second semester courses. This course applies the concepts learned from the UE Occupation Centered & Cultural Awareness Intervention course to UE beneficiaries. The application of these concepts allows the student to explore, apply, and integrate the dimensions of occupation, occupation centered practice, critical reasoning, and culture during clinical intervention.

#### MOT 6223 Critical Research Appraisal (2)

This course introduces the student to critical appraisal of all forms of research in rehabilitation. The purpose of this course is to further develop the student's competence in carrying out and evaluating research. The student develops the skills necessary to find, critically evaluate, and synthesize the available research in order to answer individual research questions and/or create a line of research questions.

# MOT 6228 UE Occupation Centered Intervention & Cultural Awareness (2)

Pre-requisite(s): Successful completion of DScOT first semester Courses Focuses on the ability to explore, apply, and integrate the dimensions of occupation, occupation-centered practice, client-centered practice, reflection, critical reasoning, and culture and their application in the areas of assessment, intervention, and outcome measurement in occupational therapy services for upper extremity beneficiaries.

### MOT 6242 Upper Extremity Conditions Residency (2)

Pre-requisite(s): Successful completion of DScOT semesters I, II, and III courses

This is a four-month residency emphasizing the clinical evaluation and treatment of the upper-extremity injured or diseased patient presenting to occupational therapy, under the mentorship of an orthopedic surgeon.

# MOT 6243 Advanced Hand Surgery Outcomes for Occupational Therapists (2)

Pre-requisite(s): Successful completion of DScOT semesters I, II, and III courses

This overview of the hand surgeon's model of evaluation and treatment of musculoskeletal disease and trauma and review of outcomes in advanced surgical techniques requires the development and application of a post-operative occupational therapy protocol for treatment of a specialized case.

### MOT 6311 Evaluation and Intervention: Behavioral Health (3)

Pre-requisite(s): Acceptance into the US Army Doctor of Science Program in Occupational Therapy

Emphasizes the advanced evaluation and treatment of behavioral health conditions, introducing the student to the behavioral health knowledge base and evidence-based practice to integrate critical reasoning and evidence-based practice into occupational therapy behavioral health treatment settings.

# MOT 6315 Management of Combat and Operational Stress Control (3)

Pre-requisite(s): Acceptance into the US Army Doctor of Science Program in Occupational Therapy

An in-depth study of combat operational stress control and the role of the occupational therapist, experienced through forty-nine hours of didactics and four days of field training in a simulated combat environment. Includes a four-day field training exercise and a twenty-one-hour project and practicum.

#### MOT 6317 Qualitative Methods (3)

Pre-requisite(s): Acceptance into the US Army Doctor of Science Program in Occupational Therapy

Examines qualitative research methods used to enhance evidencebased research for occupational therapists through the analysis of published healthcare research and the employment of qualitative research methodology. Student will also select an appropriate qualitative research method to collect and analyze data associated with his or her research project.

# MOT 6319 Essentials of Evidence-Based Practice and Clinical Research (3)

Pre-requisite(s): Acceptance into the US Army Doctor of Science Program in Occupational Therapy

Includes the integration of best evidence and best practice concepts as well as advanced concepts, techniques, and technologies used for the scientific inquiry of applied clinical research. Emphasis is placed on refining research designs for individual projects and preparing a research protocol for approval by the Institutional Review Board.

# MOT 6322 Differential Diagnosis in Occupational Therapy (3)

Pre-requisite(s): Successful completion of DScOT first semester Courses Poses discussion of the medical history and occupational therapy examination findings of somatic and visceral disorders with reference to their influence on occupational therapy upper extremity musculoskeletal diagnosis, evaluation, and intervention.

# MOT 6325 Evaluation and Intervention: Ergonomics (3)

Pre-requisite(s): Successful completion of DScOT first semester Courses Includes the development of advanced clinical skills in evaluating environments, tools, and equipment for ergonomic intervention. Presents the study of work and ergonomic principles to enhance occupational performance. Includes health promotion and wellness, environmental health engineering, and health risk management.

# MOT 6327 Quantitative Methods (3)

Pre-requisite(s): Successful completion of DScOT first semester Courses Includes in-depth discussion and analysis of the research process including measurement theory, experimental design, hypothesis construction and testing, critical evaluation of research, rating scales, sampling, indices of validity and reliability, statistical analysis, and the appropriate use and interpretation of statistical tests.

# MOT 6328 Quantitative Methods II (3)

Pre-requisite(s): MOT 6327 Continuation of Quantitative Methods I in which students continue their work with a Faculty Research Advisory Committee on a clinically relevant research project Specific goals during this course include the completion of a literature review and the beginning of pilot testing and data collection. Also included is material in statistics, which develops the student's use of

advanced statistical analysis techniques, including the use of SPSS.

# MOT 6331 Evaluation and Intervention: Burn and Trauma Rehabilitation (3)

Pre-requisite(s): Successful completion of DScOT semesters I II courses Focuses on the evaluation and intervention involved in burn and trauma rehabilitation as it relates to occupational therapy practice. Special emphasis is placed upon assessment and intervention to minimize devastating and lifelong disability and maximize patient functional outcomes both in the clinic and operational environment.

# MOT 6336 Aspects of Pharmacology, Complementary and Alternative Medicine, & Nutrition in Occupational Therapy (3)

Pre-requisite(s): Successful completion of DScOT semesters I II courses Focuses on the role and relationship of nutrition, pharmacology, and complementary/alternative medicine in the treatment of specific populations by occupational therapists where emphasis is placed on medical indications and potential effects of drugs and alternative/complementary medicine as well as nutrition on occupational therapy interventions.

#### MOT 6337 Field Research for Occupational Therapy (3)

Pre-requisite(s): Successful completion of DScOT semesters I II courses Builds upon the student's familiarity with the occupational therapy knowledge base, quantitative and qualitative research methodologies, and critical/clinical reasoning and includes the development of a clinical research question, completion of a comprehensive literature review/ systematic review, and writing a research protocol that includes informed consent documents.

# MOT 6341 Evaluation and Treatment of Upper-Extremity Conditions (3) Pre-requisite(s): Successful completion of DScOT semesters I, II, and III courses

Emphasizes the evaluation, diagnosing, and treatment of the upperextremity injuries or diseases of patients presented to occupational therapy. Provides fifty-six hours of didactics including all diagnoses related to upper-extremity trauma and disease. Includes pathophysiology of wounds, arthritides, radiology, laboratory tests, and pharmacology.

# MOT 6344 Advanced Professional Paper Product (3)

Pre-requisite(s): Successful completion of DScOT semesters I, II, and III courses

Focuses on the completion of the manuscript from the clinical research project with the goal of publication in a peer-reviewed journal and presentation to the occupational therapy community.

# MOT 6441 Upper Extremity & Behavioral Health Conditions Residency (4)

A four-month course emphasizing the clinical evaluation and treatment of the Upper Extremity injured or diseased patient presenting to occupational therapy with comorbid Behavioral Health symptoms of kinesiophobia, pain catastrophizing, and post-traumatic stress from injury. 160 hours of clinical assessment and intervention including all diagnoses related to BH & UE.

# **Museum Studies (MST)**

### MST 5199 Non-Thesis Degree Completion (1)

To fulfill requirements for non-thesis master's students who need to complete final degree requirements other than coursework during their last semester. This may include such things as a comprehensive examination, oral examination, or foreign language requirement. Students are required to be registered during the semester they graduate.

# MST 5301 The Museum: History, Philosophy, Prospects (3)

This course provides an overview of museums, the museum profession, and the field of museum studies. Students learn the defining characteristics of different types of museums, how museums have evolved over time, how museums have dealt with subjects that have proven controversial, and recent trends towards greater inclusiveness and respect for other cultures.

#### MST 5304 Collections Management (3)

Pre-requisite(s): Credit or concurrent enrollment in MST 5301 This course examines the intellectual, physical, legal, financial, social, and ethical challenges of preserving and providing access to museum collections. Through lectures, readings, hands-on activities, and field trips, students explore the theory and practice of collections management and learn how to utilize available resources for collections care in any museum regardless of size.

#### MST 5309 Museum Education (3)

Pre-requisite(s): Credit or concurrent enrollment in MST 5301 This course examines both directed/formal education and free-choice/informal learning opportunities in museums and how we effectively serve learners of all ages and learning style. An in-depth consideration of the development of programs includes assessment and needs of target audiences, presentation techniques and content selection and organization, logistics, and implementation and evaluation.

#### MST 5311 Issues in Museum Administration (3)

Pre-requisite(s): Credit or concurrent enrollment in MST 5301 This course provides an overview of museum and non-profit administration issues, including governance, working with a board of trustees, budgetary planning, fund raising, accreditation by the American Association of Museums, and museum ethics. Students gain practical experience in writing grants and preparing a conference-level presentation covering a museum administration issue.

### MST 5312 Outreach and Community Relations (3)

Pre-requisite(s): MST 5301

This course provides hands-on experience in researching, creating, and executing strategies in advertising, public relations, marketing, and development/fundraising. Students explore the development of outreach techniques in the United States and create a finished marketing plan for a museum/archive/library partner institution as part of the course.

# MST 5318 Ethical Issues in Museums, Libraries, and Archives (3) Investigation of ethical issues in cultural institutions. All aspects of professional practice in museums, libraries, and archives are examined, including collections management, personnel, and interpretation and exhibition. Cultural patrimony and the repatriation of collections such as Nazi-looted art or Native American collections are also examined.

### MST 5323 Historic Preservation (3)

This course examines historic preservation, and the parallel development of historic house museums and historic villages, from early patriotic and volunteer-based efforts such as Mount Vernon, to the development of preservation professionals at Colonial Williamsburg and elsewhere, and ultimately to modern preservation organizations and preservation law as found at the national, state, and local levels.

# MST 5324 Archival Arrangement and Description (3)

Introduction to the intellectual and physical organization of archival materials in all media and formats. Students examine the core principles and standards underlying the processes of arrangement and description and their application to different types of archival collections. Students put archival theory into practice, processing a small archival collection.

# MST 5326 Archival Technology and Digital Collections Management (3) Pre-requisite(s): MST 5324

This course examines the evolution of technology in archives and museums with an emphasis on digitization, cataloging, metadata generation, and creation of contextual information. Students create a new, online-accessible digital collection derived from archival resources using technology resources of the Riley Digitization Center in the University Library system.

#### MST 5327 Special Topics in Museum Studies (3)

Specialized topics in Museum Studies not covered in other museum studies courses. This course may be repeated twice under different topics for a maximum of 9 hours.

#### MST 5328 American Material Culture (3)

The material remains of the past provide a window into American social, cultural, and political life. Students will learn to interpret museum objects through study of the artifacts themselves through related artifacts and landscapes, and through other forms of evidence that expose their deeper meanings, including probate inventories, letters, diaries, newspapers, books, and maps.

#### MST 5329 American Decorative Arts (3)

This course examines American decorative arts from the seventeenth century to the mid-twentieth century, particularly furniture, silver, ceramics, glass, textiles, prints, and paintings, with emphasis on the perspectives of maker and user, the influence of Britain and other cultures, differences among regions, differences between urban and rural, and differences over time.

### MST 5331 Design and Management of Museum Exhibits (3)

This course considers the public dimension of exhibit design, the needs and interests of varied audiences, different learning styles, and the best interpretive approaches. Classroom theory is combined with in-the-field application, with a particular focus on exhibit planning, teamwork and management, design elements, lighting, interpretation of objects and ideas, labels, and evaluation.

### MST 5333 Issues in Preservation Management (3)

Pre-requisite(s): MST 5304

Examines the causes of deterioration in museum collections, protective storage, collections care in use, disaster preparedness, policy development, needs assessment, funding, and preservation planning.

### MST 5340 Capstone: Major Issues in Museum Administration (3)

This course is designed for the fourth semester graduate student who will soon be entering the museum job market or pursuing further graduate study. It provides students, whether they intend to pursue careers as administrators, curators, or educators with a review of the most important museum "basics," emphasizing current and projected trends in the field.

# MST 5V40 Independent Studies in Museums (1-4)

Pre-requisite(s): Approval of the professor and student's graduate committee required

Students identify an individual research project related to the student's area of interest. Students formulate project objectives, develop working parameters, construct a project design, and demonstrate an ability to complete a project and describe project results. Maximum six semester hours.

# MST 5V97 Master's Internship (3-6)

Supervised professional work in a museum or related organization, with six semester hours required for graduation.

# MST 5V98 Professional Project (1-6)

Supervised preparation of a professional project, with six semester hours required for graduation.

# MST 5V99 Thesis (1-6)

Supervised preparation of the master's thesis, with six semester hours required for graduation.

# Music (MUS)

#### MUS 5010 Academic Division Colloquium (0)

This course is oriented to the development and practical application of the student's critical thinking process through lectures and presentations related to the academic field in music.

# MUS 5011 Graduate Music History Review (0)

A remedial course for incoming graduate students who show multiple deficiencies on the Music History diagnostic exam. All major periods will be covered, but the course will focus on the specific needs of the students enrolled. Students who pass this course may enroll for any graduate level music history course.

### MUS 5037 Church Music Forum (0)

Graduate enrollment in Church Music Forum (see MUS 1007, Undergraduate catalog, for description).

# MUS 50R1 Special Recital (0)

Pre-requisite(s): Consent of instructor

Presentation of a recital over and above degree requirements.

### MUS 5100 Music Theory Review (1)

Review of part writing, ear training, analysis, and keyboard procedures. Required of graduate students who show deficiencies in theory on the graduate entrance test. Does not count as degree credit.

### MUS 5113 Internship in Music (1)

This course provides graduate music students an opportunity to apply what they have been learning in the classroom to practice in their field of study.

### MUS 5114 Internship in Piano Teaching I (1)

Pre-requisite(s): Consent of instructor

Teaching of children's classes, college classes, adult leisure piano, or private lessons under faculty supervision. Designed to broaden the student's prior teaching experience.

# MUS 5115 Internship in Piano Teaching II (1)

Pre-requisite(s): MUS 5114 and consent of instructor Continuation of MUS 5114.

# MUS 5136 APC Collaborative Keyboard (1)

Course only available for students in the Advanced Performance Certificate in piano or organ.

# MUS 5138 Sight-reading for Pianists (1)

This course focuses on the development of sight-reading skills for pianists. In-class activities and regular practice assignments help the student identify weaknesses and improve sight-reading abilities. Intended for piano majors.

# MUS 5141 Performance Document (1)

Writing of a document to accompany the M.M. student's recital. The document will give historical background and analysis of works performed. Document must be completed before recital is given.

# MUS 5150 Seminar in Vocal Performance and Pedagogy (1)

Practicum for advanced vocalists in aspects of the singer's art, involving performance and research. May be repeated once for credit.

### MUS 5151 Advanced Vocal Coaching (1)

Pre-requisite(s): Consent of instructor

Advanced individual study of solo vocal repertoire for graduate students preparing for recitals, contests, and auditions. May be repeated for a maximum of six total credit hours, but only four credit hours may be used to satisfy degree requirements.

#### MUS 5152 Graduate Diction Review (1)

A comprehensive review of the lyric diction of Italian, German and French. Required of graduate students who demonstrate deficiencies in diction on the graduate entrance examination. Does not count as degree credit.

### MUS 5153 Graduate Russian Lyric Diction (1)

Special laboratory course for voice students dealing with pronunciation and enunciation as applied to singing in Russian. Additional emphasis is placed on Russian song and aria repertoire.

### MUS 5170 Graduate Recital (1)

Graduate recitals consist of repertoire learned while the student is in residence for the degree. Guidelines for approval and presentation of these programs are available from the Graduate Program Director.

# MUS 5171 Conducting Performance Project (1)

Practical application of conducting skills in a full-scale concert.

# MUS 5199 Non-Thesis Degree Completion (1)

To fulfill requirements for non-thesis master's students who need to complete final degree requirements other than coursework during their last semester. This may include such things as a comprehensive examination, oral examination, or foreign language requirement. Students are required to be registered during the semester they graduate.

MUS 51B1 Graduate Trumpet (1)

MUS 51B2 Graduate Horn (1)

MUS 51B3 Graduate Trombone (1)

MUS 51B4 Graduate Baritone (1)

MUS 51B5 Graduate Tuba (1)

MUS 51H1 Graduate Applied Harp (1)

MUS 51K1 Graduate Piano (1)

MUS 51K2 Graduate Organ (1)

MUS 51K3 Graduate Applied Harpsichord (1)

MUS 51K4 Graduate Carillon (1)

MUS 51K5 Applied Piano: Collaborative (1)

MUS 51P1 Graduate Percussion (1)

MUS 51S1 Graduate Violin (1)

MUS 51S2 Graduate Viola (1)

MUS 51S3 Graduate Cello (1)

MUS 51S4 Graduate Bass (1)

MUS 51S5 Harp (1)

MUS 51V1 Graduate Voice (1)

MUS 51W1 Graduate Flute (1)

MUS 51W2 Graduate Oboe (1)

MUS 51W3 Graduate Clarinet (1)

MUS 51W4 Graduate Bassoon (1)

MUS 51W5 Graduate Saxophone (1)

# MUS 5201 Pedagogy of Theory (2)

Survey of materials and methods for teaching theory at high school and college levels.

# MUS 5207 Graduate Composition I (2)

Master's level instruction in composition in twentieth-century idioms through the creation of original pieces, supplemented by analysis and pertinent auxiliary exercises.

# MUS 5208 Graduate Composition II (2)

Continuation of MUS 5207.

# MUS 5209 Graduation Composition III (2)

Continuation of MUS 5208.

### MUS 5251 Advanced Choral Conducting (2)

Advanced study of choral conducting techniques and related preparation and score study, specifically applied to choral ensembles.

# MUS 5252 Seminar in Vocal Collaboration I (2)

Pre-requisite(s): Undergraduate major/concentration in piano or equivalent background

Standard opera and concert repertoire for the voice in a two-semester sequence: Semester I–Opera Arias, Italian Canzone, English Songs. Graduate pianists collaborate with fellow student vocalists in master class performances. Critique and coaching by director of collaborative piano.

### MUS 5253 Seminar in Vocal Accompanying II (2)

Pre-requisite(s): MUS 5252

Continuation of MUS 5252. Semester II: German Lied, French Chanson and Melodie.

#### MUS 5254 Seminar in Instrumental Collaboration I (2)

Pre-requisite(s): MUS 5252 and 5253

A two-semester survey of the standard sonata repertoire for the following instruments: Semester I - strings. Graduate students in piano will collaborate with fellow student instrumentalists in master class performances. Critique and coaching by director of collaborative piano.

# MUS 5255 Seminar in Instrumental Collaboration II (2)

Pre-requisite(s): Undergraduate major/concentration in piano or equivalent

Continuation of MUS 5254. Semester II: woodwinds, brasses, and percussion.

# MUS 5265 Orchestral Conducting Performance Practicum (2)

Pre-requisite(s): MUS 4260

To provide the student a regularly mentored rehearsal and performing experience.

# MUS 5266 Choral Conducting Performance Practicum (2)

Pre-requisite(s): MUS 4261

To provide the student a regularly mentored rehearsal and performing experience.

# MUS 5267 Band Conducting Performance Practicum (2)

Pre-requisite(s): MUS 4262

To provide the student a regularly mentored rehearsal and performing experience.

### MUS 5270 Applied Conducting (2)

Pre-requisite(s): Enrollment restricted to graduate conducting majors and church music majors with conducting emphasis

Private conducting lessons. This course is open only to conducting majors on the M.M. degree and will normally be taken in semesters when the student is not registered for the concentration conducting course or Performance Practicum.

### MUS 5299 Vocal Pedagogy (2)

A study of the singing voice including anatomy and physiology of the larynx and the breathing mechanism, phonation, basic acoustics, vocal registers, vocal pathologies, and hygiene, among other related subjects.

MUS 52B1 Graduate Trumpet (2)

MUS 52B2 Graduate Horn (2)

MUS 52B3 Graduate Trombone (2)

MUS 52B4 Graduate Baritone (2)

MUS 52B5 Graduate Tuba (2)

MUS 52H1 Graduate Harp (2)

MUS 52K1 Graduate Piano (2)

MUS 52K2 Graduate Organ (2)

MUS 52K3 Graduate Harpsichord (2)

MUS 52P1 Graduate Percussion (2)

MUS 52S1 Graduate Violin (2)

MUS 52S2 Graduate Viola (2)

MUS 52S3 Graduate Cello (2)

MUS 52S4 Graduate Bass (2)

MUS 52S5 Harp (2)

MUS 52V1 Graduate Voice (2)

MUS 52W1 Graduate Flute (2)

MUS 52W2 Graduate Oboe (2)

MUS 52W3 Graduate Clarinet (2)

MUS 52W4 Graduate Bassoon (2)

MUS 52W5 Graduate Saxophone (2)

# MUS 5301 History of Music Theory (3)

Theorists and theoretical tracts from the ancient Greeks to the present day.

# MUS 5302 Analytical Techniques (3)

Pre-requisite(s): Passing score on the Graduate Music Theory Diagnostic Exam, or passing grade in MUS 5100

A survey and application of analytical approaches and techniques currently employed in the study of music. Required of all graduate students.

# MUS 5319 Foundations and Trends in Ethnomusicology (3)

Pre-requisite(s): MUS 5320

History, philosophies, and issues concerning the discipline of ethnomusicology as illustrated in significant selected literature. Advanced research procedures are applied to a selected topic.

# MUS 5320 Research Methods and Bibliography (3)

Resources, research procedures, and writing techniques for music scholarship.

# MUS 5321 Seminar in The Middle Ages (3)

Pre-requisite(s): MUS 5320

Selected topics on medieval music in historical and cultural context.

# MUS 5322 Seminar in The Renaissance Era (3)

Pre-requisite(s): MUS 5320

Selected topics on renaissance music in historical and cultural context.

# MUS 5323 Seminar in The Baroque Era (3)

Pre-requisite(s): MUS 5320

Selected topics on baroque music in historical and cultural context.

# MUS 5325 Seminar in The Classic Era (3)

Pre-requisite(s): MUS 5320

Selected topics on music of the long eighteenth century in historical and cultural context.

# MUS 5326 Seminar in The Romantic Era (3)

Pre-requisite(s): MUS 5320

Selected topics on music of the long nineteenth century in historical and cultural context.

#### MUS 5328 Seminar in Music of World War I to the Present (3)

Pre-requisite(s): MUS 5320 Selected topics on music from WWI to the present in historical and cultural context

#### MUS 5329 Foundations and Trends in Musicology (3)

Pre-requisite(s): MUS 5320

History, philosophies, and issues concerning the discipline of musicology as illustrated in significant selected literature. Advanced research procedures are applied to a selected topic.

### MUS 5337 Choral Literature (3)

Choral literature representing style periods from the late renaissance to the present with emphasis upon large works.

# MUS 5342 Choral/Vocal Music Ministry (3)

Cross-listed as THEO 7394

A study of adult choirs, youth choirs, and children's choirs, ensembles and soloists including rehearsal techniques, spiritual growth, promotion, management, vocal development, materials, and their role in the life of the church and community.

# MUS 5345 Leadership for Ministry (3)

Cross-listed as LEAD 7301

A survey of leadership theory and practice including biblical, historical, and contemporary perspectives.

#### MUS 5346 Leading the Church's Song (3)

A study of the practical leadership of music in worship in a variety of contexts, helping to develop the understanding and functional skill set required to design and lead worship effectively.

#### MUS 5347 Liturgical Traditions (3)

MUS 5347 Liturgical Traditions A study of the principal historic worship forms of the Eastern and Western churches with emphasis on the continuity of worship practices, the forms and roles of music used in the liturgical orders, and the relationship of the traditions to Christian worship in the present day.

### MUS 5349 Perspectives on Worship (3)

A study of music in worship from biblical times to the present, focusing on the varied perspectives of worship theologians. Includes worship planning and leadership and evaluation of present uses, trends, and emphases.

### MUS 5350 Resources for Worship (3)

A survey of resources for faithful and creative planning of corporate Christian worship services, in diverse settings and traditions.

#### MUS 5351 Sacred Choral Literature (3)

Cross-listed as THEO 7395

A study of choral literature from various genres and periods of music history that is appropriate for use in Christian worship.

# MUS 5352 Worship in Global Perspective (3)

This course provides master's students with a broad overview of Christian worship practices around the world, including how practitioners from different regions and traditions approach the relationship between worship, music, and culture.

# MUS 5353 Congregational Song in Global Perspective (3)

This course explores aspects of the composition, performance, and reception of Christian congregational song around the world.

# MUS 5354 The Business of Ministry (3)

Cross-listed as LEAD 7302

This course enables church leaders to study church business concepts and basic administrative practices in order to enhance the vision and ministry of the church.

#### MUS 5355 Analysis Seminar (3)

Advanced topics in music theory and analysis. The course may be repeated once for credit..

# MUS 5356 Choral/Vocal Music in the Church (3)

A seminar on various types of church vocal ensembles, including rehearsal techniques, organization, recruitment, and the use of these groups in enhancing the spiritual life of the church and community.

#### MUS 5357 Congregational Song in Historical Perspective (3)

Pre-requisite(s): MUS 4374 In-depth study of selected areas in the history and literature of Christian hymnody

MUS 54B1 Graduate Trumpet (4)

MUS 54B2 Graduate Horn (4)

MUS 54B3 Graduate Trombone (4)

MUS 54B4 Graduate Baritone (4)

MUS 54B5 Graduate Tuba (4)

MUS 54H1 Graduate Harp (4)

MUS 54K1 Graduate Piano (4)

MUS 54K2 Graduate Organ (4)

MUS 54P1 Graduate Percussion (4)

MUS 54S1 Graduate Violin (4)

MUS 54S2 Graduate Viola (4)

MUS 54S3 Graduate Cello (4)

MUS 54S4 Graduate Bass (4)

MUS 54S5 Harp (4)

MUS 54V1 Graduate Voice (4)

MUS 54W1 Graduate Flute (4)

MUS 54W2 Graduate Oboe (4)

MUS 54W3 Graduate Clarinet (4)

MUS 54W4 Graduate Bassoon (4)

MUS 54W5 Graduate Saxophone (4)

#### MUS 5V16 Research Project in Piano Pedagogy (1-2)

The research project in piano pedagogy is a terminal requirement for the master's degree in Piano Pedagogy and Performance. Students enroll in two hours of MUS 5V16 during the final two semesters of their graduate program with either 1 hour credit for 2 semesters or 2 hours' credit for 1 semester. While enrolled in the course, they conduct research, write their research project, and meet regularly with their supervisor.

# MUS 5V89 Special Research Problems (1-3)

Pre-requisite(s): MUS 5320

Advanced individual research project in the student's major field of interest under the guidance of a member of the Graduate Faculty. Subject of research to be agreed upon by the student and professor and approved by the Graduate Program Director prior to registration. The area of study may not duplicate directly any material pertaining to the thesis, nor may the study substitute for any required course. Course may be repeated, with different topic(s), for a maximum total of twelve hours.

MUS 5V99 Thesis (1-3)

hrs.

MUS 5VK1 Graduate Piano (1-5)

MUS 5VK2 Graduate Organ (1-5)

# MUS 6199 Non-Dissertation Degree Completion (1)

Pre-requisite(s): Completion of all coursework for the degree
To fulfill requirements for non-dissertation doctoral students who need
to complete final degree requirements other than coursework during their
last semester, such as the final oral exam, or who must register for at
least one hour during the semester they graduate.

### MUS 6341 Introduction to Research in Church Music (3)

An introduction to the methodology of scholarly research and writing in church music. A study of bibliography, research technology, and methods of research, specifically as they relate to church music.

### MUS 6342 Research in Congregational Song (3)

A study of the history, philosophy, theology, and practice of congregational song. Major components of this study will include reliance upon primary sources as well as study of key persons.

### MUS 6343 Research in Church Music History (3)

An in-depth study of selected significant developments, movements, and people in the history of church music. Congregational song, which is covered in Music 6342, will be largely excluded from this course.

# MUS 6344 Research in Church Music Philosophy (3)

An exploration and evaluation of the goals, motivations, responsibilities, and parameters affecting the use of music in congregational settings. Congregational song, which is covered in Music 6342, will be largely excluded from this course.

# MUS 6345 Research in Christian Worship (3)

Provides in-depth study of the history, philosophy, and practice of liturgy and worship, with particular attention to the role of music.

### MUS 6346 Research in Music Ministry (3)

A seminar that addresses various components of music ministry and their history, relationship to traditional pastoral ministry, relationship to current worship practices, and future in the life and work of local congregations.

### MUS 6347 Research in Sacred Choral Music (3)

A study of the repertory, functions, and performing forces of sacred choral music in various genres and periods of musical and church history.

# MUS 6348 Professional Development and Teaching Practicum (3)

A course that assists church music professionals in gaining information and skills for launching effective careers in teaching or church music ministry. Subjects may include securing a position, understanding higher education, various approaches to research resulting in publication and scholarly presentation, curriculum and course design, teaching effectiveness, and college music administration.

# MUS 6V07 Composition (2-3)

Doctoral level instruction in composition in modern idioms through the creation of original musical works, analysis, and auxiliary exercises. Normally taken for three credit hours; taken for two credit hours when enrolled concurrently in MUS 5170 Graduate Recital or with advisor approval.

# MUS 6V10 Doctoral Performance Document (1-3)

Writing of a document to accompany the D.M.A. student's second recital. The document will give historical background and analysis of works performed. Document must be completed before recital is given.

# MUS 6V99 Dissertation (1-9)

Research, data analysis, writing, and oral/written defense of an approved doctoral dissertation. At least nine hours of MUS 6V99 are required.

# **Music Ensemble (MUEN)**

#### MUEN 5001 Orchestra (0)

Graduate enrollment in Orchestra (see MUEN 1101, Undergraduate catalog, for description).

# MUEN 5002 A Cappella Choir (0)

Graduate enrollment in A Cappella Choir (see MUEN 1100, Undergraduate catalog, for description).

### MUEN 5003 Symphonic Band (0)

Graduate enrollment in Symphonic Band (see MUEN 1103, Undergraduate catalog, for description).

#### MUEN 5004 Opera (0)

Graduate enrollment in Opera (see MUEN 1104, Undergraduate Catalog, for description).

# MUEN 5005 Chamber Singers (0)

Graduate enrollment in Chamber Singers (see MUS 1105, Undergraduate catalog, for description).

### MUEN 5006 Jazz Ensemble (0)

Graduate enrollment in Jazz Ensemble (see MUEN 1106, Undergraduate catalog, for description).

# MUEN 5007 Concert Choir (0)

Graduate enrollment in Concert Choir (see MUEN 1107, Undergraduate catalog, for description).

#### MUEN 5008 Wind Ensemble (0)

Graduate enrollment in Wind Ensemble (see MUEN 1108, Undergraduate catalog, for description).

### MUEN 5009 Concert Band (0)

Graduate enrollment in Concert Band (see MUEN 1109, Undergraduate catalog, for description).

# MUEN 5020 Early Music Ensemble (0)

Graduate enrollment in Early Music Ensembler (see MUEN 1120, Undergraduate catalog, for description).

### MUEN 5021 Baylor University Men's Choir (0)

Graduate enrollment in Baylor University Men's Choir (see MUEN 1121, Undergraduate catalog, for description).

# MUEN 5022 Small Vocal Ensemble (0)

Graduate enrollment in Small Vocal Ensemble (see MUEN 1122, Undergraduate catalog, for description).

### MUEN 5024 Women's Choir (0)

Graduate enrollment in Women's Choir (see MUEN 1124, Undergraduate catalog, for description).

# MUEN 5025 Baylor Bronze (0)

Graduate enrollment in Baylor Bronze (see MUEN 1125, Undergraduate catalog, for description).

#### MUEN 5026 Baylor Handbell Ensemble (0)

Ensemble

# MUEN 5030 Chamber Music (Strings) (0)

Graduate enrollment in string chamber music (see MUEN 1130, Undergraduate catalog, for description).

# MUEN 5031 Chamber Music (Brass) (0)

Graduate enrollment in brass chamber music (see MUEN 1131, Undergraduate catalog, for description).

# MUEN 5032 Chamber Music (Woodwinds) (0)

Graduate enrollment in woodwind chamber music (see MUEN 1132, Undergraduate catalog, for description).

#### MUEN 5033 Chamber Music (Percussion) (0)

Graduate enrollment in percussion chamber music (see MUEN 1133, Undergraduate catalog, for description).

#### MUEN 5035 Piano Ensemble (0)

Graduate enrollment in piano ensember (see MUEN 1135, Undergraduate catalog, for description).

#### MUEN 5036 Studio Accompanying (0)

Graduate enrollment in collaborative piano (see MUEN 1136, Undergraduate Catalog, for description).

# MUEN 5050 Ensemble (0)

Participation in various ensembles of the School of Music.

# MUEN 5093 Baylor Belle Voce - Advanced Womens Ensemble (0)

Pre-requisite(s): By Audition/Consent of Instructor (Conductor) Baylor Bella Voce is a highly select treble choir open primarily to music majors (voice majors, choral music education majors and church music majors) at the graduate level

# MUEN 5130 Chamber Music (Strings) (1)

Graduate enrollment in chamber music with strings for students in the Advanced performers Certificate program in piano or organ.

### MUEN 5131 Chamber Music (Brass) (1)

Graduate enrollment in chamber music with brass for students in the Advanced Performers Certificate program in piano or organ.

# MUEN 5132 Chamber Music (Woodwinds) (1)

Graduate enrollment in chamber music with woodwinds for students in the Advanced Performers Certificate program in piano or organ.

# MUEN 5133 Chamber Music (Percussion) (1)

Graduate enrollment in chamber music with percussion for students in the Advanced Performers Certificate program in piano or organ.

# MUEN 5136 Advanced Performers Certificate Collaborative Keyboard (1)

Course is only available for students in the Advanced Performers Certificate in piano or organ.

# **Neuroscience (NSC)**

# NSC 5100 Psychology and Neuroscience Seminar (1)

Please see course description for PSY 5100.

# NSC 5199 Non-Thesis Degree Completion (1)

To fulfill requirements for non-thesis master's students who need to complete final degree requirements other than coursework during their last semester. This may include such things as a comprehensive examination, oral examination, or foreign language requirement. Students are required to be registered during the semester they graduate.

# NSC 5311 Seminar in Memory and Cognition (3)

Cross-listed as PSY 5311

Pre-requisite(s): Psychology Ph

D or Psy.D. students only, or consent of instructor. An advanced treatment of the study of human cognition. Topics to include memory, language, problem solving, intelligence, and thinking.

#### NSC 5318 Perception (3)

Cross-listed as PSY 5318

Research and theory on sensory and perceptual processes.

### NSC 5319 Clinical Neuroscience - Advanced (3)

Cross-listed as PSY 5319

Pre-requisite(s): PSY 4430 or 5330, or consent of instructor Neuroanatomy, brain structure-function relationships, experimental neuropsychology, and biological theories of abnormal behavior.

### NSC 5320 Learning and Behavior Theory (3)

Cross-listed as PSY 5320

Pre-requisite(s): Consent of instructor

Methods of theories of learning and Behavioral Analysis.

# NSC 5330 Neuropharmacology (3)

Cross-listed as PSY 5330

Pre-requisite(s): Psychology Ph.D or Psy.D. students only, or consent of instructor

Introduction to pharmacology with emphasis on drugs that act on the nervous system. Absorption distribution and biotransformation of drugs. Drug receptors, site and mechanism of action.

# NSC 5360 Neurophysiology (3)

Cross-listed as PSY 5360

Pre-requisite(s): Consent of instructor

Electrical and chemical behavior of neurons--excitable membranes, cell physiology of nerve cells, neural conduction, transmission, reception and integration.

# NSC 5430 Neuroanatomy (4)

Cross-listed as PSY 5430

Pre-requisite(s): Consent of instructor

Selected topics in physiological psychology, including laboratory.

### NSC 5V04 Graduate Research (1-3)

Pre-requisite(s): Consent of instructor

For research credit prior to admission to candidacy for an advanced degree. May be repeated for credit.

#### NSC 5V06 Individual Studies in Neuroscience (1-3)

Individual study in areas of neuroscience not covered by formal courses. Meetings are by appointment, and the course may be repeated for credit.

#### NSC 5V51 Supervised Teaching (1-3)

Cross-listed as PSY 5V51

Advanced study in an area of psychology not covered by formal courses. Course may be repeated with a different topic of study.

# NSC 5V71 Selected Topics in Neuroscience (1-9)

Advanced study in an area of neuroscience not covered by formal courses. Course may be repeated with a different topic of study.

# NSC 5V96 Research Methods in Neuroscience (1-12)

Selected laboratory methods and techniques in experimental psychology.

#### NSC 5V99 Thesis (1-3)

Research, data analysis, writing, and oral defense of an approved master's thesis. At least three hours are required.

# NSC 6V10 Prospectus Research (1-6)

Pre-requisite(s): Completion of required course work for PhD degree Supervised research for developing and writing a Dissertation Prospectus Proposal that will be subject to review and approval by the Supervisory Committee.

# NSC 6V99 Dissertation (1-12)

Supervised research for the doctoral dissertation. These hours may be distributed over more than one semester.

# **Nursing (MNUR)**

# MNUR 6132 Clinical Concepts of Nurse Anesthesia Practice I (1)

Students are introduced to the perioperative management of a patient in a simulated operating room environment utilizing both high fidelity technology and human models. Students learn the necessary equipment and processes utilized by the nurse anesthetist to administer a variety of anesthetics. The Student Registered Nurse Anesthetist will also learn basic and advanced airway management, operating room set up, and patient positioning.

### MNUR 6136 Clinical Concepts for Nurse Anesthesia II (1)

Pre-requisite(s): MNUR 6132

This course builds on the concepts and knowledge delivered in Clinical Concepts for Nurse Anesthesia I. Students continue the advancement of patient perioperative management in a simulated operating room environment. Students learn the induction sequence for general anesthesia, develop an anesthetic plan of care for complex patients, and conduct preoperative assessments.

### MNUR 6233 Regional Anesthesia and Ultrasound Science I (2)

This course teaches the Student Registered Nurse Anesthetist to apply knowledge of anatomy, physiology, pharmacology, and technology (e.g. ultrasound and nerve stimulation) to the administration and maintenance of regional anesthesia, patient assessment and management, and other related procedures under ultrasound guidance (e.g. central line placement, arterial line placement, intravenous access).

# MNUR 6237 Regional Anesthesia and Ultrasound Science 2 (2)

Pre-requisite(s): MNUR 6233

The RAUS II course builds upon the knowledge and skills gained in RAUS I. Students continue to apply their developing knowledge of anatomy, physiology, pharmacology, and technology (e.g. ultrasound and nerve stimulation) to the administration and maintenance of regional anesthesia, patient assessment and management, and other related procedures under ultrasound guidance. The course also introduces additional peripheral and trunk nerve blocks.

# MNUR 6321 Health Care Informatics (3)

This course focuses on the methods and tools of information handling relative to selected aspects of anesthesia nursing, health care, education, and research. The process of organizing, collecting, processing, and analyzing of data is explored as a basis for clinical decision-making.

# MNUR 6323 Research Evidence into Practice (3)

This course prepares the student to undertake systematic investigations of clinical questions from research, evidence-based practice, and quality improvement perspectives. Students examine strategies and tools for retrieval, compilation, critical appraisal, and application of empirical, reflective, and practice-based information to improve quality of care and health outcomes for populations of interest.

# MNUR 6341 Professional Aspects of Nursing Anesthesia (3)

This course provides the Student Registered Nurse Anesthetist with skills to engage in the professional aspects of anesthesia nursing. It prepares the SRNA for the legal ramifications concerning the administration of anesthesia and examines current issues affecting the nurse anesthetist. Also, it outlines historical aspects of the anesthesia practice and shows the progression of the profession through litigation and scope of practice impacts.

#### MNUR 6342 Healthcare Management (3)

This course provides a foundation in health care economics, financial and marketing functions, and responsibilities of health care leaders. Specific emphasis is placed on the decision-making process involved in assuring fiscal responsibility and management of the exchange process between an organization and the public by which both parties satisfy their needs and wants.

### MNUR 6343 Health Policy and Law (3)

This course emphasizes the relationships among health policy, law, and nursing practice at both the clinical and systems level. Develops skills to analyze historical, political, ethical, and legal ramifications of current health policies. Advocacy approaches for policy changes from local to global arenas are examined. Students formulate and critique policy proposals that impact access, cost, and healthcare quality.

# MNUR 6344 Leadership in Advanced Practice Nursing (3)

This course provides a solid foundation for providing education in leadership through in-depth analysis of the principles of transformational leadership and organizational behavior pertinent to health care systems. Prepares nursing leaders to use critical thinking skills and evidence-based decision making to affect systems and organizational change.

# MNUR 6371 DNP Scholarly Project 1 (3)

This course focuses on the integration of knowledge and skills for a student to design and develop a health care field project in the area of interest. Building on the student's existing clinical competencies, the field project provides an opportunity to gain greater depth and breadth as a leader in direct patient care, health care administration and system development, and nursing education.

# MNUR 6372 DNP Scholarly Project 2 (3)

Pre-requisite(s): MNUR 6371

This course provides the student the opportunity to design and evaluate quality improvement methodologies to promote safe, timely, effective, efficient, equitable, and patient-centered care. In addition, the student examines and applies relevant findings to develop guidelines and improve practice in the clinical environment.

### MNUR 6373 DNP Scholarly Project 3 (3)

Pre-requisite(s): MNUR 6371, 6372

The culmination of this course is the completion of all steps of the DNP Project to include dissemination through a poster offering, defense, and submission to a peer-reviewed journal of the Chair's selection. The result will be the enhancement of patient care or facility functioning through student research, deductive reasoning, and dissemination of evidence-based information.

# MNUR 6411 Biochemistry for Nurse Anesthesia (4)

This course integrates nursing science with basic biophysical sciences to prepare nurses for the highest level of advanced nursing practice in the specialty of anesthesia. The course provides students an opportunity to correlate biochemical principles as they apply to the physiology, pathophysiology, and pharmacology of anesthesia nursing.

# MNUR 6415 Advanced Pharmacology for Nurse Anesthesia 2 (4) Pre-requisite(s): MNUR 6513

This course is the second Pharmacology course to foster advanced understanding of human pathophysiology and therapeutics as a basis for contemporary anesthesia practice. This course complements the biochemistry, physiology, pharmacology, and fundamentals of nurse anesthesia practice courses and emphasizes disease processes and mechanism of action underlying the therapeutic and adverse effects of pharmacotherapies.

#### MNUR 6422 Research and Statistical Methods (4)

This course emphasizes the research process and statistics used in scientific inquiry. Research designs, theoretical frameworks, and methods are incorporated. The students have the opportunity to analyze data using SPSS. Threats to internal and external validity are examined. Emphasis is on critical appraisal of research and evidence as a basis for translation into practice.

### MNUR 6434 Advanced Health Assessment and Diagnosis (4)

This course integrates nursing science with biophysical sciences and anesthesia standards of practice to prepare nurses for the highest level of advanced nursing practice in the specialty of anesthesia. This course provides students with the opportunity to refine their assessment skills with an emphasis on assessing for the presence and quantifying the severity of problems with significant implications for anesthesia care.

# MNUR 6513 Advanced Pharmacology for Nurse Anesthesia I (5)

Students learn to apply in-depth knowledge in pharmacology of inhalation agents, IV induction agents, agents that cause smooth muscle relaxation, drugs unique to the administration of anesthesia, agents that affect the autonomic nervous system, neuromuscular blockading agents, and specifically pharmacology of agents that affect the pain pathways. Principles of drug interactions and implications specific to anesthesia.

# MNUR 6514 Advanced Anatomy and Physiology II for Nurse Anesthesia (5)

Pre-requisite(s): MNUR 6612

This course fosters advanced understanding of human cardiovascular, respiratory, and endocrine anatomy and physiology as a basis for contemporary anesthesia practice. This course complements the biochemistry, pharmacology, and fundamentals of nurse anesthesia practice courses and emphasizes homeostatic mechanisms in the resting patient.

# MNUR 6612 Advanced Anatomy and Physiology I for Nurse Anesthesia (6)

This course fosters advanced understanding of human cellular and neuromuscular anatomy and physiology and regional anatomy as a basis for contemporary anesthesia practice. This course complements the biochemistry, pharmacology, and fundamentals of nurse anesthesia practice courses and emphasizes homeostatic mechanisms in the resting patient as well as gross anatomy to support airway management and regional anesthesia.

# MNUR 6631 Introductory Concepts and Principles of Anesthesia Practice (6)

This course provides the principles governing the practice of anesthesia, including Physical Principles, Anesthesia Gas Delivery Systems, Preparation for Administration of Anesthesia, and Intraoperative Management of Anesthesia. Students are introduced to the formulation of anesthetic care plans, anesthetic techniques, prevention of patient complications, procedures and equipment requirements, monitoring, record keeping, and care of equipment.

# MNUR 6735 Anesthesia for Surgical Procedures and Special Populations (7)

Pre-requisite(s): MNUR 6631 This course provides additional advanced principles governing the practice of anesthesia, regional anesthesia, anesthesia for special patient populations (e.g. pediatrics and obstetrics) and those with various pathophysiologic presentations (e.g. cardiovascular, pulmonary, endocrine, and neuromuscular), anesthesia for trauma, and anesthesia in austere conditions

#### MNUR 6V01 Clinical Practicum and Role Development 1 (11)

Pre-requisite(s): MNUR 6344 This course provides the clinical foundational experiences for nursing anesthesia students
Students are required to assess a patient's history, physiology, and social interactions in planning his or her anesthesia care. This course prepares the student as a healthcare leader with skills necessary to safely plan, administer, and manage anesthesia care for patients undergoing surgical and/or other procedures.

# MNUR 6V02 Clinical Practicum and Role Development 2 (11)

Pre-requisite(s): MNUR 6V01

Clinical Practicum and Role Development 1 is a prerequisite for this course. Students are assigned more complex clinical cases both in and outside the OR. This course prepares the student to be a healthcare leader able to independently plan, administer, and manage anesthesia care for patients undergoing surgical and/or other procedures. Clinical specialty out-rotations begin during the course.

# MNUR 6V03 Clinical Practicum and Role Development 3 (11)

Pre-requisite(s): MNUR 6V02

Clinical Practicum and Role Development 2 is a prerequisite for this course. The focus for students in this course is increasingly complex clinical experiences with reduced levels of supervision. Students in this course are expected to precept incoming junior students, interns, medical students, prospective USAGPAN applicants, and/or new graduate nurses.

# MNUR 6V04 Clinical Practicum and Role Development 4 (11)

Pre-requisite(s): MNUR 6V01, 6V02, and 6V03

Clinical Practicum and Role Development 3 is a prerequisite for this course. Students focus on clinical experiences in which they will provide independent, competent anesthesia care to all types of patients and all types of cases. Students are expected to formulate comprehensive care plans quickly for all patient category patients. Students must achieve a score of 425 on the SEE exam to pass this course.

# **Nursing (NUR)**

# NUR 5100 Advanced Pediatric Health Care Management I:

Practicum (1)

Co-requisite(s): NUR 5305

Pre-requisite(s): NUR 5332, 5354 and 5351

This course provides the student with clinical experiences within the scope of the Pediatric Nurse Practitioner centered on normal growth and development, health promotion, health maintenance and management of children from birth to adolescence, within the context of the family.

### NUR 5103 Diagnostic Reasoning (1)

Pre-requisite(s): NUR 5351, 5332, and 5354

This course includes the application of pathologic disease mechanisms and advanced pharmacotherapy to refine and integrate techniques of history taking, physical examination, and diagnostics. Development of differential diagnoses that are prioritized based on clinical assessment, critical thinking, and clinical reasoning to narrow down the appropriate final diagnoses for adult and gerontology populations.

# NUR 5140 Professional Issues and the History of Nurse-Midwifery (1)

The role and image of, and misconceptions about, the nurse-midwife in contemporary society are explored. The historic, political, social, and economic bases of nurse-midwifery practice are examined. Students become familiar with the role of the American College of Nurse-Midwives (ACNM) in professional practice and resources available through the ACNM, as well as regulations and legislation which guide, interpret, and provide a legal and ethical base for future nurse-midwifery practice.

# NUR 5152 Special Studies in Advanced Health Assessment/Promotion/ Disease Prevention (1)

Pre-requisite(s): NUR 5350 or concurrent enrollment and successful completion of a graduate level 3-hour Advanced Assessment course from an accredited university/college or approval of faculty

Physical, psychosocial, spiritual, and cultural assessments across the lifespan are studied in order for the individual to have a current and complete knowledge in the area. Advanced health assessment skills and clinical diagnostic techniques combined with disease prevention concepts and techniques are taught and applied.

# NUR 5153 Advanced Practice FNP I & NM I Primary Care Practicum (1)

Co-requisite(s): NUR 5255

Pre-requisite(s): NUR 5332, 5351, and 5354

This practicum course allows the Advanced Practice Nurse student to apply principles of evaluation and management of common acute and chronic illnesses seen in primary care practice.

Fee: \$50.

# NUR 5158 Nurse Midwifery I: Primary Care for Women Practicum (1)

Co-requisite(s): NUR 5254

Pre-requisite(s): NUR 5332, 5351, and 5354 and NUR 5254 or concurrent enrollment

This practicum course allows the Advanced Practice Nurse Midwifery student to apply principles of evaluation and management of common acute and chronic illnesses seen in primary care practice for Women.

# NUR 5163 Advanced Assessment and Diagnostics of the Newborn/Infant Practicum (1)

Co-requisite(s): NUR 5262

Pre-requisite(s): NUR 5332 and 5361

The student gains clinical experience in assessing the health care needs of healthy and at-risk newborns/infants and their families. This practicum focuses on assessment and evaluation of care to families with at-risk factors during all phases of the childbearing process (antenatal, intra-partum, post-partum, and neonatal periods) with an emphasis on obtaining and interpreting comprehensive assessment and diagnostic data.

# NUR 5199 Non-Thesis Degree Completion (1)

To fulfill requirements for non-thesis master's students who need to complete final degree requirements other than coursework during their last semester. This may include such things as a comprehensive examination, oral examination, or foreign language requirement. Students are required to be registered during the semester they graduate.

# NUR 5200 Advanced Pediatric Health Care Management II: Practicum (2)

Co-requisite(s): NUR 5307

Pre-requisite(s): NUR 5332, 5354, and 5351

This course provides the student with clinical experiences within the scope of the Pediatric Nurse Practitioner centered on health promotion, health maintenance and management of acute and common health issues of children from birth to adolescence, within the context of the family.

# NUR 5201 Introduction to Statistical Methods (2)

Introduction to Statistical Methods is a non-calculus-based statistics course that provides an overview of descriptive and inferential methods including a brief introduction to probability distributions and how they are used for estimation and comparison of two or more groups. This course addresses how to analyze both continuous and categorical data with examples containing simulated data.

# NUR 5202 Genomics in a Pediatric Setting (2)

This course focuses on the relationships among genes, environment, and health in the care of children and adolescents. Emphasis is placed on concepts of prevention and treatment effectiveness within cultural care contexts. Ethical and legal considerations are also addressed.

### NUR 5207 Role of the Nurse Educator (2)

Philosophy and history of nursing education and expectations of nursing faculty. Current issues, trends and research in nursing education are examined. Emphasis is on socialization into the role of the nurse educator as a faculty member, including rights and responsibilities in academia.

# NUR 5209 Theoretical Concepts for the Advanced Practice Registered Nurse (2)

Pre-requisite(s): Basic statistics course and Graduate level standing This course focuses on critical analyses of theory and its applicability for advanced practice nursing. The course explores the theoretical foundation of advanced practice nursing through analysis of selected nursing models, theories, and constructs as well as selected theories, models, and concepts from complementary sciences that enhance nursing as a scientific discipline. The relationship between theory and research and their application to advanced practice is explored.

# NUR 5211 Servant Leadership and Advanced Practice Nursing (2)

Pre-requisite(s): Graduate-level standing

Application of nursing leadership theories and models in the delivery of advanced practice nursing care to culturally diverse clients (individuals, families, organizations, and global society).

# NUR 5213 Adult-Gerontology Acute Care NP Management I: Practicum (2)

Co-requisite(s): NUR 5333

Pre-requisite(s): NUR 5351, NUR 5332, and NUR 5354

This course focuses on the management of adults and older adults with common health problems encountered across multiple acute/chronic care settings. Emphasis is on providing students with an opportunity to utilize theoretical knowledge and clinical decision-making skills in the management of care of adult-gerontology patients experiencing common health problems using evidence-based practice.

# NUR 5242 Nurse-Midwifery II A: Women's Health (2)

Pre-requisite(s): NUR 5452

This course provides students with the knowledge and skills necessary to promote health, maintain wellness, and manage common health problems in pregnant and postpartum women in the ambulatory setting

# NUR 5243 Nurse-Midwifery II B: Women's Health and gynecologic care (2)

Pre-requisite(s): NUR 5452

This course provides students with the knowledge and skills necessary to promote health, maintain wellness, and care for women presenting for family planning and well women visits and women seeking care for gynecologic problems and conditions across the lifespan.

# NUR 5248 Nurse-Midwifery IV: High Risk Family and Abnormal Gyn Practicum (2)

Pre-requisite(s): NUR 5346 or concurrent enrollment

A clinical course that focuses on the application of the nurse-midwifery process and care of mothers and newborns with complications and individuals with abnormal gynecologic conditions. The goal of this course is to further develop the role and responsibilities of the health care provider in caring for women and families who have a high-risk situation or condition or individuals with abnormal gynecologic conditions.

### NUR 5250 Advanced Family Practice III/Low Resource Clinical (2)

Co-requisite(s): NUR 5357

Pre-requisite(s): NUR 5255 and 5153

Approval by faculty and program coordinator required. The clinical site will be arranged by student with help from faculty and must be with a qualified preceptor that meets approval of program coordinator and Baylor University policy and procedure. Continuing evaluation and management of common acute and chronic illnesses seen by the family nurse practitioner with a particular focus on medically underserved/low-resource individuals. A systematic approach to the treatment options across the lifespan is studied for all body systems. Students are given the opportunity to progress toward increasing independence in clinical practice.

# NUR 5251 Family Nurse Practitioner International Clinical (2)

Co-requisite(s):

Pre-requisite(s): NUR 5356 and 5359

An International Clinical Course that will require cross-cultural independent clinical management of acute and chronic illnesses across the life span and focus on health-related issues relevant to a targeted international population, with the majority of the clinical hours to be completed in an international location.

#### NUR 5254 Nurse-Midwifery I: Primary Care of Women (2)

Co-requisite(s): NUR 5158

Pre-requisite(s): NUR 5354, NUR 5332 and NUR 5351

This course focuses on refinement of diagnostic reasoning strategies and the knowledge and skills necessary to promote health, prevent illness, and manage common primary care needs of individuals from puberty through menopause. Health promotion/wellness models and biopsychosocial and cultural theories are integrated throughout the course as role development of the Certified Nurse-Midwife within the community is explored.

# NUR 5255 FNP I: Primary Care for FNP APRNS (2)

Co-requisite(s): NUR 5153

Pre-requisite(s): NUR 5332, 5351, and 5354

This course is the refinement of diagnostic reasoning strategies needed for primary care management of patients with commonly occurring health problems. This course provides students the knowledge and skills necessary to promote health, prevent illness, and manage the common primary care needs of individuals of all ages, from a variety of cultural, ethnic, and racial backgrounds, while providing the conceptual basis for advanced nursing practice. Health promotion/wellness models and biopsychosocial and cultural theories are integrated throughout the course. Role development of the Advanced Practice Nurse within the community is explored.

# NUR 5262 Advanced Assessment and Diagnostics of the Newborn/Infant (2)

Co-requisite(s): NUR 5163

Pre-requisite(s): NUR 5332 and 5361

The course focuses on the knowledge and skills necessary to perform comprehensive physical assessments and interpretation of diagnostic data on newborns/infants and their families. Systematic data collection, diagnostic reason, and clinical problem solving for a variety of newborns and infants is emphasized. Content focuses on perinatal assessment, fetal assessment, gestational age assessment, neurobehavioral and developmental assessments of newborns and infants, and the use of diagnostics such as laboratory studies, radiographs, instrumentation, and monitoring devices.

#### NUR 5266 Advanced Neonatal Nursing Practicum I (2)

Co-requisite(s):

Pre-requisite(s): NUR 5163 and 5262

This practicum focuses on developing clinical competency in the advanced practice role and in the pathophysiology, stabilization, management, and evaluation of the stable and acute high-risk newborn/infant. By using the processes of expert practice, consultation, collaboration, administration, and research utilization, the student provides advanced nursing management to a caseload of hospitalized newborns/infants and their families. Students are given the opportunity to progress toward increasing independence in clinical practice.

#### NUR 5274 Women's Health Across the Lifespan (2)

Using a developmental, socio-political context, this didactic course prepares the advanced practice nurse to provide comprehensive care to women from adolescence throughout the lifespan, with an emphasis on reproductive-gynecologic health. Principles of health promotion, disease prevention, assessment, and management of common primary health issues of women are presented.

#### NUR 5280 Health Informatics and Innovations in Technology (2)

This course focuses on obtaining, analyzing, and using information to make patient-centered decisions and solve problems. The integration of current emerging technologies into practice to enhance care outcomes is explored.

#### NUR 5283 Ethics and Cultural Competence for Nurse Leaders (2)

This course exposes students to the principles and practice of ethics in healthcare settings. The ethical challenges of providing quality care in today's economy are explored. This course also defines culture and cultural competence and examines ways that cultures intersect with health issues and human resource management.

#### NUR 5287 Professionalism of the Exemplary Nurse Leader (2)

This course examines key elements for becoming an exemplary professional nurse leader. Strategies for success, such as certification, collaboration, mentoring, maintaining competency, and advocacy are discussed. Reflective practices and developing life-long learning skills to enhance career trajectory are explored.

### NUR 5290 Innovative and Global Nursing Practice/Missions (2)

This course explores the provision of health care to medically underserved or vulnerable populations locally, nationally, and internationally. The challenges of the global environment that require creative and innovative changes in health care are examined. Accountable Care Organizations, Non-Governmental Organizations, and models of care delivery and coordination are explored. Cross-cultural mission clinics or outreach activities to meet the needs of vulnerable populations are analyzed.

# NUR 5300 Primary Care Pediatric Management for the Family Nurse Practitioner (3)

This course prepares the FNP student to address primary health care needs of pediatric patients from birth to adolescence. The course focuses on normal growth and development, health maintenance, and promotion of wellness, as well as management of acute and chronic illness in children.

#### NUR 5302 Principles of Learning, Instruction, and Evaluation (3)

Pre-requisite(s): Admission to the Graduate Program
Theories of teaching, learning and evaluation related to nursing education
and practice. Focus is on selected teaching and evaluation techniques,
and their implementation in nursing courses within a curricular
framework.

### NUR 5304 Curriculum Development in Nursing (3)

Pre-requisite(s): Admission to the Graduate Program
Analysis and application of theory and principles for planning, developing, and evaluating nursing curricula. Focus is on conceptual frameworks, which determine course organization and course content in both didactic and clinical settings.

# NUR 5305 Advanced Pediatric Health Care Management I: Primary Care (3)

Co-requisite(s): NUR 5100

Pre-requisite(s): NUR 5354, 5332, and 5351

This course prepares the Pediatric Nurse Practitioner student to address the primary health care needs of children and adolescents, utilizing patient-and-family centered care. The course focuses on normal growth and development, health promotion, health maintenance, and management of children from birth to adolescence, within the context of the family.

# NUR 5307 Advanced Pediatric Health Care Management II: Acute & Common Health Care Needs (3)

Co-requisite(s): NUR 5200

Pre-requisite(s): NUR 5232, 5233, 5351, and 5452 This course prepares the Pediatric Nurse Practitioner (PNP) student to address the acute and common health care needs of children and adolescents, utilizing patient-and-family centered care

The course focuses on health promotion, health maintenance, and management of acute and common health issues of children from birth to adolescence, within the context of the family.

# NUR 5308 Advanced Pediatric Health Care Management III: Chronic Health Needs (3)

Co-requisite(s): NUR 5309

Pre-requisite(s): NUR 5232, 5233, 5351, and 5452 This course prepares the Pediatric Nurse Practitioner student to identify and address potential and actual chronic health needs of children and adolescents The course focuses on providing direct care, teaching, and management to children and adolescents, and their families, experiencing complex, lifelong processes.

# NUR 5309 Advanced Pediatric Health Care Management III: Practicum (3)

Co-requisite(s): NUR 5308

Pre-requisite(s): NUR 5232, 5233, 5452, and 5351 This course provides the student with clinical experiences within the scope of the Pediatric Nurse Practitioner centered on health promotion, health maintenance and management of chronic health issues of children from birth to adolescence, within the context of the family

#### NUR 5311 Gerontology Considerations for APRN Practice (3)

This course focuses on healthcare of geriatric patients by identifying normal and abnormal changes of the aging body and psychosocial and physiological processes related to aging with particular attention to environmental, circumstantial, and behavioral concerns including cognition, perception of health, performance status, falls, malnutrition, pharmacotherapy, substance abuse, elder neglect and abuse, and end of life issues.

# NUR 5312 The Roles and Business of the Advanced Practice Registered Nurse (APRN) (3)

This course covers the analysis and synthesis of the multidimensional role and responsibilities of advanced practice nursing. This includes the financial role and responsibilities of Advanced Practice Registered Nurses. The business aspects of being an Advanced Practice Registered Nurse are included.

#### NUR 5314 Scientific Inquiry (3)

Pre-requisite(s): NUR 5201

The course emphasizes the critical appraisal and synthesis of evidence derived from quantitative and qualitative research and the relevance of the evidence to advanced practice. Skills necessary for evidence-based practice are developed.

#### NUR 5332 Advanced Human Pathophysiology (3)

This course focuses on developing an advanced knowledge base of pathophysiology across the lifespan for advanced nursing practice. The principles and laws that govern the life-process, well-being, and optimal function of human beings, sick or well, will be explored. Attention will be given to etiology, pathogenesis, and developmental and environmental influences, as well as clinical manifestations of major health problems.

# NUR 5333 Adult Gerontology Acute Care NP Management I: Common Problems (3)

Pre-requisite(s): NUR 5351, 5332, and 5354

Assess, diagnose, and coordinate high-quality, cost-effective, evidence-based, patient-centered care of adults with common health problems via health promotion and disease prevention and management. Engage in collaboration with the interprofessional team and assess the impact of social, spiritual, psychological, and economic determinants of health which are essential roles of the AGACNP to provide care that is diverse, inclusive, and equitable.

# NUR 5334 Adult Gerontology Acute Care NP Management II: Chronic Problems (3)

Co-requisite(s): NUR 5214

Pre-requisite(s): NUR 5351, 5332, 5354, 5333, and 5213

Focuses on high-quality, cost-effective, evidence-based, patient-centered care by formulating diagnoses, treatment, and evaluation plans to improve outcomes of adults with chronic health problems in a variety of settings. Interprofessional team collaboration and evaluation of the impact of social, spiritual, psychological, and economic determinants of health are essential for the AGACNP to provide care that is diverse, inclusive, and equitable.

# NUR 5344 Nurse-Midwifery III: Care of the Childbearing Family (3) Pre-requisite(s): NUR 5V43

This course focuses on application of the Nurse-Midwifery process for the care of healthy women during childbirth and the newborn.

# NUR 5345 Nurse-Midwifery III: Care of the Childbearing Family Practicum (3)

Pre-requisite(s): NUR 5344 or concurrent enrollment

This course provides students with clinical experiences to demonstrate synthesis, integration, and translation of the knowledge and skills necessary to promote health, maintain wellness, and manage common health problems in women experiencing childbirth and in the care of the essentially normal newborn. Use of information technology in the clinical practice setting is expected. The nurse-midwifery management model of care is used in the provision of care to clients.

# NUR 5346 Nurse-Midwifery IV: High Risk Family and Abnormal Gynecologic Conditions (3)

Pre-requisite(s): NUR 5345

This course focuses on further development of application of the nurse-midwifery process to the care of mothers and newborns with complications and to individuals with abnormal gynecologic conditions. Knowledge of high-risk pregnancies and abnormal gynecologic conditions is continuously acquired and builds upon previous and concurrent courses.

#### NUR 5349 Global Healthcare and Missions (3)

This course prepares students to evaluate the health needs for culturally, ethnically, geographically, and economically diverse populations; develop solutions; and evaluate outcomes from a Christian perspective. The course focuses on cultural analysis and key global health concepts to enhance the effectiveness of the Advanced Practice Registered Nurse working in global and/or cross-cultural health care settings.

#### NUR 5351 Advanced Pharmacology (3)

Use of advanced pharmacotherapeutics, herbals and dietary supplements for primary health care across the life span. Drugs used to treat and manage common illnesses and conditions are the focus of the course. Content includes indication, selection, adverse effects, and client education related to use of prescribed medication. Clinical decision-making and review of laws governing prescriptive authority are also emphasized.

# NUR 5354 Advanced Health Assessment/Promotion/Disease Prevention (3)

Pre-requisite(s): NUR 5332 or concurrent enrollment Expansion of prerequisite knowledge of health and physical assessment. Comprehensive physical, psychosocial, spiritual, and cultural assessments across the life span are studied. Health promotion and disease prevention during life transitions are incorporated into the assessment process. Advanced health assessment and disease prevention concepts and techniques are practiced. Beginning technical skills used in clinical diagnostic procedures are included.

#### NUR 5356 Family Health Care Management II (3)

Co-requisite(s): NUR 5359

Pre-requisite(s): NUR 5153 and 5255

Prepares the Family Nurse Practitioner to assume continued responsibility for evaluation and management of acute common and increasingly complex problems in primary care. A systematic approach to current evidence-based assessment, diagnostic testing, diagnosis, and management options is taught from a primary care perspective. Indications for collaboration, consultation, and/or referral to other health care providers are emphasized as an integral part of the nurse practitioner's role.

### NUR 5357 Family Health Care Management III (3)

Pre-requisite(s): NUR 5356 and 5359

Prepares the family nurse practitioner student to continue to assume responsibility for evaluation and management of patients in primary care. A focus of the course is to prepare the student to assess and manage selected complex health problems. Indications for collaboration, consultation, and/or referral to other health care providers are emphasized as an integral part of the nurse practitioner's role.

### NUR 5359 Advanced Family Practice II (3)

Co-requisite(s): NUR 5356

Prerequisites(s): NUR 5153 and 5255. Continuing evaluation and management of common acute and chronic illnesses seen by the family nurse practitioner. A systematic approach to the treatment options across the lifespan is studied for all body systems. Students are given the opportunity to progress toward increasing independence in clinical practice.

# NUR 5360 Embryology and Developmental Physiology (3)

This course is designed to provide the student with a greater depth of understanding of developmental physiology of the fetus and neonate. Principles of growth and development, physiologic maturation of organ systems, birth physiology, and transition to extrauterine life through early infancy will be covered. Adaptation of physiologic stress and alterations from normal will also be addressed.

#### NUR 5361 Advanced Newborn/Infant Pharmacotherapeutics (3)

This course provides the student with an in-depth understanding of pharmacotherapeutics for newborns and infants. Content focuses on the alterations seen in the principles of pharmacokinetics and pharmacodynamics when applied to newborn/infant physiology, special considerations of drug therapy in the newborn/infant, and advanced nursing management of selected newborn/infant therapeutics. Issues associated with drug therapy in the neonatal intensive care unit and evaluation of experimental therapies are included. The course also provides essential information needed to obtain prescriptive authority for advanced practice neonatal nurses.

#### NUR 5363 Advanced Neonatal Nursing Practicum II (3)

Pre-requisite(s): NUR 5266

This practicum focuses on developing increasing clinical competency in the advanced practice role and in the pathophysiology, stabilization, management, and evaluation of the stable and acute high-risk newborn/infant. By using the processes of expert practice, consultation, collaboration, administration, and research utilization, the student will provide advanced nursing management to an increasing caseload of hospitalized newborn/infants and their families. Students are given the opportunity to progress toward increasing independence in clinical practice.

#### NUR 5364 Pathophysiology of the Newborn/Infant (3)

Theoretical and practical knowledge of pathophysiology as it applies to the advanced nursing care of newborns/infants with acute and/or chronic illness or at risk for health problems from a high-risk pregnancy. Consequences of the intensive care environment and abnormal physiology for the normal development of the fetus, newborn and infant will also be addressed.

# NUR 5365 Advanced Neonatal Nursing Management I: High-Risk & Critically III Newborns/Infants (3)

Pre-requisite(s): NUR 5163 and NUR 5262

Theoretical and practical knowledge needed for advanced practice neonatal nurses (APNN) to manage the health care needs of culturally diverse newborns/infants in neonatal intensive care units (NICU). Content focuses on stabilization, management and evaluation of high-risk and critically ill newborns/infants and their families. Responsibilities of the APNN in perinatal-neonatal health care policy and delivery systems management are also emphasized.

# NUR 5367 Advanced Neonatal Nursing Management II: Acute & Chronic Problems of Newborns/Infants (3)

Pre-requisite(s): NUR 5365

Theoretical and practical knowledge needed for advanced practice neonatal nurse (APNN) to manage the health care needs of culturally diverse newborns/infants in neonatal intensive care units (NICU) and post-discharge NICU graduates through the first two (2) years of life. Content focuses on stabilization, management, and evaluation of acute and chronic illness during infancy. Responsibilities of APNN in perinatalneonatal health care policy and delivery systems management are also emphasized.

# NUR 5369 Advanced Neonatal Nursing Practicum III Residency (3)

Pre-requisite(s): NUR 5363

This practicum focuses on continuing to develop increased clinical competency, delivery room management, and team management in the advanced practice role and in the pathophysiology, stabilization, management, and evaluation of high-risk infants with increasing acuity. By using the processes of expert practice, consultation, collaboration, administration, and research utilization, the student provides advanced nursing management to a caseload of hospitalized infants and their families with complex health needs. Students are given the opportunity to progress toward increasing independence in clinical practice.

#### NUR 5370 Practice Residency for Midwifery (3)

Pre-requisite(s): Completion of all specialty clinical practicum courses Students will have the opportunity to practice in the full scope of the nurse-midwifery role. Student experiences will lead to increasing expertise in providing safe, effective, efficient and ethical care.

### NUR 5381 Visionary Leadership in Complex Organizational Systems (3)

This course provides a comprehensive overview of leadership in complex healthcare organizations. Influential leadership behaviors such as the use of imagination, risk-taking, and transformative thinking to create evolutionary change in complex organizations are examined. Effective communication, negotiation, conflict resolution, delegation, and coordination skills, from an interpersonal and organizational perspective, are explored.

#### NUR 5382 Health Policy and Advocacy for the Nursing Leader (3)

This course explores health and public policy development in the United States. The processes and tools used for policy implementation and evaluation are discussed. The impact of economic, legal, and political factors on efficacy and efficiency of organizations and care delivery is explored. The advocacy role of the nurse leader to defend or maintain a cause on behalf of patients, staff, and the nursing profession is presented.

### NUR 5384 Evidence Based Practice for Nurse Leaders (3)

This course focuses on the ethical translation of current evidence to improve healthcare delivery systems and patient care. The role of the nurse leader in critically appraising the evidence and integrating it into practice, decision-making, or change is examined.

#### NUR 5385 Legal and Regulatory Requirements and Compliance (3)

This course examines the application and impact of legal and regulatory requirements for nurse leaders. More specifically, federal and state laws, wage and hour laws, equal employment laws, and occupational health and safety practices, as well as legal issues such as fraud, whistle-blowing, malpractice/negligence, electronic security, and harassment in healthcare organizations are analyzed. Implications of the nurse practice act(s) for effective management of safe patient-centered care are evaluated.

#### NUR 5386 Innovation for Clinical Prevention and Population Health (3)

This course uses principles of epidemiology to evaluate disease prevention and health promotion data to design innovative healthcare programs for individuals and communities. Community assessment skills, healthcare disparities, and the development of culturally appropriate health outcome measures are explored. Elements of planning and responding to internal and external disasters are investigated.

#### NUR 5388 Interprofessional Collaboration and Partnerships (3)

This course prepares the student for deliberate interprofessional collaborative practice with the goal of building a safer and better patient-centered and community/population-oriented healthcare system. The role of the nurse leader in developing, demonstrating, and maintaining interprofessional collaborative practice is explored. Strategies for communication, conflict, negotiation, delegation, and supervision of groups and teams are discussed.

#### NUR 5389 Financial Acumen for Nursing Leadership (3)

This course examines business principles and practices such as cost benefit analysis, budgeting, and marketing used in leadership and management of successful healthcare organizations. Budget development and control in selected nursing settings will be examined.

#### NUR 5391 Quality Management and Safety in Nursing Practice (3)

This course provides an overview of a variety of models used for healthcare improvement. Creative and innovative strategies that drive leadership activities to improve care delivery and population outcomes are examined. Common performance measurements and components of evidenced-based healthcare safety programs are explored.

#### NUR 5400 PNP Primary Care Residency (4)

Pre-requisite(s): NUR 5232, 5233, 5452 and 5351

A residency requiring independent clinical management of health promotion and acute and chronic illnesses of children and adolescents across the pediatric life span. Synthesis of practice management skills pertaining to economics, reimbursement for services, and time management are emphasized, as is implementation of transcultural nursing concepts. Concepts of research are applied in the clinical setting.

#### NUR 5450 Family Nurse Practitioner Residency (4)

Pre-requisite(s): NUR 5356 and 5359

A residency requiring independent clinical management of acute and chronic illnesses across the life span. Synthesis of practice management skills pertaining to economics, reimbursement for services, and time management will be emphasized as well as implementation of transcultural nursing concepts. Concepts of research will be applied in the clinical setting.

### NUR 5V03 Teaching/Learning Practicum (1,3)

Pre-requisite(s): NUR 5302

Practical experiences to apply teaching/learning principles and theories and evaluation methods in classroom and clinical settings. The practicum is supervised by faculty and precepted by an accomplished teacher. Seminar discussions will focus on solutions to contemporary problems in nursing education.

#### NUR 5V08 Special Topics in Advanced Nursing (1-3)

Pre-requisite(s): Graduate standing

The special topics, variable credit course provides opportunity for advanced study in areas not covered by formal nursing courses.

# NUR 5V43 Nurse-Midwifery II: Women's Health Practicum (1-3)

Pre-requisite(s): NUR 5242 or concurrent enrollment

This course provides students with clinical experiences to demonstrate synthesis, integration, and translation of the knowledge and skills necessary to promote health, maintain wellness, and manage pregnancy, contraception, and common gynecologic problems. Use of information technology in the clinical practice setting is expected. The nurse-practitioner and nurse-midwifery management models of care are used in the provision of assessment, diagnosis, intervention, and evaluation for clients.

# NUR 5V50 Complementary Therapies and Traditional Chinese Medicine (1-3)

Pre-requisite(s): NUR 5V49 or consent of course instructor
The purpose of this course is to provide an opportunity for health
professions students to experience a study abroad program with a focus
on complementary and alternative therapies. Students and faculty will
explore health and Traditional Chinese Medicine (TCM) practices within
the context of the Chinese culture and health care delivery settings.
Students will also examine the Chinese system of health professions
education and dialogue with students enrolled in selected programs in
China.

### NUR 5V92 Residency for the Nurse Leader (1-6)

Pre-requisite(s): NUR 5280, NUR 5381, NUR 5382, NUR 5283, NUR 5384, NUR 5385, NUR 5386, NUR 5287, NUR 5388, NUR 5289, NUR 5390, and NUR 5391

This course provides the opportunity for the student to practice with a nurse leader as mentor. A final capstone project will be developed, implemented, and evaluated with the assistance of the mentor during the practicum. The student will meet the AONE competencies within the course.

#### NUR 5V97 Independent Study (1-3)

Pre-requisite(s): Consent of instructor

An opportunity for the student to supplement knowledge gained in previous graduate nursing courses. Maximum of three semester hours credit.

### NUR 6102 Doctor of Nursing Practice-Executive Nursing Leadership-Project 2 (1)

Pre-requisite(s): NUR 6203

This is the second in a series of three seminars that guide the student in development thru completion of the scholarly DNP-ENL Project. In this second course the student finalizes and gets approval for the project plan proposal and completes IRB review as needed.

# NUR 6103 Doctor of Nursing Practice-Executive Nursing Leadership-Project 3 (1)

Pre-requisite(s): NUR 6102

This seminar is the third and last DNP-ENL project course. During DNP-ENL 3 the student finalizes the project. The student prepares and gives a compelling presentation to gain endorsement for the project in the practice environment. To further demonstrate DNP-Executive Nursing Leadership skills, knowledge, and influence, the student formally presents the project to other health professionals and faculty.

#### NUR 6110 Data Management for the Advanced Practice Nurse (1)

Pre-requisite(s): Basic statistics course, NUR 5314, and NUR 6375 This course provides basic skills for managing scientific data through all stages of a DNP Project (collection, cleaning, analysis, and interpretation). Students gain experience using quantitative and qualitative (e.g., SPSS and NVivo) statistical software to clean messy data, merge data from multiple sources, restructure data for analysis, choose appropriate statistical analyses, run statistical analyses, and interpret statistical results.

#### NUR 6175 Scientific Inquiry for Executive Nurse Leaders (1)

Scientific inquiry for executive nurse leaders focuses on the developing understanding of how scientific knowledge applies to executive nursing leadership practice. The emphasis of the course is on evidence-based practice and appraisal.

#### NUR 61C2 DNP Project II (1)

Pre-requisite(s): NUR 63C1

This course involves the implementation of the DNP project. During DNP Project II the student is expected to be actively engaged in project implementation. IRB submission (if required) must be accomplished prior to project implementation if it was not accomplished in DNP Project I.

#### NUR 6202 The NICU Graduate (2)

This course provides an overview of the care of the NICU graduate: the infant after NICU discharge through two years of life. The course focuses on parent and family transitions, the care of infants post-discharge, growth and development, immunizations, wellness visits, acute care visits, special considerations for those with long-term complications, and consulting services.

### NUR 6203 Doctor of Nursing Practice-Executive Nursing Leadership-Project 1 (2)

Co-requisite(s):

Pre-requisite(s): NUR 6175 and 6275

This is the first in a series of three seminars that guide the student in development through completion of the scholarly DNP-ENL Project. In this first course the student identifies the area of focus, identifies the gap, designs the innovation or transformation, and determines key influential components (AIM model) to operationalize during the DNP project process.

#### NUR 6272 Applied Ethics for Advanced Practice Nursing (2)

Students explore the development and philosophical foundation of nursing ethics. Ethical dilemmas encountered by advanced practice nurses in a variety of settings are identified and systematically analyzed.

#### NUR 6275 Translational Science for Executive Nurse Leaders (2)

Pre-requisite(s): NUR 6175

Translational science for executive nurse leadership builds on knowledge gained in NUR 6175 Scientific Inquiry for Executive Nurse Leaders. The emphasis of NUR 6275 is to promote executive nursing leadership skills relevant to implementation and sustainment of evidence-based practice.

# NUR 62C3 DNP Project III (2)

Pre-requisite(s): NUR 62C2

This Seminar, the third of four Capstone courses, involves the implementation of the Capstone project. In Capstone 3 the student is expected to be actively engaged in project implementation. IRB submission (if required) must be accomplished in Capstone 3 if it has not been accomplished in Capstone 2.

### NUR 62C4 DNP Project IV (2)

Pre-requisite(s): NUR 62C3

This seminar, the fourth course in the capstone series, finalizes the Capstone project. In Capstone IV, the student is expected to complete project implementation, analyze data, evaluate outcomes, and disseminate findings of the completed project. The student will formally defend the capstone project prior to graduation.

# NUR 6301 Developing Executive Nursing Presence, Authority, and Influence (3)

This course assists nurse leaders in embracing the factors, attributes, and processes that can strategically influence their constituents' goals and perceptions. The course focuses on nurse executives' applying knowledge-based competencies and using communication traits that reflect the appropriate authority and status required to successfully influence decisions locally, nationally, and globally.

#### NUR 6302 Resource Attainment and Allocation (3)

Advanced business principles and skills are critical to strategically attaining and allocating financial and human resources. The course focuses on knowledge and skills that are essential to operationalize fiscal and human resources for current and future care delivery models. The content includes advanced financial business skills, alternative funding options, staffing models, and human resource and workforce development.

#### NUR 6303 Influential Communication & Relationship Building (3)

This course examines specific knowledge and traits that impact the executive's proficiency in interacting and purposefully creating influential macro and micro relationships and actualizing desired outcomes. The focus is on identification of key constituents' perspectives and determining the most effective communication methods and timing to influence relationships, gain credibility, and actualize goals.

#### NUR 6304 Optimizing Quality and Safety Outcomes (3)

This course provides advanced knowledge and skill regarding concepts in quality, safety improvement, and risk management including collaboration, leading teams, system design, evaluating quality, safety, and risk management data and implementing micro and macro initiatives. This course has an experiential learning option to apply knowledge and skills in a selected practice setting.

# NUR 6305 Business Intelligence and Advanced Decision-making in Complex Healthcare Organizations (3)

This course focuses on the use of business and healthcare technology data to improve and predict performance, influence and optimize decisions in health care, and promote effective strategy development to improve operational and clinical outcomes. The course provides an opportunity to collaborate with healthcare leaders to apply knowledge in a selected setting.

# NUR 6306 Creating Excellence in Professional Practice Environments (3)

This course addresses visioning, strategic planning, and designing structures and processes that will advance excellence in professional nursing practice. The emphasis is on developing skills and knowledge that will support developing and sustaining a practice environment that promotes optimal outcomes for patients, nursing, and organizations and elevates the perception of nursing practice.

#### NUR 6307 Strategic Economic and Financial Concepts (3)

The course examines current trends in healthcare economics and the current and potential impact on organizational financial practices. The emphasis is on developing specific skills and knowledge a nurse executive can use to effectively respond to changing economic and financial expectations and improve stakeholder perception of nursing's value to the organization.

# NUR 6308 Transforming Systems and Care Delivery Models for Diverse Populations and Emerging Needs (3)

This course examines different models of care delivery, outcomes, and emerging trends in the United States and globally. The emphasis is on gaining a theoretical, evidenced-based, and global perspective to be able to effectively influence transformation of systems and care delivery models in response to the emerging needs of diverse populations.

#### NUR 6309 Pediatric Acute Care Nurse Practitioner I (3)

Co-requisite(s): NUR 6311 Pre-requisite(s): NUR 5332 or 5351

This course prepares the Acute Care Pediatric Nurse Practitioner student to identify and address potential and actual health care needs of the acutely ill or injured child. Course content focus encompasses clinical judgment, decision-making, and procedural skills for delivering complex acute, critical, and chronic health care to ill or injured children, within the context of the family.

# NUR 6310 Evidence Informed Health Policy for the Executive Nurse Leader (3)

Examines how policy affects nursing practice and the delivery of health care. Provides information to facilitate the identification, analysis, and interpretation of emerging priority areas for health care from state, national, and international perspectives. Reviews the policy development process and identifies opportunities for nurse participation and influence. Also discusses ethical implications of policy development and implementation.

# NUR 6311 Pediatric Acute Care Nurse Practitioner II (3)

Co-requisite(s): NUR 6406

This course expands preparation of the Acute Care Pediatric Nurse Practitioner student for identifying and addressing potential and actual health care needs of the acutely ill or injured child. This course focuses on mastery of essential competencies to meet the specialized needs of infants and children with complex acute, critical, and chronic health conditions and advanced roles of the acute care pediatric nurse practitioner.

# NUR 6316 Transforming Health Care Organizations and Changing Outcomes (3)

This course examines key factors used to assess complex health care organizations, including identification, development, implementation, and evaluation of change strategies that ensure optimal patient care quality and safety outcomes

#### NUR 6369 Clinical Genetics in Practice (3)

Pre-requisite(s): NUR 5232 and 5233

This course explores the identification, evaluation, and implementation of evidence-based genomics practices that can be used to prevent and control leading chronic, infectious, environmental, and occupational diseases. The familial, social, economic, and psychological implications of genetic testing are analyzed.

# NUR 6371 Nursing Informatics (3)

This course focuses on the current role of information technology in nursing practice. Emerging trends and informatics are explored. Students will become familiar with application of information science and computer technologies in health care, biomedical research, and education of health professionals.

#### NUR 6373 Clinical Epidemiology (3)

Pre-requisite(s): NUR 5314

An integration of basics of epidemiology (e.g. incidence, distribution and determinants of disease) and public health in order to promote knowledge and skills in care for vulnerable populations as individuals and aggregate. Basics of study of populations, biostatistics and environmental data will be included. This course builds upon NUR 5314 Scientific Inquiry.

#### NUR 6375 Translational Science (3)

Pre-requisite(s): NUR 5314 or a passing grade in a masters-degree level research methods course

This course builds upon knowledge gained in Scientific Inquiry (NUR 5314) or a masters-level research course. Students in Translational Science gain advanced skills in appraising the results of scientific and other evidence, learn strategies to translate evidence into practice, and evaluate outcomes relevant to advanced practice nursing.

#### NUR 6377 Policy and Implications for Health (3)

This course provides the student with information to facilitate the identification and analysis of emerging priority areas for health from state, national, and international nursing perspectives. The role of advocate for population groups from a position of leadership is emphasized.

#### NUR 63C1 DNP Project I (3)

Pre-requisite(s): NUR 6110

This course provides the student the opportunity to develop a written proposal for the DNP project.

### NUR 6406 Pediatric Acute Care Nurse Practitioner II: Practicum (4)

Co-requisite(s): NUR 6311

Pre-requisite(s): NUR 5232, 5233, 5351

This course provides the student with expanded clinical experiences within the scope of the Acute Care Pediatric Nurse Practitioner centered on addressing potential and actual health care needs of the acutely ill or injured child.

# NUR 6407 Pediatric Acute Care Nurse Practicum I (4)

Co-requisite(s): NUR 6309

This course provides the student with clinical experiences within the scope of the Acute Care Pediatric Nurse Practitioner centered on addressing potential and actual health care needs of the acutely ill or injured child.

# NUR 6V09 Doctor in Nursing Practice Executive Nursing Leadership Residency (2-6)

Co-requisite(s): NUR 6103

Pre-requisite(s): NUR 6101, 6102, 6301, 6302, 6303, 6304, 6305, 6306,

6307, 6308, 6375, and 6377

The residency provides an in-depth executive experiential opportunity focused on a personally designed plan. The plan will lead to increasing expertise and influence in promoting evidence-based practice, strategically leading change, transforming care models, and improving patient outcomes with an emphasis on current and emerging healthcare organizations and systems in a targeted healthcare organization.

#### NUR 6V76 Advanced Practice Nursing Residency (1-6)

Pre-requisite(s): APRN students: Completion of all specialty clinical courses

Post-MS to DNP students: completion of all core courses. [For APRN students] This course provides the student with in-depth clinical opportunities by focusing on personally designed experiences that lead to increasing expertise in providing safe, effective, and efficient care in focused populations. [For post MS to DNP students] This course provides the student with in-depth, personally-designed experiences that lead to a beginning mastery of the DNP Essentials.

# **Nutrition Sciences (NUTR)**

### NUTR 5350 Dietetic Internship (3)

Pre-requisite(s): Departmental approval required Supervised off-campus experiences in medical nutrition therapy, food systems management, and public health nutrition settings.

#### NUTR 5351 Nutrition and Aging (3)

Cross-listed as GRT 5351

Pre-requisite(s): NUTR 2351 or consent of instructor

Nutritional needs of individuals as they age. Disease prevention, nutrition assessment, and the central role of nutrition in maintaining health and well-being.

#### NUTR 5352 Pediatric Nutrition (3)

Pre-requisite(s): Graduate standing

An in-depth investigation of all aspects of pediatric nutrition. The course will cover nutrition concerns from conception through adolescence.

#### NUTR 5354 Nutrition in Public Health (3)

Pre-requisite(s): 12 hours undergraduate in nutrition and related subjects, or consent of instructor

A comprehensive study of Public Health and the role Nutrition plays in maintaining the health and well-being of communities.

#### NUTR 5355 Macronutrients and Metabolism (3)

Pre-requisite(s): Graduate standing

An in-depth investigation of all the macronutrients (fats, carbohydrates, and protein) and their metabolic activity.

#### NUTR 5356 Micronutrients and Phytochemicals (3)

Pre-requisite(s): Graduate standing

An in-depth investigation of micronutrients and their metabolism with the focus on the action, interaction and sources of vitamins and minerals.

#### NUTR 5357 Global Aspects of Food and Nutrition (3)

Pre-requisite(s): Graduate standing

Nutritional issues in developing countries, including an analysis of factros contributing to food supply, nutritional status including malnutrition, effect of under-nutrition, and methods of assessing nutritional status and interventions.

#### NUTR 5358 Emerging Issues in Food and Nutrition (3)

Pre-requisite(s): Graduate standing

Readings, discussion, and analysis of one or more emerging trends and developments in nutrition and food sciences.

#### NUTR 5359 Advanced Medical Nutrition Therapy (3)

Pre-requisite(s): Graduate standing

Nutrition in disease, including the biochemistry and pathophysiology of nutrition care, effects of disease, metabolism, advanced medical nutrition therapy, assessment, and therapeutic intervention.

#### NUTR 5360 Resource Management in Nutrition and Food Systems (3)

Pre-requisite(s): Graduate standing and successful completion of NUTR 3435 or equivalent

Principles of management applied to foodservice systems including institutions and restaurants and nutritional care delivery.

#### NUTR 5370 Research Methods in Nutrition Sciences (3)

Pre-requisite(s): Graduate standing

An in-depth investigation of research procedures in Nutrition Sciences.

#### NUTR 5380 Clinical Sports Nutrition (3)

Pre-requisite(s): NUTR 2351 or 4386, or consent of instructor In-depth study of clinical sports nutrition.

#### NUTR 5386 Nutrition for Sport and Fitness (3)

Pre-requisite(s): NUTR 2351 or consent of instructor Advanced study of nutritional concepts for individuals and team sport participants across the life span with a focus on selection of optimal dietary/nutritional approaches and timing as related to performance needs, maximizing performance, body composition, energy balance, and unique nutrient needs for specific sport participants. Non-scientifically-based information related to food and nutrition in sports will be addressed.

#### NUTR 5387 Advanced Human Nutrition (3)

Pre-requisite(s): NUTR 2351; successful completion of BIO 1305, CHE 1301, 1341, 3341 or consent of instructor

Advanced scientific study of nutrients and other human health-promoting substances.

### NUTR 5V93 Special Topics in Nutrition and Food Sciences (1-6)

Pre-requisite(s): Graduate standing and consent of instructor Special topics in Nutrition and Food Sciences. May be repeated with different topics for up to six hours.

# Occupational Therapy Doctorate (OTD)

# OTD 6122 Conditions Impacting Occupational Performance (1)

Pre-requisite(s): Successful completion of all Semester 1.1 coursework or permission of Program Director

This course examines the pathophysiology of selected cellular, integumentary, neuromuscular, cardiovascular, and pulmonary health conditions and their associated effects on health and wellness across the lifespan. The role of occupational therapy in addressing occupational performance needs for persons with such health conditions is emphasized while social determinants of health for persons, groups, and populations are explored.

#### OTD 6124 Professional Competencies I (1)

Pre-requisite(s): Successful completion of all Semester 1.1 coursework or permission of Program Director

Introduction to professional roles and responsibilities of the occupational therapy practitioner with emphasis on effective communication, intraprofessional collaboration, and interprofessional team dynamics. Integration of emotional/social intelligence, learning theories, learning styles, characteristics of learners through the lifespan, and health literacy education approaches.

#### OTD 6140 Professional Leadership and Advocacy (1)

Pre-requisite(s): OTD 6233 and 6216

This course examines the concepts underlying the application, study, and science of occupation. It provides an overview of culturally-related topics and their relationship to occupational therapy and views toward disabilities in society at large and within the military culture. Course prerequisites are Professional Practice and Ethical Formation Seminar and Clinical Education Seminar.

### OTD 6155 Military Healthcare Policy and Injury (1)

Pre-requisite(s): OTD 6315 and OTD 6140

This course introduces students to US civilian and Military Healthcare System (MHS). Health-care regulations, policies, OT services, insurance, documentation, and reimbursement are addressed and compared between the civilian and MHS. This course addresses issues related to work performance, including work conditioning, work hardening, functional evaluation, supported employment, job coaching, job analysis, and basic ergonomics.

#### OTD 6161 Leadership and Advocacy (1)

Pre-requisite(s): Successful completion of all Semester 3.1 coursework or permission of Program Director

Principles of leadership and advocacy essential for individual and professional growth. Integration of knowledge and skills to advocate for patients and programs by influencing regulatory environment, and refinement and evaluation of skills in interprofessional communication and collaboration. Exploration of topics and methods of advocacy that promote the role of occupational therapy in addressing societal needs.

#### OTD 6196 Hybrid Learning in the Healthcare Clinic and Classroom (1)

Overview of evidence-based research and theory supporting the use of online and hybrid environments for adult learning in the healthcare clinic or classroom setting. Includes a historical perspective of online and hybrid learning for occupational therapy practice and education with practical strategies to support and enhance learning in a virtual environment.

#### OTD 6210 Evidence-Based Practice (2)

Exploration of the knowledge and tools critical to locating, selecting, analyzing, and applying scholarly literature to support evidence-based OT clinical decisions. The course serves as a first step in the identification of a Capstone Project focus area.

### OTD 6212 Scholarly Practice I (2)

Pre-requisite(s): Admission to the Entry Level OTD program
This course introduces application of research principles to evidencebased practice and service competency. The student learns the steps
required to develop a research proposal, conduct a research study,
and disseminate research results. The ability to frame evidence-based
practice questions, obtain peer-reviewed research, and develop beginning
competence in the fundamentals of conducting a literature review is
developed.

# OTD 6213 Pathophysiology in Occupational Therapy (2)

Based on illness and disease within a systems framework, this course provides a basic understanding of pathophysiology as a change from normal physiological functioning of various human body systems. It is a corequisite with Semester I courses. Emphasis is placed on select conditions most often encountered by occupational therapists. The student uses critical thinking to analyze signs and symptoms based on knowledge of pathophysiology.

#### OTD 6214 Research Methods I (2)

Co-requisite(s): OTD 6218

The first of a two-part series, this course is an in-depth analysis of Research Design, Statistics, and Critical Appraisal of Research Literature. This course introduces students to the basic and advanced concepts, techniques, and technologies used in the scientific inquiry of applied clinical research.

# OTD 6215 Neuroscience in Occupational Therapy (2)

Pre-requisite(s): Admission to the Entry Level OTD program Examination of the theoretical explanations of occupational choices viewed through a neuroscience lens. Contemporary concepts of brainfunction that support occupation are explored with emphasis on sensory, motor, and cognitive processes. Lab activities emphasize elements of the neurologic examination with an introduction to commonly employed measures and tools for assessment.

#### OTD 6216 Professional Practice and Ethical Formation Seminar (2)

This course introduces the concept of professional development for the eventual transition from student to professional practitioner. It is a corequisite with Semester I courses. Students explore self-reflection and self-assessment as related to continuing competence and professional behaviors. A learning portfolio is developed and used throughout the remainder of the program to demonstrate achievement of instructional and graduation outcomes.

#### OTD 6217 Analysis of Human Occupation Across the Lifespan (2)

Pre-requisite(s): Admission to the Entry Level OTD program Exploration of occupational performance and physical, social-emotional, behavioral, and cognitive development throughout the lifespan. Typical and atypical changes in normative life tasks and occupational roles in relationship to environment and culture are discussed.

#### OTD 6218 Evidence Based Practice Research Proposal (2)

Co-requisite(s): OTD 6214, OTD 6216, OTD 6315

This is the first in a series of courses that provide the research base for the OTD Program. It is a corequisite with Semester I courses. The student identifies a research study through an Institutional Review Board (IRB) approved research protocol. Students use the integration of best evidence and best practice concepts, as well as advanced concepts, techniques, and technologies used for scientific inquiry of applied clinical research.

#### OTD 6220 Professional Development and Leadership (2)

In-depth analysis of criteria for professional excellence, advanced credentialing, and leadership in occupational therapy; development of a professional portfolio emphasizing competency in an evidence-based practice specialty or for preparation for teaching in an OT or OTA program. Exploration of leadership and power.

#### OTD 6224 Research Methods II (2)

Pre-requisite(s): OTD 6218 and OTD 6214

The second of a two-part series, this course is an in-depth analysis of Research Design, Statistics, and Critical Appraisal of Research Literature. This course is a continuation of Research Methods I in which students continue their work with a Faculty Research Advisory Committee on a clinically relevant research project.

#### OTD 6225 Fieldwork Seminar IA: Mental Health (2)

Pre-requisite(s): Successful completion of all Semester 1.1 coursework or permission of Program Director

Development of clinical reasoning, therapeutic use of self, and the occupational therapy process is emphasized with a focus on development of and socialization to professional behavior and attitudes. Simulation and faculty-led experiences promote an organized approach to implementation of the occupational therapy process including evaluation, intervention, and targeting of outcomes. Includes service delivery models within mental health settings.

#### OTD 6226 Occupational Therapy Across the Lifespan (2)

Pre-requisite(s): OTD 6315, OTD 6213, OTD 6214, OTD 6216, OTD 6515, and OTD 6218

This course gives the student an overview of human development throughout the lifespan with an emphasis on the areas that are important to occupational therapy and rehabilitation. Areas include: (1) the major developmental achievements at each age level, (2) beginning developmental assessment and observation, (3) professional communication skills, and (4) examples of major health problems and issues for each age with application to OT.

#### OTD 6227 Occupational Therapy Process Across the Lifespan (2)

Pre-requisite(s): Successful completion of all Semester 1.1 coursework or permission of Program Director

Examines professional reasoning through completion of an occupational profile, analyzing activities and occupations, and creating intervention plans using a variety of models of practice and frames of reference.

#### OTD 6228 Occupational Therapy Clinical Skills (2)

Co-requisite(s): OTD 6323, OTD 6328 Pre-requisite(s): All Semester I courses

Co-requisite(s): OTD 6328 and 6323. The evaluation and treatment of biomechanical factors in Occupational Therapy Across the Lifespan are discussed. Course prerequisites are all Semester I courses, and corequisites include Neuroscience and Human Movement. The student gains skill in analyzing movement, muscle palpation, goniometry of range of motion, and manual muscle testing.

#### OTD 6229 OT Theory (2)

Co-requisite(s): OTD 6226

Pre-requisite(s): All 1st Semester courses

Basic knowledge of theories, models of practice, and frames of reference used in critical thinking and professional reasoning are discussed as a means to inform occupational therapy assessment and interventions for persons within multiple contexts and environments. The student demonstrates foundational knowledge and applies concepts.

# OTD 6230 Teaching and Educational Theory in Occupational Therapy (2)

An overview of current research and theory related to the education of occupational therapy practitioners, including academic and clinical education experiences. Emphasizes major concepts of adult learning with a focus on active learning and cooperative learning principles.

#### OTD 6233 Clinical Education Seminar (2)

Co-requisite(s): OTD 6430

Pre-requisite(s): OTD 6315 and OTD 6213

This course puts into practice the student's competency to detect the need for occupational therapy intervention and to select and apply the clinical and non-clinical approaches necessary to facilitate a client's occupational performance within his/her context. In order to prepare the student to evaluate and treat adult and elderly clients with differing conditions, emphasis is placed on the development of problem-solving abilities.

#### OTD 6235 Level IA Fieldwork (Mental Health) (2)

Co-requisite(s): OTD 6431

Pre-requisite(s): OTD 6315 and OTD 6229

Level I fieldwork affords students the opportunity for hands-on assessment, evaluation, treatment planning, and client intervention. The student learns to be part of the therapy team and professionally interact with clients and interdisciplinary teams. This fieldwork provides the opportunity for students to translate into a clinical setting.

### OTD 6236 Physical Rehabilitation: Lab (2)

Co-requisite(s): OTD 6334, OTD 6435

This lab course addresses occupation-based practice for adults and older adults with physical impairments resulting in rehabilitation needs. Students practice assessment and interventions to improve occupational performance of clients across occupational therapy domains and through the occupational therapy process as related to rehabilitation.

# OTD 6237 Communication and Engagement in the Therapeutic Process (2)

Pre-requisite(s): Successful completion of all Semester 1 coursework or permission of Program Director

Development of client interaction skills that facilitate therapeutic use of self as a style of therapeutic communication that promotes change and growth. Includes consideration of multicultural factors that strongly influence professional communication, developing and facilitating participation in groups, and using group process as a therapeutic tool.

#### OTD 6238 Fieldwork Seminar IB: Adult and Older Adult (2)

Pre-requisite(s): Successful completion of all Semester 1 coursework or permission of Program Director

Development of clinical reasoning is emphasized with a focus on the development of and socialization to professional behavior and attitudes. Simulation and faculty-led experiences promote an organized approach to implementation of the occupational therapy process including evaluation, intervention, and targeting of outcomes. Includes service delivery models for adult and older adult populations in various settings.

#### OTD 6239 Level IB Fieldwork: Adults and Older Adults (2)

Co-requisite(s): OTD 6435

Pre-requisite(s): OTD 6315 and 6229

Level I fieldwork affords students the opportunity for hands-on assessment, evaluation, treatment planning, and client intervention. The student learns to be part of the therapy team and professionally interact with clients and interdisciplinary teams. This fieldwork provides the opportunity for students to translate their behavior, skills, performance, and knowledge into a clinical setting.

### OTD 6240 Program Evaluation & Development (2)

Concepts and strategies for assessment of practice outcomes and program evaluation including grant-writing. Students access and analyze data to examine the needs of a community that warrants occupational therapy interventions. Topics include the development of outcome tools, basis of outcomes research, selection and availability of outcome tools, and challenges for implementation.

#### OTD 6241 Doctoral Mentorship and Research I (2)

Pre-requisite(s): OTD 6218, OTD 6214, and OTD 6224

This course is the first in a series of four doctoral mentorship courses that provide the foundational work for development of the 16-week Doctoral Capstone Experience and Project (OTD 6V85 Doctoral Capstone Experience & OTD 6387 Doctoral Capstone Project). This course examines qualitative research methods used to enhance evidence-based research for occupational therapists and serves as an introduction for various qualitative research methods.

#### OTD 6242 Occupational Therapy Service Delivery and Organization (2)

Pre-requisite(s): Successful completion of all Semester 2.1 coursework or permission of Program Director

Basic principles of health care systems providing occupational therapy to individuals and organizations are examined. The student learns to integrate knowledge of delivery models, policies, and systems related to various current and emerging practice settings and makes clinical decisions for individuals and populations through application and synthesis of theory and evidence-based reasoning.

#### OTD 6243 Management and Program Development (2)

The student gains knowledge and understanding of contextual factors, social systems, policy, and legislation that impact the management and delivery of occupational therapy services in the military and civilian settings. This course occurs in the fourth semester of the OTD program. It provides foundational managerial knowledge and skills that will support the OTD 6155 Healthcare Policy and Injury course offered in the fifth semester.

#### OTD 6244 Professional Development (2)

Pre-requisite(s): Successful completion of all Semester 2.1 coursework or permission of Program Director

Examines professional behavior, development, and roles (e.g., fieldwork educator, entrepreneur, faculty, consultant, advocate, and servant leader). The student completes a professional portfolio based upon self-assessment, reflection, and career goals.

#### OTD 6245 OT Psychosocial COSC and Wellness (2)

Pre-requisite(s): OTD 6229 and 6430

The Clinical Education Seminar focuses on management of combat and operational stress casualties and learning combat and operational stress control (COSC) doctrine. This course provides an in-depth study of combat and operational stress control and delineates the role of occupational therapists as members of the interdisciplinary team and unit. The student analyzes the full scope and application of FM 4-02.51.

#### OTD 6246 Scholarly Practice II (2)

Pre-requisite(s): Successful completion of all Semester 2.1 coursework or permission of Program Director

An in-depth examination of research and its relationship to multiple areas of practice and practice assumptions. The student acquires an in-depth understanding of theory-based research, selecting appropriate methodology and units of analysis in the design of research, ways of evaluating practice, and approaches to analyzing data. Includes analysis and synthesis of qualitative data.

### OTD 6247 Level IC Fieldwork: Children and Youth (2)

Co-requisite(s): OTD 6445

Level I Fieldwork affords students the opportunity for hands-on assessment, evaluation, treatment planning, and client intervention. The student learns to be part of the therapy team and professionally interact with clients and interdisciplinary teams. This fieldwork provides the opportunity for students to translate their behavior, skills, performance, and knowledge into a clinical setting.

# OTD 6248 Occupational Performance and Theories of Practice (2)

Pre-requisite(s): Successful completion of all Semester 2.1 coursework or permission of Program Director

This course focuses on the models and frames of reference that shape occupational therapy practice in relationship to engagement in occupation. The student participates in the critique and discussion of the theoretical perspectives commonly used in occupational therapy practice and examines the role of theory in the clinical decision-making process as it relates to clients across the lifespan.

# OTD 6250 Level ID Fieldwork: Upper Quarter (2)

Pre-requisite(s): OTD 6515, OTD 6323, and OTD 6228

Level ID Fieldwork, Upper Quarter Evaluation and Intervention affords students the opportunity for hands-on assessment, evaluation, treatment planning, and client intervention. The student learns to be part of the therapy team and professionally interact with clients and interdisciplinary teams. This fieldwork provides the opportunity for students to translate into a clinical setting.

#### OTD 6255 Management of Occupational Therapy Services (2)

Pre-requisite(s): Successful completion of all Semester 2 coursework or permission of Program Director

This course provides an overview of practice management fundamentals and applies principles to various aspects of leadership and personal development, strategic planning, and business operations. The student gains knowledge in health care management, human resources, team dynamics, organizational structures, and fiscal management as these relate to occupational therapy practice.

#### OTD 6256 Fieldwork Seminar IC: Children and Youth (2)

Pre-requisite(s): Successful completion of all Semester 2 coursework or permission of Program Director

Development of clinical reasoning, therapeutic use of self, and the occupational therapy process is emphasized with a focus on development of and socialization to professional behavior and values. Simulation and faculty-led experiences promote an organized approach to implementation of the occupational therapy process and service delivery models as applied to children and youth and their families.

# OTD 6257 Educational Strategies and Learning in Healthcare and Academic Settings (2)

Pre-requisite(s): Successful completion of all Semester 2 coursework or permission of Program Director

An examination of best evidence associated with teaching and learning in community, clinical, and academic settings. Exploration of teaching strategies across a wide range of practice settings based on consumer needs, contexts, roles, task demands, resources, and expected outcomes. Includes methods for professional presentations and interprofessional teaching.

#### OTD 6259 Doctoral Mentorship and Research II (2)

Pre-requisite(s): OTD 6241, 6214, and 6224

The second in a series of four courses required for completion of the doctoral capstone project. At the beginning of this course, the Capstone Faculty Mentor (CFM) and Capstone Site Mentor (CSM) for the doctoral capstone are assigned. The student begins a needs assessment for the project site, develops learning objectives, begins a literature review, and drafts the student's individualized specific goals and a capstone proposal.

# OTD 6262 Professional Competencies II (2)

Pre-requisite(s): Successful completion of all Semester 3.1 coursework or permission of Program Director

Fundamental basis of theory and skills necessary for selecting and utilizing physical agent modalities and splinting within the context of occupational therapy practice. Advanced critical thinking and problemsolving skills are developed through various case studies, self quizzes, splint analyses, laboratory exercises, and self-evaluation. Licensure requirements and competency issues are addressed.

### OTD 6265 Program Development (2)

Pre-requisite(s): Successful completion of all Semester 3.1 coursework or permission of Program Director

This course examines community health and education practices for groups, communities, and populations. It bridges the biomedical and sociocultural aspects of health through grant attainment and program development. Practice models are explored for health promotion, facilitating occupational performance and wellness, and population health across the lifespan in community-based settings.

#### OTD 6272 Doctoral Capstone II (2)

Pre-requisite(s): OTD 6340 Doctoral Capstone I The second course in a series of three courses required for completion of the doctoral capstone project

Students develop methods and procedures and submit a proposal for implementation and evaluation of the planned capstone project.

#### OTD 6280 Doctoral Capstone III (2)

Pre-requisite(s): OTD 6272 and 6340 The third in a series of three courses required for completion of the doctoral capstone project Implementation of capstone project including data collection and data analysis, or program evaluation with conclusions. Preparation of abstract for publication. Dissemination of the results of an applied and innovative project in response to an identified need in the profession.

#### OTD 6285 Scholarly Practice III (2)

Pre-requisite(s): Successful completion of all Semester 5.1 coursework or permission of Program Director

Students are guided in the application of cumulative knowledge from previous courses and fieldwork experiences. Independent study and sample examinations prepare students for the National Board for Certification in Occupational Therapy (NBCOT) examination. Students present the Doctoral Capstone Proposal for peer and faculty review and complete the Occupational Therapy Knowledge Evaluation (OTKE) that tests clinical knowledge and skills.

# OTD 6298 Hybrid Teaching Strategies for the Healthcare Clinic and Classroom (2)

Pre-requisite(s): OTP 6196

Examines theoretical perspectives and current literature supporting instructional design strategies and technology integration in a hybrid learning environment for healthcare clinical and classroom settings. Includes exploration of learning technologies and development of learning artifacts for online and face-to-face instruction. Peer teaching encourages student-driven exploration of a current topic in hybrid education and/or telehealth.

#### OTD 6309 Doctoral Capstone Project (3)

Pre-requisite(s): Successful completion of all Semester 6.1 coursework or permission of Program Director

Implementation of the capstone project, including data collection and data analysis, or program evaluation with conclusions. Preparation of abstract or article for publication. Dissemination of results for an applied and innovative project designed in response to an identified need in the profession.

#### OTD 6310 Advances in Occupational Therapy Practice (3)

Critical analysis of the American Occupational Therapy Association (AOTA) Occupational Therapy Practice Framework and other professional documents that serve as resources for addressing contemporary OT practice issues. Focus is directed on analyzing current professional trends including those representing advances in global, national, state, and local organizations. Requires completion of a Professional Development Plan.

### OTD 6311 Foundations of Occupational Therapy (3)

Pre-requisite(s): Admission to the Entry Level OTD program
This course examines the historical foundations, philosophical base, core
values, and code of ethics of the profession. Occupation-based models
of practice and the Occupational Therapy Practice Framework (OTPF) are
examined with a focus on analysis of the domain of occupational therapy.
Structured learning experiences facilitate professional development
and the transition to professional roles. Includes an experiential lab
component.

# OTD 6315 Foundations of Occupational Therapy (3)

Co-requisite(s): OTD 6213, OTD 6216

This course provides the student with foundational knowledge of the occupational therapy profession, development of the profession, and professional ethics, values, and responsibilities. Content addresses both historical and contemporary professional perspectives. The student learns and practices fundamental elements of activity analysis and client observation.

#### OTD 6320 Occupational Therapy Conceptual Foundations (3)

Study of the complexity of human occupation, occupational science, and the impact of historical and contemporary advances in occupational therapy theory. The validity and reliability of occupation-based assessment instruments and the efficacy of evidence-based treatment interventions are studied particularly as they relate to meeting the occupational needs of society.

#### OTD 6323 Human Movement (3)

Pre-requisite(s): OTD 6515

This course provides the student with understanding of normal human movement and gives a clinical perspective to the science of movement and to the pathology movement as deviation from the norm. Both kinematics (describing movement) and kinetics (the forces influencing movement) will be addressed. The course is designed for occupational therapy (OT) students with focus on clinical application of kinesiology to support children and adults.

#### OTD 6328 Neuroscience (3)

Pre-requisite(s): OTD 6515 and OTD 6213

With an emphasis on the relationship between structure and function, this course provides didactic and laboratory study of the human nervous system including neuroanatomy, neurophysiology, and disorders of the human nervous system. Prerequisites are Clinical Anatomy and Lab, and Pathophysiology in Occupational Therapy. The student engages in clinical problem solving by applying neuroscience principles to case studies of neurological disorders.

# OTD 6330 Clinical Reasoning: Forms of Inquiry in Advanced Practice (3)

Advanced topics in clinical reasoning with an emphasis on narrative inquiry and occupational science. Exploration of biomedical and phenomenological approaches to examining individual and personal meanings of illness and health.

#### OTD 6333 Human Movement (3)

Pre-requisite(s): Successful completion of all Semester 1 coursework or permission of Program Director

Fundamental knowledge of the structure and function of the neuromuscular, musculoskeletal, and cardiovascular systems with application to occupational performance and assessments related to palpation, muscle testing, and goniometry. Analysis of dysfunctional impact on occupational performance is a focus.

### OTD 6340 Doctoral Capstone 1 (3)

The first in a series of three courses required for completion of the doctoral capstone project. Development of the doctoral capstone plan to include the literature review, needs assessment, identification of individualized learning objectives, plans for supervision, and an evaluation plan.

#### OTD 6350 Human Performance Optimization (3)

Pre-requisite(s): Student must be actively enrolled in a U.S Army-Baylor OTD Program and completed semester 4 courses. The Human Performance Optimization course educates an interprofessional care team of military allied health students (PT, OT, RD) who collaboratively develop and deliver holistic individual and unit services in a resource-constrained military environment outside of standard clinical care environments. Holistic services include rehabilitation, reconditioning, and human performance optimization to support the unit mission and commander's intent.

#### OTD 6360 Wellness and Health Promotion (3)

Pre-requisite(s): Successful completion of all Semester 3.1 coursework or permission of Program Director

Focus on prevention health, wellness, and fitness related to injury prevention, nutritional influences, fitness testing, and exercise prescription in an apparently healthy population. Development and adaptation of injury prevention and/or exercise programs based on test results. Course includes participation in selected complementary and alternative health interventions.

#### OTD 6383 Doctoral Mentorship II (3)

Pre-requisite(s): Successful completion of all Semester 5.1 coursework or permission of Program Director

Methods and procedures for the planned Doctoral Capstone Project are developed with a proposal for implementation and evaluation submitted. The student collaborates and reflects on issues related to occupational therapy practice including service delivery, supervision, and ethical considerations across a variety of practice settings.

# OTD 6396 Developing Hybrid Teaching Skills for the Healthcare Clinic and Classroom (3)

Pre-requisite(s): OTD 6298

Application of educational theory and research for the development and evaluation of hybrid programs to foster active adult learning in healthcare clinical and classroom environments. Using simulated scenarios, the development of a learning module or intervention plan is scaffolded through the course. Included is the production of teaching artifacts and refinement of the electronic teaching portfolio.

# OTD 6420 Mental Health Populations and Practice in Occupational Therapy (4)

Pre-requisite(s): Successful completion of all courses in Semester 1.1 coursework or permission of Program Director

Historical and current models for application of occupational therapy to psychosocial problems. Reflective video analysis and faculty-led experiences to aid the socialization process into roles and styles of occupational therapists in mental health practice and other psychosocial settings. Task analysis and activity analysis techniques for participation in human occupation.

### OTD 6430 Adult & Older Adult POP & PRAC in OT (4)

Pre-requisite(s): Successful completion of all Semester 1 coursework or permission of Program Director

Evaluation and intervention for adults using ICIDH systems as a framework. Application of screening, planning, applied treatment, and evaluation approaches including acquisition, restorative, and compensatory strategies for adult and older adult populations.

#### OTD 6431 Occupational Therapy in Mental Health (4)

Co-requisite(s): OTD 6435

Pre-requisite(s): Abnormal Psychology, OTD 6315, OTD 6226, and

OTD 6229

Occupational therapy services for persons with psychosocial deficits and conditions that impact occupational performance during acute episodes, chronicity, rehabilitation, wellness, illness prevention, and health promotion are examined. Course prerequisites are Foundations in Occupational Therapy, Occupational Therapy Across the Lifespan, and OT Theory. The student learns through an integrated process of active learning and fieldwork.

# OTD 6435 Occupational Therapy with Adult and Older Adult Populations (4)

Co-requisite(s): OTD 6430

Pre-requisite(s): OTD 6315, OTD 6226, and OTD 6229

The influence of occupation-based practice on the health and well-being of adults and older adults with impairments that impact participation is studied. Course prerequisites are Foundations in Occupational Therapy, Occupational Therapy Across the Lifespan, and OT Theory. The student learns to facilitate client performance to improve health in natural environments, such as the home, community, and workplace.

#### OTD 6450 Children & Youth Populations & Practice in OT (4)

Pre-requisite(s): Successful completion of all Semester 2 coursework or permission of Program Director

Occupational therapy theory and rationale of competency-based assessments and interventions for physical, developmental, sensory integrative, perceptual/cognitive, and psychosocial impairment as it applies to children and youth and their families. Application of pediatric frames of reference to specific problems within the framework of the multicultural family.

#### OTD 6515 Clinical Anatomy and Lab (5)

This didactic and laboratory human musculoskeletal anatomy course emphasizes functional understanding of common injuries and conditions related to bones, muscles, and peripheral nerves most pertinent to OT. Course prerequisites are Pathophysiology in Occupational Therapy, and Neuroscience. The student studies musculoskeletal structures of prosected human cadaver specimens (bones, muscles, and nerves) during hands-on laboratory experiences.

#### OTD 6572 Doctoral Mentorship I (5)

Pre-requisite(s): Successful completion of all program coursework and current enrollment in OTD 6V75 Level II Fieldwork I or permission of Program Director

Development of a scholarly Doctoral Capstone Project Plan to include literature review, needs assessment, identification of individualized learning objectives, plans for supervision, and evaluation plan.

#### OTD 6V09 Doctoral Capstone Experience (15)

Pre-requisite(s): Successful completion of all Semester 5.2 coursework or permission of Program Director

In-depth experience in one or more of the following areas: clinical practice, research, leadership, program and policy development, advocacy, education, and/or theory development. This experience requires application and synthesis of professional knowledge and concentrated skills with 560 hours of a mentored doctoral capstone experience in the student's selected area.

#### OTD 6V60 Level IIA Fieldwork (1-12)

Co-requisite(s): OTD 6167

Pre-requisite(s): Completion of Practicum II Level I Fieldwork (OTD 6235, 6239, 6247, and 6250

A 16-week, full-time, supervised fieldwork experience in a clinic environment, hospital, school, or community agency. The course focuses on developing and integrating clinical skills and professional behaviors in designated practice areas of occupational therapy for competence as an entry-level practitioner.

#### OTD 6V70 Independent Study (1-3)

This course is organized as a (one-credit; two-credit; three-credit) independent study course under the supervision of an assigned faculty member. It is a student-designed course that provides the student with an opportunity to receive direct interaction and guidance from a faculty member. This course is intended to integrate the core courses and elective courses within the occupational therapy curriculum.

#### OTD 6V75 Level II Fieldwork I (12)

Pre-requisite(s): Successful completion of all semester 3.2 coursework or permission of Program Director

Initial full-time fieldwork experience under direct supervision of licensed Occupational Therapist. Twelve weeks of full-time direct patient/client care activity supervised by qualified Fieldwork Educator.

#### OTD 6V80 Level II Fieldwork II (12)

Pre-requisite(s): Successful completion of all semester 4.2 coursework or permission of Program Director

Second full-time fieldwork experience under the direct supervision of a licensed Occupational Therapist. Twelve weeks of full-time direct patient care activity supervised by a qualified Fieldwork Educator. Continued development of the student's professional competency and personal transformation to an entry-level therapist is emphasized.

# PhD in Preaching (PHDP)

# PHDP 6350 History of Preaching from the First Testament to Wycliffe (3)

A detailed historical study of preaching in the First Testament, the development of the synagogue sermon, the forms of preaching in Christian Scripture as kerygma and didache, preaching in the earliest church, Hellenistic rhetorical influences on preaching, patristic preaching in the East and West, the Alexandria and Antioch schools, monastic preaching, and preaching of the Middle Ages and High Middle Ages to Wycliffe.

# PHDP 6351 History of Preaching from the Reformation to Post-Modern Preaching (3)

An analytical study of primary preaching sources and contemporaneous homiletical theory from the Reformation to the present, an analysis of the sermonic contexts in political and intellectual history, the hermeneutical and exegetical approach to scripture, the rhetorical models, the theosymbolic impact, and the use of cultural references in sermons.

#### PHDP 6354 Homiletical Theory and Methods (3)

Based on the literature of the last 100 years, modern and early post-modern developments in preaching are examined against larger trends in church and society. The psychological, neo-orthodox, deductive, inductive, narrative, phenomenological, law/gospel, and postmodern schools of preaching will be considered as the major representatives of each homiletic approach.

#### PHDP 6358 The Practice of Preaching (3)

A detailed examination of the role of delivery in the effectiveness of preaching through careful analysis of the practice of preaching through delivery. Attention is given to the place vocal dynamics (volume, pitch, pace, pause, etc.) and body language (facial expression, eye contact, posture, gestures, etc.) have in effective communication. Members of the seminar each preach a sermon for careful analysis.

#### PHDP 6360 Studies in OT and Proclamation (3)

A study of selected Old Testament texts. While considerable attention will be given to historical, literary, and theological issues, the course will also address hermeneutical matters related to proclamation. Course may be repeated when content differs for a maximum of nine (9) semester hours.

#### PHDP 6361 Studies in the New Testament and Proclamation (3)

A study of selected New Testament texts. While considerable attention is given to historical, literary, and theological issues, the course also addresses hermeneutical matters related to proclamation. Course may be repeated when content differs for a maximum of nine (9) semester hours.

# PHDP 6362 Studies in Theology and Proclamation (3)

An examination of various topics in systematic or historical theology. Implications for proclamation will also be considered. Course may be repeated when content differs for a maximum of nine (9) semester hours.

#### PHDP 6363 Hermeneutics for Preaching (3)

A detailed consideration of hermeneutical approaches to the biblical text and their impact on contemporary preaching. The seminar includes examination of biblical passages with a view to varied hermeneutical outcomes that stand with, in front of, behind, and beyond the text. The seminar will examine perspectives in minoritized, feminist, European, Global South, and non-Protestant hermeneutics.

### PHDP 6364 Teaching Preaching (3)

This course enables doctoral students of homiletics to develop skills for teaching an entry-level course in preaching. The course provides students with a background in educational theory and curriculum design, pedagogical/andragogical tools, and practice in sharpening their skills as instructors of preaching.

# PHDP 6365 Research Methodology (3)

This course examines research approaches and methodologies as related to preaching and writing. The course explores writing for research and other platforms and includes reading assignments, discussion, presentations, and writing assignments, preparing the student for academic article writing, dissertation writing, and other writing platforms.

# PHDP 6366 Victorian and Edwardian Preaching: Preaching in the Grand Style (3)

Informed opinion considers the Victorian and Edwardian eras the zenith of English language preaching in the grand rhetorical style and tradition. The literary remains of these periods embrace preaching from the poetic, cultured sermons of F. W. Robertson to the rugged Anglo-Saxon speech of C.H. Spurgeon.

# PHDP 6367 Studies in Minoritized Preaching Traditions (3)

A detailed study of minoritized culture preaching traditions in the U.S. context. Participants engage with preaching theories and practices in minoritized homiletics, wrestle with the significance of context and location in reading and preaching biblical texts, increase their levels of intercultural competence as preachers and teachers of preaching, and enhance their homiletical capacity to serve an intercultural church.

# PHDP 6370 Preaching and Culture: Engaging Societal Shifts in North America (3)

This seminar examines how recent societal shifts have impacted homiletical engagement with culture in the North American context(s). After constructing a biblical-theological rationale for cultural engagement, participants will analyze three shifts in particular – secularization, technologization, and interculturation – and their broader impact on preaching, congregational life, and society.

#### PHDP 6V99 Dissertation (1-9)

Supervised research for the doctoral dissertation. A total of nine semester hours is required for the completion of the dissertation. Students register for dissertation hours during dissertation research and receive credit for them when the dissertation is approved.

# Philosophy (PHI)

### PHI 5199 Non-Thesis Degree Completion (1)

To fulfill requirements for non-thesis master's students who need to complete final degree requirements other than coursework during their last semester. This may include such things as a comprehensive examination, oral examination, or foreign language requirement. Students are required to be registered during the semester they graduate.

#### PHI 5301 Readings from Plato (3)

Topics include Plato's philosophical contributions in metaphysics, epistemology, ethics, social and political philosophy, and aesthetics. Additional topics may include the philosophical uses of literary form, and the role of psychology and the emotions in an adequate philosophical understanding of human nature and the common good. Students learn a variety of interpretive approaches to Plato and also become familiar with the secondary literature on Plato. The course may be taken up to three times with different topics for a total of nine hours course credit.

# PHI 5302 Readings from Aristotle (3)

We read from Aristotle's writings around a theme, e.g., metaphysics, epistemology, logic, ethics, politics, aesthetics, or psychology. Students become conversant with Aristotle's writings and important secondary literature. Course may be taken up to three times with different topics for a total of nine hours course credit.

#### PHI 5306 Readings from Kierkegaard (3)

An intensive reading of selected philosophical works of Soren Kierkegaard, drawn from his pseudonymous and non-pseudonymous authorship. Focuses on significant philosophical issues discussed in Kierkegaard's works, putting him in conversation with important philosophers both from the past and from the contemporary world. Course may be taken up to two times with different topics for a total of 6 hours course credit.

#### PHI 5310 Value Theory (3)

Pre-requisite(s): For philosophy graduate students only or by departmental approval

A seminar on the major interpretations of the nature and meaning of value, with particular attention to the relation between value theory and ethics. Course may be repeated once with a different topic of study.

#### PHI 5311 Readings from the Philosophers (3)

Cross-listed as PSC 5311

Pre-requisite(s): For Political Science or Philosophy graduate students only; or consent of instructor

An intensive, critical reading of selected works of major philosophers such as Plato, Aristotle, Augustine, Aquinas, Descartes, Locke, Hume, Kant, Hegel, Nietzsche, Heidegger, Russell, and Rawls. Other philosophers may be added to this list. May be taken a maximum of six times if different topic, not to exceed eighteen semester hours.

#### PHI 5312 Topics in Classical Philosophy (3)

Pre-requisite(s): For philosophy graduate students only or by departmental approval

A critical study of philosophers from the classical world; may include figures from the pre-socratic origins of philosophy to the times of epicurean and stoic philosophers, including especially Plato and Aristotle. Course may be taken up to three times with different topics for a total of nine hours course credit.

#### PHI 5313 Topics in Action Theory (3)

An in-depth study of relevant recent and/or more classical philosophical literature on one or more selected topics such as free will, responsibility, practical rationality, decision theory, and intention. Course may be taken up to three times with different topics for a total of nine hours course credit.

#### PHI 5314 Topics in Modern Philosophy (3)

Pre-requisite(s): For philosophy graduate students only or by departmental approval

A critical study of philosophers from the Modern Period, including thinkers from the sixteenth to the nineteenth centuries. Course may be taken up to three times if topic is different for a total of nine hours credit.

#### PHI 5315 Topics in Philosophy of Mind (3)

Pre-requisite(s): For philosophy graduate students only or by departmental approval

A philosophical examination of the nature of the human mind and its relation to the body as well as theories that account for the nature of consciousness, intentionality, and other features of mentality. Course may be taken up to three times when topic is different for a total of nine credit hours for the course.

#### PHI 5316 Contemporary Philosophical Problems (3)

Pre-requisite(s): For philosophy graduate students only or by departmental approval

Examination of historical, normative, and analytical problems which have arisen in the history of philosophy and an examination of the systems of philosophy which have emerged from the consideration of these problems. May be taken six times if different topic, not to exceed eighteen semester hours.

### PHI 5318 Logic for Philosophers (3)

Pre-requisite(s): For philosophy graduate students only or by departmental approval

In this course the student should gain formal tools that are useful in a wide-range of areas of philosophy, including: propositional logic, quantificational logic, basic set theory, basic probability theory, and basic modal logic.

### PHI 5319 Philosophical Writing (3)

Pre-requisite(s): For philosophy graduate students only or by departmental approval

This course contains a significant amount of epistemology, metaphysics, and ethics. This course has as its goal mastering the art of writing a critical essay in philosophy, an essential skill for success in graduate school in philosophy and for publication success after securing a faculty position in philosophy.

#### PHI 5320 Special Topics in Philosophy (3)

Pre-requisite(s): For philosophy graduate students only or by departmental approval

Special research topics to be undertaken by students under direct supervision of the professor. Course may be taken a maximum of four times if different topic, not to exceed twelve hours.

#### PHI 5321 Topics in Epistemology (3)

Pre-requisite(s): For philosophy graduate students only or by departmental approval

Covers a broad array of issues concerning the nature of successful cognition of the sort sought after in purely theoretical activities. May focus on issues such as the nature and possibility of knowledge, the threat of skepticism, and the nature of rationality and justification, as well as on current controversies in the literature, including controversies with the value of knowledge, debates between foundationalists and coherentists, the Gettier problem, and many others. Course may be taken up to three times when the topic is different for a total of nine credit hours for the course.

### PHI 5322 Topics in Metaphysics (3)

Pre-requisite(s): For philosophy graduate students only or by departmental approval

Covers a broad array of issues concerning the nature of being and reality, involving topics concerning God, the world, and the self. May focus on related topics such as ontology, category theory, substances and attributes, space and time, causation, and possible worlds. Course may be taken up to three times when topic is different for a total of nine credit hours for the course.

#### PHI 5330 Readings in Ancient and Medieval Philosophy (3)

Pre-requisite(s): For philosophy graduate students only or by departmental approval

A critical readings course on primary sources and ancient and medieval philosophy. The course concludes with a comprehensive written examination over the sources.

#### PHI 5331 Readings in Modern and Contemporary Philosophy (3)

Pre-requisite(s): For philosophy graduate students only or by departmental approval

A critical readings course on primary sources in modern and contemporary philosophy. The course concludes with a comprehensive written examination over the sources.

### PHI 5333 Seminar in Political Philosophy (3)

Cross-listed as PSC 5333

See PSC 5333 for course information.

# PHI 5342 Seminar on Religion, Law, and Politics (3)

Cross-listed as PSC 5342, REL 5340

An examination of the liberal and republican traditions of government and their relationship to church-state relations, with particular emphasis on how philosophers, legal theorists, and/or theologians assess the influence of both traditions on the American constitutional system. Among the topics that may be discussed are the debates about liberalism, religious liberty, religious establishment, the employement of religious reasons in a liberal regime, and the nature of public reason.

#### PHI 5343 Classical Political Thought (3)

Cross-listed as PSC 5343

See PSC 5343 for course information.

#### PHI 5350 Workshop in Teaching Philosophy (3)

Pre-requisite(s): For philosophy graduate students only or by departmental approval

This course will address a broad range of pedagogical issues involved in becoming a successful philosophy teacher. Topics include: educational theory, organizational strategies, practical techniques for effective lecturing, practical techniques for stimulating discussion, the logistics of evaluation, the scholarship of teaching and the importance of ongoing self-assessment of classroom performance.

#### PHI 5353 Medieval Political Thought (3)

Cross-listed as PSC 5353

See PSC 5353 for course information.

#### PHI 5360 Contemporary Ethical Theory (3)

Pre-requisite(s): For philosophy graduate students only or by departmental approval

A critical study of issues in contemporary ethical theory; may be taken up to three times with different topics of study, not to exceed nine semester hours.

#### PHI 5361 Topics in Contemporary Philosophy of Religion (3)

Pre-requisite(s): For philosophy graduate students only or by departmental approval

This course investigates issues in contemporary philosophy of religion. Course may be taken up to three times with different topics, not to exceed a total of nine hours of course credit.

#### PHI 5362 Issues in Contemporary Philosophy of Science (3)

Pre-requisite(s): For philosophy graduate students only or by departmental approval

A critical study of issues in contemporary philosophy of sciences; may be taken up to three times with different topics of study, not to exceed nine hours of course credit.

#### PHI 5363 Modern Political Thought (3)

Cross-listed as PSC 5363

See PSC 5363 for course information.

# PHI 5365 Topics in Philosophy of Language (3)

Pre-requisite(s): For philosophy graduate students only or by departmental approval

A critical study of issues in philosophy of language. Meaning, reference, intentionality and extensionality are among possible topics to be considered using primary sources in contemporary philosophy. May be taken up to three times with different topics not to exceed nine total credit hours.

# PHI 5393 Advanced Seminar in Political Philosophy (3)

Cross-listed as PSC 5393

See PSC 5393 for course information.

#### PHI 5V99 Thesis (1-6)

Research, writing, and oral defense of an approved master's thesis. A minimum of six semester credit hours of PHI 5V99 is required.

### PHI 6V10 Prospectus Research (1-6)

Pre-requisite(s): PHI 5330 and 5331; and completion of regular course work

Supervised research for developing and writing a Dissertation Prospectus Proposal that will be the subject of a preliminary exam that will admit students to candidacy. A student may repeat this course for credit, with a maximum of eighteen total hours.

#### PHI 6V99 Dissertation (1-12)

Supervised research for the doctoral dissertation.

# **Physical Therapy (Doctoral) (PHT)**

# PHT 5191 Special Topics: Seminar I (1)

Concentrated study of a particular topic in physical therapy.

#### PHT 5192 Special Topics: Seminar II (1)

Concentrated study of a particular topic in physical therapy.

#### PHT 5193 Special Topics: Seminar III (1)

Concentrated study of a particular topic in physical therapy.

#### PHT 5194 Special Topics: Seminar IV (1)

Concentrated study of a particular topic in physical therapy.

# PHT 5230 Essentials of Evidence-Based Practice and Clinical Research (2)

The integration of best evidence and best practice concepts as well as advanced concepts, techniques, and technologies used for the scientific inquiry of applied clinical research. Emphasis is placed on refining research designs for individual projects and preparing a research protocol for approval by the Institutional Review Board.

#### PHT 5241 Differential Diagnosis in Orthopaedic Physical Therapy (2)

Discussion of the subjective and objective findings of somatic and visceral disorders of the various systems with reference to their influence on physical therapy evaluation and rehabilitation or the need for referral to a physician.

# PHT 5321 Aspects of Pharmacology and Nutrition in Physical Therapy (3)

Role and relationship of nutrition and drug therapy in the treatment of specific populations treated by physical therapists; medical indications and potential effects of drugs on physical therapy treatments; nutritional principles related to exercise.

### PHT 5323 Pathophysiology of Therapeutic Exercise (3)

An in-depth exploration of exercise physiology and pathophysiology related to the cardiovascular, respiratory, and musculoskeletal systems. Emphasis will be placed on utilizing this information as a basis for evaluating patients with selected pathologies commonly seen in physical therapy, and designing and implementing treatment programs.

# PHT 5326 Functional Physical Therapy Anatomy and Biomechanics: Lower Quarter (3)

Advanced dissection course in human gross anatomy with emphasis on the origin of function. Ligaments, bones, and bones are dissected and their interrelationships emphasized especially with the lower extremities. All tissues and joint structures are analyzed from an anatomical as well as functional perspective.

# PHT 5327 Functional Physical Therapy Anatomy and Biomechanics: Upper Quarter (3)

Advanced dissection course in human gross anatomy with emphasis on the origin of function. Ligaments, bones, and muscles are dissected and their interrelationships emphasized especially with the upper extremities. All tissues and joint structures are analyzed from an anatomical as well as functional perspective.

### PHT 5331 Quantitative Evaluation (3)

Assessment of the uses, advantages, validity, reliability, and sources of error of evaluation procedures in physical therapy.

#### PHT 5349 Radiology for Physical Therapists (3)

Familiarizes the physical therapist with procedures used in radiology related to neuromuscular and musculoskeletal disorders. Emphasis placed on correlation of radiological findings with clinical signs and symptoms.

#### PHT 5382 Evaluation and Mobilization: Lower Quarter (3)

Interpretation of basic science knowledge and development of clinical skills needed to complete a differential evaluation and proceed to effective treatment of lower quarter dysfunction.

#### PHT 5383 Evaluation and Mobilization: Upper Quarter (3)

Interpretation of basic science knowledge and development of clinical skills needed to complete a differential evaluation and proceed to effective treatment of upper quarter dysfunction.

# PHT 5392 Evaluation and Mobilization: Advanced Lower Quarter (3)

Review of basic science knowledge and refinement of clinical skills needed to complete a differential evaluation and proceed to effective treatment of lower quarter dysfunction. Development of advanced clinical skills in treatment progression and application of combined movements, and grade V mobilization techniques (manipulation) which will increase efficiency, accuracy, and clinical outcomes.

#### PHT 5393 Evaluation and Mobilization: Advanced Upper Quarter (3)

Review of basic science knowledge and refinement of clinical skills needed to complete a differential evaluation and proceed to effective treatment of upper quarter dysfunction. Development of advanced clinical skills in treatment progression and application of combined movements, and grade V mobilization techniques (manipulation) which will increase efficiency, accuracy, and clinical outcomes.

# PHT 6101 Advanced Practicum in Physical Therapy (1)

Supervised experience in a specialized area of interest such as administration, teaching, research, or advanced evaluation and treatment procedures.

# PHT 6111 Advanced Orthopaedic/Sports Medicine and Surgery for Physical Therapists (1)

Review of the orthopaedic surgeon's model of evaluation and treatment of musculoskeletal injuries. Update current orthopaedic and sports medicine surgical procedures and rehabilitation guidelines.

#### PHT 6150 Orthopaedic Lecture Series I (1)

The Orthopaedic Lecture Series, developed for the West Point Joint & Soft Tissue Trauma Fellowship, provides lectures from some of the top orthopaedic and rehabilitation specialists in the country. The residents are invited to present their research at this forum, which prepares them to present in front of leading experts in orthopaedics and sports medicine.

# PHT 6151 Orthopaedic Lecture Series II (1)

A continuation of The Orthopaedic Lecture Series, developed for the West Point Joint and Soft Tissue Trauma Fellowship, which provides lectures from some of the top orthopaedic and rehabilitation specialists in the country. The residents are invited to present their research at this forum, which prepares them to present in front of leading experts in orthopaedics and sports medicine.

### PHT 6152 Orthopaedic Lecture Series III (1)

A continuation of courses PHT 6150 and 6151. The Orthopaedic Lecture Series, developed for the West Point Joint and Soft Tissue Trauma Fellowship, provides lectures from some of the top orthopaedic and rehabilitation specialists in the country. The residents are invited to present their research at this forum, which prepares them to present in front of leading experts in orthopaedics and sports medicine.

#### PHT 6191 Independent Study I (1)

Variable content. Clinical practicum with direct one-to-one clinical mentoring with specialization in advanced orthopedic physical therapy.

### PHT 6192 Independent Study II (1)

Variable content. Clinical practicum with direct one-to-one clinical mentoring with specialization in advanced orthopedic physical therapy.

#### PHT 6193 Independent Study III (1)

Variable content. Clinical practicum with direct one-to-one clinical mentoring with specialization in advanced orthopedic physical therapy.

# PHT 6194 Independent Study IV (1)

Variable content. Clinical practicum with direct one-to-one clinical mentoring with specialization in advanced orthopedic physical therapy.

#### PHT 6292 Special Topics: Seminar I (2)

Concentrated study of a particular topic in sports medicine as it relates to the overall health and performance of an athlete/soldier.

# PHT 6293 Special Topics: Seminar II (2)

Concentrated study of a particular topic in sports medicine as it relates to the overall health and performance of an athlete/soldier.

#### PHT 6294 Differential Diagnosis in Sports Medicine (2)

Discussion of subjective and objective findings of somatic and visceral disorders of the various systems with reference to their influence on physical therapy evaluation and rehabilitation or the need for referral to a physician.

#### PHT 6310 Soft Tissue and Bone Pathophysiology (3)

Fundamental concepts of pathophysiological processes of injury and disease as related to causes, mechanisms, clinical manifestations, diagnostic techniques and management. Basic science of soft tissue and bone pathophysiology with emphasis on relationship to clinical/field evaluation, intervention and post-operative rehabilitation.

#### PHT 6320 Athletic Injuries I (3)

Basic and advanced concepts for the recognition, examination, diagnosis, management and prevention of injuries. Injuries are presented in general terms as well as sport specific. Classroom and practical exposure to acute and chronic injuries, to include injury prevention are addressed.

#### PHT 6321 Athletic Injuries II (3)

A continuation of PHT 6320 exposing the residents to advanced concepts for the recognition, examination, diagnosis, management and prevention of athletic injuries. Injuries are presented in general terms as well as sport specific. Classroom and practical exposure to acute and chronic injuries, to include injury prevention are addressed.

#### PHT 6332 Field Research in Physical Therapy (3)

Designs, data collection techniques, and analyses for field research in physical therapy. Critical application of surveys, observational studies, case studies, and single case designs to clinical field problems in physical therapy. Emphasis is on the development of analytical skills requisite for field research in physical therapy.

# PHT 6333 Advanced Professional Paper Project (3)

This course focuses on methods of evaluating health status and outcomes of physical therapy intervention. Design, measurement and analysis are covered. This course is designed to guide the residents in conducting and completing original clinical research. Review of the literature of selected topics, pilot research studies, and the course instructor may approve independent research projects. Focus will be placed on assisting the residents to be participants in the research process.

### PHT 6340 Functional Anatomy and Biomechanics I (3)

Advanced course in functional anatomy and biomechanics of the upper/lower quarter and spine with emphasis on orthopedic and sports related trauma and pathology. The course will correlate basic science with clinical concepts for diagnosis, intervention and injury prevention. All tissues and joint structures are analyzed from an anatomical as well as functional perspective.

#### PHT 6341 Functional Anatomy and Biomechanics II (3)

A continuation of PHT 6340. Advanced course in functional anatomy and biomechanics of the upper/lower quarter and spine with emphasis on orthopedic and sports related trauma and pathology. The course will correlate basic science with clinical concepts for diagnosis, intervention and injury prevention. All tissues and joint structures are analyzed from an anatomical as well as functional perspective.

#### PHT 6379 Advanced Radiology in Sports Medicine (3)

Familiarize with procedures used in radiology related to neuromuscular and musculoskeletal disorders. Emphasis placed on correlation of radiological findings with clinical signs and symptoms.

#### PHT 6384 Independent Study (3)

Concentrated study of a particular topic related to musculoskeletal pathology in sports medicine.

#### PHT 6387 Research and Statistics I (3)

This course is designed to introduce residents to advanced concepts, techniques, and technologies used in the scientific inquiry of applied clinical research, with the emphasis on sports medicine. Topics to be investigated include measurement theory and the scientific method, the research process, experimental design, hypothesis construction and testing, critical evaluation of physical therapy research, sampling, indices of validity and reliability, parametric and non-parametric statistics, data collection, and coding schemes. This course focuses on methods of evaluating health status and outcomes of physical therapy intervention. Design, measurement and analysis are covered. This course is also designed to guide the residents in conducting and completing original clinical research. Review of the literature of selected topics, pilot research studies, independent research projects may be approved by the course instructor. Focus will be placed on assisting the residents to be participants in the research process.

# PHT 6388 Research and Statistics II (3)

A continuation of PHT 6387 and is designed to further introduce residents to advanced concepts, techniques, and technologies used in the scientific inquiry of applied clinical research, with the emphasis on sports medicine. Topics to be investigated include measurement theory and the scientific method, the research process, experimental design, hypothesis construction and testing, critical evaluation of physical therapy research, sampling, indices of validity and reliability, parametric and non-parametric statistics, data collection, and coding schemes. This course focuses on methods of evaluating health status and outcomes of physical therapy intervention. Design, measurement and analysis are covered. This course is also designed to guide the residents in conducting and completing original clinical research. Review of the literature topics, pilot research studies, independent research projects may be approved by the course instructor. Focus will be placed on assisting the residents to be participants in the research process. Dissemination of research findings in the form of manuscripts, poster and platform presentations will also be covered.

#### PHT 6389 Research and Statistics III (3)

A continuation of PHT 6387 and 6388. This course focuses on the dissemination of research findings in the form of manuscripts, poster and platform presentations will also be covered.

#### PHT 6391 Clinical Fellowship I (3)

Clinical practicum with specialization in orthopaedic physical therapy emphasizing advanced orthopaedic evaluation and treatment procedures in the provision of direct patient, orthopaedic care.

#### PHT 6392 Clinical Fellowship II (3)

Clinical practicum with specialization in orthopaedic physical therapy emphasizing advanced orthopaedic evaluation and treatment procedures in the provision of direct patient, orthopaedic care.

#### PHT 6393 Clinical Fellowship III (3)

Clinical practicum with specialization in orthopaedic physical therapy emphasizing advanced orthopaedic evaluation and treatment procedures in the provision of direct patient, orthopaedic care.

#### PHT 6394 Clinical Fellowship IV (3)

Clinical practicum with specialization in orthopaedic physical therapy emphasizing advanced orthopaedic evaluation and treatment procedures in the provision of direct outpatient, orthopaedic care.

#### PHT 6395 Advanced Sports Medicine Practicum I (3)

Field and courtside basic and advanced practical applications for the recognition, examination, diagnosis, and management of athletic injuries. Coverage for an athletic event may be with another faculty member or independently (usually not until third or fourth semesters). Athletic venues will consist of USMA intramural and inter-collegiate sports. Residents will also be sent on TDY to cover Army Sports at trial camps, Armed Forces, National and CISM competitions. TDYs will be in CONUS and OCONUS.

#### PHT 6396 Advanced Sports Medicine Practicum II (3)

A continuation of PHT 6395 for field and courtside basic and advanced practical applications for the recognition, examination, diagnosis, and management of athletic injuries. Coverage for an athletic event may be with another faculty member or independently (usually not until third or fourth semesters). Athletic venues will consist of USMA intramural and inter-collegiate sports. Residents will also be sent on TDY to cover Army Sports at trial camps, Armed Forces, National and CISM competitions. TDYs will be in CONUS and OCONUS.

# PHT 6397 Advanced Sports Medicine Practicum III (3)

Continuation of PHT 6395 and 6396. Field and courtside basic and advanced practical applications for the recognition examination, diagnosis, and management of athletic injuries. Coverage for an athletic event may be with another faculty member or independently (usually not until third and fourth semesters). Athletic venues will consist of USMA intramural and inter-collegiate sports. Residents will also be sent on TDY to cover Army Sports at trial camps, Armed Forces, National and CISM competitions. TDYs will be in CONUS and OCONUS.

# **Physical Therapy (PT)**

# PT 6107 Emerging Topics in Physical Therapy (1)

The purpose of this course is to provide the students with lectures and interaction with a distinguished visiting professor. The topics and scholars are chosen annually by the faculty. Typically two visiting scholars provide a daylong interaction with the students. Topics include current issues in the practice and profession of physical therapy.

#### PT 6120 Evidence Based Practice I (1)

The purpose of this course is to prepare and equip uniformed services physical therapists with the knowledge, skills, and abilities necessary to practice evidence-based physical therapy throughout their career. This is the first of a two-part course that develops the elements that serve as the foundation of evidence-based practice. EBP I focuses on the concepts of evidence-based practice with particular emphasis on literature search strategies and forming answerable clinical questions. In addition, the critical appraisal of literature is fostered in conjunction with the material presented in Research Methods I.

#### PT 6121 Evidence Based Practice II (1)

Pre-requisite(s): PT 6120 This course prepares and equips uniformed services physical therapists with the knowledge, skills, and abilities necessary to practice evidence-based physical therapy throughout their career.

This course builds upon the foundation established in EBP I. EBP II focuses on the concepts of evidence-based practice with particular emphasis on critical appraisal of the literature. The evaluative approach to diagnostic tests and screening tools prepares the students to judge the evidence on the accuracy and validity of diagnostic tests and the application of important diagnostic tests in the care of a specific patient. The evaluative approach to studies of treatment and intervention prepares the student to judge the evidence on clinical trials and systematic reviews. In addition, discussions on how the clinician proceeds in the absence of evidence occur. The focus of this course is on the tests and intervention used in patients with musculoskeletal disorders.

#### PT 6131 Clinical Pathophysiology (1)

This course presents the fundamental concepts involved in the pathophysiological processes of injury and disease. Specifically discussed are the causes, mechanisms, clinical manifestations, diagnostic techniques, and clinical management of these various injury and disease processes.

#### PT 6142 Clinical Medicine III (1)

Pre-requisite(s): PT 6240 and PT 6241

The information presented in this course reinforces previous neurologic and pediatric education and assists student understanding and application of evidence-based examination, evaluation, assessment, treatment, and referral of adult and pediatric patients with various neurological disorders. This course presents a variety of clinical medicine topics to include adult neurology, pediatric neurology, management of cognitive disorders, and the mechanisms of speech and language disorders.

#### PT 6151 Pharmacology for Physical Therapists (1)

The purpose of this course is to prepare uniformed services physical therapists for their role as physician extenders by providing instruction in general pharmacologic principles, drugs prescribed by physical therapists, drugs with significant impact on physical therapy practice and issues related to drug prescription.

### PT 6172 Research Methods III (1)

Pre-requisite(s): PT 6270 and 6271 A continuation of Research Methods I and II in which students continue their work with Faculty Research Advisory Committee on a clinically relevant research project Specific goals include: the completion of data collection and analysis, development of poster and platform presentations, oral research presentations, and individual research defense.

#### PT 6204 Diagnostic Imaging and Procedures (2)

This course presents an eclectic collection of topics related to issues in radiology and nuclear medicine. The emphasis is placed on musculoskeletal imaging with plain films, CT scans, and MRI, and an introduction to musculoskeletal ultrasound. In addition, instruction in medical laboratory diagnostic tests for physical therapists is provided. Lecture and laboratory work in electrophysiologic testing (EMG & NCV) is conducted.

#### PT 6209 Primary Care Musculoskeletal Physical Therapy (2)

Pre-requisite(s): PT 6402, 6503, and 6601

This course provides lectures, labs, and case-based learning experiences in differential diagnosis and medical screening in clinical settings. This course is taught in two sections and spans the duration of three academic semesters and the student's clinical internship year. During the first and second semester a regional approach to primary care is covered in one-hour instructional blocks for each of the seven regions. The third semester pulls from the regional course information and shifts the focus onto the various medical systems of the body and teaches the physical therapy student how to conduct a review of systems. The student will integrate this knowledge during their internship clinical experience (fourth semester) and apply it to a real patient case.

#### PT 6212 Neuroanatomy (2)

Pre-requisite(s): PT 6410 and 6511 A discussion of the normal anatomy of the brain and spinal cord and their supporting structures Introduction to the Pain and Temperature, Discriminatory Touch and Conscious Proprioception, and Pyramidal Motor Pathways. In depth study of the microscopic structures of the central nervous system. A problem solving approach to fundamental neuroanatomical pathologies.

#### PT 6230 Neuromuscular Physiology (2)

This course will consist of a study of normal neuromuscular physiology. The emphasis will be on the cellular functions of neurons and muscle fibers. The goals of the course are to provide foundational knowledge about human function, enhance the student's ability to make quantitative and qualitative observations, and facilitate understanding of the clinical sciences.

#### PT 6240 Clinical Medicine I (2)

This class consists of topics in pathology, medicine, and surgery with emphasis on signs and symptoms resulting from abnormalities, disease, or trauma that produce disorders of movement. Substance abuse, depression, post-traumatic stress disorders, and cultural variations are presented with an emphasis on how these conditions impact the physical therapy management of patients. This is a lecture-based course taught primarily by guest speakers (subject matter experts) including physicians, physician assistants, medical social workers, dieticians and occupational therapists. Program faculty members present the lectures on arthritis. Group discussion of case scenarios is part of the instructional hours on arthritis.

### PT 6241 Clinical Medicine II (2)

Pre-requisite(s): PT 6240 This course consists of an eclectic collection of topics that include a general and specific review of the endocrine, renal, and immune systems; discussion of pelvic floor dysfunction, incontinence, and urinary tract disorders; wound healing and burn care; and a review of women's health topics specific to post-mastectomy rehabilitation and musculoskeletal dysfunction associated with pregnancy

#### PT 6250 Therapeutic Interventions (2)

This course is comprised of a wide spectrum of introductory material regarding therapeutic interventions and provides a foundation for the prescription and application of these interventions in patients with neuromusculoskeletal disorders. This course will include topics on planning treatment programs, clinical teaching and patient education, therapeutic exercise, introduction to joint and soft tissue mobilization and manipulations, bandaging, basic ambulation, and wheelchairs. This course consists of lecture and lab periods.

#### PT 6253 Orthotic and Prosthetic Interventions (2)

Functional and surgical anatomy of upper and lower member amputations and conditions requiring upper/lower member and spinal orthotic intervention are presented. Physiology/pathophysiology of upper and lower member amputations to include predisposing and complicating factors of traumatic and surgical amputations as well as etiology and response to treatment are covered. The physiologic effects of and response to upper/lower member and spinal orthotic intervention are discussed. Conditions requiring amputation intervention and orthotic use are presented and the biomechanical principles of prosthetic and orthotic fabrication are outlined as are the indications for their selection and use. All phases of upper/lower amputee management are covered in depth and include: preoperative phase, early postoperative phase, rehabilitative phase, and prosthetic fitting phase. Psychomotor tasks related to the upper/lower amputee and the upper/lower member and spinal orthotic patient care are practiced. Discharge planning and self-care/prevention techniques for the amputee and orthotic patient are discussed.

#### PT 6270 Research Methods I (2)

The first of a three-part series, this course is an in-depth analysis of research design, statistics, and critical appraisal of research literature. This course introduces students to the basic and advanced concepts, techniques, and technologies used in the scientific inquiry of applied clinical research. Topics to be investigated include the research process and the scientific method, measurement theory, indices of validity and reliability, hypothesis construction and testing, constructing a clinical question, sampling, data collection and coding schemes, experimental design, a hierarchy of evidence, survey research, and guides for critical appraisal of research. During Research Methods I, students begin work on a clinically relevant research project under the direction and supervision of a Faculty Research Advisory Committee.

#### PT 6271 Research Methods II (2)

Pre-requisite(s): PT 6270 This course is a continuation of Research Methods I in which students continue their work with a Faculty Research Advisory Committee on a clinically relevant research project Specific goals during this course include the completion of a literature review and the beginning of pilot testing and data collection. Also included is Statistics II, which develops the student's use of advanced statistical analysis techniques, including the use of SPSS analytic software.

#### PT 6280 Executive Leadership and Management (2)

Pre-requisite(s): Semester II courses

This course is designed to help junior officer physical therapists develop their executive skills for future clinic leadership/management and for their future leadership positions. The course is the study of management leadership theory and concepts drawn from the behavioral and social sciences and applied to leadership and management in the diagnosis, prediction and analysis of human behavior in organizations. In addition to helping students understand and address change in their own leadership styles, the course addresses change theory, strategic planning, and consulting. The course also includes elements of clinic design and management, continuous quality improvement, legal and legislative issues in physical therapy, and consulting/health promotion. This course is specific to graduates' needs as new Army/Air Force/Navy/Public Health physical therapists. The course has been tailored to the work of a physical therapy professional, where a large part of the position is dealing with people, including patients, personnel, supervisors, third party payers and other professionals. These same skills developed, as a junior officer, will serve the officer well in various future assignments with increased levels of responsibilities. This Executive Skills course is also closely aligned with the LAMP (leadership, administration, management preparation) skills identified by the APTA Section on Administration.

#### PT 6281 Physical Therapy in Deployed Environments (2)

This course is designed to prepare uniformed service physical therapy students for their roles and responsibilities while deployed for combat operations and support/sustainment operations. The purpose of this course is derived from the principle of "Sports Medicine on the Battlefield - operational readiness through injury prevention and early intervention" developed at the United States Military Academy, West Point, New York. The concepts for managing injured elite athletes and returning them to the playing field as quickly and safely as possible share the goal of returning injured soldiers to their units in garrison or combat. This course provides students an opportunity to develop core-advanced competencies in orthopaedic triage and management of acute musculoskeletal and neurological injuries while deployed. These same evidence-based competencies are used to return injured soldiers - "tactical athletes" - to a high level of military technical and tactical readiness. This course also brings students to an advanced level of understanding in general medicine topics (triage, differential diagnosis, and orthopaedics) and methods of tracking procedures and patient outcomes.

#### PT 6282 Injury Control and Prevention (2)

This course provides an overview of methods to control/prevent musculoskeletal injuries in physical training environments to include special populations training. It introduces the student to the epidemiology of musculoskeletal physical training injuries, explores intrinsic and extrinsic risk factors for injury as identified in the literature, and teaches the student how to develop an injury control program utilizing the five basic steps of surveillance, research, intervention, outcomes measurement/program monitoring, and program modification. The course is completed with a brief overview of the descriptive and analytical aspects of epidemiologic research as well as a review of specific study designs as applied to injury control research.

#### PT 6300 Physical Therapy Fundamentals (3)

This course is comprised of a wide spectrum of introductory material including biomechanics and kinesiology, the basic physical examination, joint motion assessment and measurement, muscle strength and flexibility testing, neuromuscular screening, vital signs, cardiopulmonary resuscitation, patient management issues, handling and positioning of patients, written and oral communication, medical records, professional organizations and responsibilities, and professional ethics.

#### PT 6306 Cardiopulmonary Physical Therapy (3)

The purpose of this module is to prepare physical therapists to consider the cardiovascular system as an integral component of all patients, not solely those patients who have manifest cardiovascular disease. The primary emphasis is how therapeutic exercise can be used in the prevention and treatment of cardiovascular disease, including the effects of exercise on other established risk factors. The student will receive instruction in principles of cardiopulmonary exercise physiology and how these principles can help guide them as they prescribe exercise in a variety of patients. Physical Therapy assessment of patients with cardiovascular disease is addressed, as are the diagnostic imaging and the medical (including pharmacological) and surgical management of patients. Recommended staffing and operation of a cardiac rehabilitation service is presented, and techniques to maximize patient compliance with the Physical Therapy prescription are reviewed.

### PT 6308 Lifespan Physical Therapy (3)

Pre-requisite(s): Semester II courses

The purpose of this course is to prepare physical therapy students to conduct a clinical examination, evaluation, diagnosis, prognosis, and intervention in pediatric and geriatric clients with neuromusculoskeletal disorders. A framework of normal development and aging will be presented and serve as a course foundation.

#### PT 6313 Neuroscience (3)

Pre-requisite(s): Semester II courses

Neuroscience is a formidably comprehensive discipline that combines neurobiology, molecular science, psychology, neuroanatomy, and neurophysiology. This course fosters an understanding of human perception and movement from a basic science level. It complements Neuroanatomy instruction and emphasizes the functional aspects of various neural systems. Normal peripheral and central nervous system function and the pathophysiology of various neurological disorders is discussed. Both a conceptual understanding of the principles of CNS organization and some memorization of specific nuclei and pathways is required. The primary end state of this course is a solid understanding of nervous system structure and function and a foundation that allows students to master future concepts that will be presented in the Neuromuscular Physical Therapy and the Lifespan Physical Therapy courses.

# PT 6333 Clinical Exercise Physiology (3)

This course begins with an overview of cardiopulmonary physiology during rest and exercise in the well individual. Students are then introduced to the principles of exercise prescription for the well individual, American College of Sports Medicine exercise guidelines, exercise and nutritional approaches to weight loss, and screening for risk factors for physical activity. Practical exercises include field and laboratory exercise testing of strength, power, and aerobic capacity.

#### PT 6352 Physical Agent Interventions (3)

This course discusses the roles and mechanisms of various physical agents used in physical therapy and rehabilitation to reduce pain, enhance healing, improve motion, and assist in the recruitment of muscle activity. It is important for the therapist to have a solid understanding of the normal physiology of the cardiovascular and neuromuscular system prior to using an agent that can alter the function of these tissues. A background in the physiology of healing and of modulation of pain serves as a basis for the rationale for using any physical agent. This course provides the foundation needed in clinical decision-making regarding patient care options and physical agents.

#### PT 6354 Advanced Therapeutic Interventions (3)

Pre-requisite(s): PT 6250

The purpose of this course is to prepare and equip physical therapists with advanced intervention skills to be used in the management of the musculoskeletal system. An emphasis will be placed on skill advancement for clinical decision-making, developing and progressing integrated treatment plans, and honing the motor skills necessary for the effective application of spinal and extremity manual therapy, soft tissue mobilization, trigger point dry needling, and therapeutic exercise. Skill laboratories will include a core set of manual therapy procedures (mobilization and manipulation), soft tissue mobilizations, dry needling procedures, therapeutic taping procedures, and therapeutic exercise as they relate to clinical case scenarios. Students will be expected to demonstrate proficiency in designing and demonstrating a complete treatment plan using sound clinical and evidence-based reasoning.

#### PT 6402 Musculoskeletal Physical Therapy II - Spine (4)

Pre-requisite(s): PT 6601 This course includes an introduction to the biomechanics, kinesiology, and specific terminology of spinal movement The course emphasizes applying evidence-based practice in all areas of spinal management, including the use of treatment-based classification systems to guide the evaluation and treatment of patients with mechanical neck and back pain. Where little evidence exists, a pragmatic, impairment-based approach integrating basic principles of biomechanics and pathokinesiology is used. A large portion of the course is devoted to carefully monitored laboratory palpation, examination, and intervention sessions. Evidence-based interventions such as patient education, therapeutic exercise, and manual therapy (muscle energy techniques, mobilization, and thrust manipulation) build upon the models previously presented in lower extremity courses.

### PT 6405 Neuromuscular Physical Therapy (4)

Pre-requisite(s): Semester II courses

This course presents the physical therapy examination, evaluation, and intervention of clients with neurological conditions, including, but not limited to: polyneuropathy, spinal cord injury, stroke, traumatic brain injury, multiple sclerosis, and Parkinson's disease. Therapeutic interventions for clients with neurological impairments and activity limitations to be discussed include, but are not limited to: activities of daily living and functional training, assistive/adaptive devices, electrical stimulation, biofeedback, therapeutic exercise including PNF, facilitation/inhibition procedures, gait and balance training, orthoses, hydrotherapy, and patient and family education.

#### PT 6410 Anatomy I (4)

This course presents a discussion of the normal anatomy of epithelial, connective, muscle, and nervous tissues including osteology and arthrology. Also discussed are the peripheral and autonomic nervous systems. This course also consists of an in-depth study of the gluteal, thigh, knee, leg and foot regions including extensive dissection and prosection study of each region.

# PT 6503 Musculoskeletal Physical Therapy III - Upper Member (5)

Pre-requisite(s): Semester II courses

This course includes the biomechanics, kinesiology, and clinical disorders of the upper member. This course, coupled with the anatomy of the upper member, prepares students to competently examine a patient with upper extremity dysfunction, evaluate the information and establish a clinical diagnosis, and develop a physical therapy intervention plan. A large portion of the time is spent in the laboratory setting practicing palpation skills, the performance of clinical tests, and application of therapeutic treatment techniques that include therapeutic exercise, manual therapy (muscle energy techniques, mobilization, and manipulation), and patient education.

#### PT 6511 Anatomy II (5)

Pre-requisite(s): PT 6410 This course provides an in-depth study of the spine, back, neck, thorax, abdomen, pelvis, shoulder, arm, elbow, forearm, wrist and hand

Also discussed are the anatomy of the face and temporomandibular joint.

#### PT 6601 Musculoskeletal Physical Therapy I - Lower Member (6)

This course includes the biomechanics, kinesiology, and clinical disorders of the lower member. This course, coupled with PT 6410 (Anatomy I), is designed to prepare students to competently examine a patient with lower extremity dysfunction, evaluate the information and establish a clinical diagnosis, and develop a physical therapy intervention plan. A large portion of the time will be spent in the laboratory setting practicing palpation skills, the performance of clinical tests, and application of therapeutic treatment techniques that include therapeutic exercise, manual therapy (muscle energy techniques, mobilization, and manipulation), and patient education.

#### PT 6660 Physical Therapy Practice I (6)

Pre-requisite(s): Semester I and II courses

This course occurs at the conclusion of the second semester and consists of a full-time clinical experience at carefully selected medical treatment facilities. The emphasis of the experience is the management of patients in musculoskeletal, acute care, or in-patient orthopedic rehabilitation environments. A heavy emphasis of this clinical experience is student integration of fundamental physical therapy skills and management of the musculoskeletal system.

# PT 6V98 Physical Therapy Internship (36)

Pre-requisite(s): Semester III courses and successful completion of comprehensive oral examinations

This year-long internship is a directed clinical experience in various physical therapy settings. The internship experience is designed to broaden and increase the depth of clinical practice to bring the student to the level of an independently practicing doctor of physical therapy. In order to achieve this level of experience, the internship will require both focused and non-focused experiences in a wide range of clinical practice environments.

# **Physics (PHY)**

#### PHY 5155 Advanced In-Situ Instrumentation Techniques (1)

Cross-listed as ENV 5155

Pre-requisite(s): PHY 4155, 4350, and concurrent enrollment in 4351 Computer modeling and instrument design and development of detectors for the in-situ measurement of physical and dynamic characteristics of dust in interplanetary space and planetary ring systems.

#### PHY 5180 Graduate Physics Colloquium (1)

Pre-requisite(s): Enrollment in graduate program

Students are required to register for the weekly colloquium and to present papers. No more than three semester hours may be counted on a master's degree and no more than six may be counted on the Ph.D. degree.

#### PHY 5199 Non-Thesis Degree Completion (1)

To fulfill requirements for non-thesis master's students who need to complete final degree requirements other than coursework during their last semester. This may include such things as a comprehensive examination, oral examination, or foreign language requirement. Students are required to be registered during the semester they graduate.

#### PHY 5320 Classical Mechanics I (3)

Pre-requisite(s): PHY 4322

Elementary mechanics, variational principles, Lagrange's equations, twobody central forces, scattering, kinematics, rotations, rigid body motion, and Hamilton's equations of motion; special relativity, including covariant Lagrangian formulation.

#### PHY 5321 Classical Mechanics II (3)

Pre-requisite(s): PHY 5320

Small oscillations; canonical transformations; Hamilton-Jacobi theory; canonical perturbation theory; Lagrangian and Hamiltonian densities, critical points, Lyapunov exponents, bifurcation, chaos, noise, and other topics in non-linear dynamics.

### PHY 5330 Electromagnetic Theory I (3)

Pre-requisite(s): PHY 4322 and 5360 (concurrently)

Advanced electrostatics and magnetostatics, boundary-value problems, time-varying fields, conservation laws, plane electromagnetic waves, wave guides and resonant cavities, and simple radiating systems and diffraction.

#### PHY 5331 Electromagnetic Theory II (3)

Pre-requisite(s): PHY 5330

Magnetohydrodynamics and plasma physics, advanced relativistic electrodynamics, collisions of charged particles, scattering, Lienard-Wiechert potentials and radiation by moving charges, Bremsstrahlung, the method of virtual quanta, dynamic multipole fields, radiation damping, self-fields of a particle, and scattering and absorption by a bound system.

#### PHY 5340 Statistical Mechanics (3)

Pre-requisite(s): PHY 4340 and credit or concurrent registration in PHY 5360

Probability, statistical methods, classical and quantum statistical mechanics, postulates, ensembles, ideal systems, real gases, cluster expansions, liquid helium, and phase transitions.

### PHY 5342 Solid State Physics (3)

Pre-requisite(s): PHY 4372 and 5370

Theory of solids: crystal symmetry, lattice dynamics, band theory, lattice defects, impurity states. Applications to the thermal, magnetic, and electrical properties of solids.

### PHY 5350 Fundamentals of Stellar Structure and Evolution (3)

Pre-requisite(s): PHY 4350 and 4351

Stellar structure, hydrostatic equilibrium, radiative transfer, stellar surface phenomena, and corona interactions. Cosmical electrodynamics and nuclear reactions in astrophysics, basic stellar evolution, variable stars, degenerate cores, white dwarfs, and neutron stars.

### PHY 5351 General Relativity (3)

Pre-requisite(s): PHY 5360

A systematic exposition of Einstein's general theory of relativity, with emphasis on applications to astrophysical and cosmological problems.

#### PHY 5352 Space Plasma Physics (3)

Pre-requisite(s): PHY 4322 and 5360 (concurrently) or consent of the instructor

Space plasma and electromagnetic field phenomena; the guiding center drift equation (with applications); adiabatic invariant theory; the basic equations of magnetohydrodynamics; plasma convection, currents (including Chapman-Ferraro currents and ring currents), oscillations; magnetohydrodynamic boundaries, diffusion, waves, shocks, and instabilities.

#### PHY 5360 Mathematical Physics I (3)

Pre-requisite(s): MTH 2321 and 3325

Theory of analytical functions, Laplace and Fourier transforms, Fourier series, theory of distributions, ordinary differential equations, eigenvalue problems, special functions defined by eigenvalue problems, Green's functions, partial differential equations, radiation problems and scattering problems.

#### PHY 5361 Mathematical Physics II (3)

Pre-requisite(s): PHY 5360 or consent of instructor Conformal mapping, electrostatic problems, dispersion relations, asymptotic expansions, method of steepest descent, calculus of variations, Rayleigh-Ritz principle, finite-dimensional vector spaces, matrix theory, orthogonal transformations, normal coordinates, Hilbert vector spaces, unitary transformations, resolvent operators, operator calculus, integral equations, and approximate methods for solution of boundary value problems.

#### PHY 5370 Quantum Mechanics I (3)

Schrodinger equation, eigenfunctions and eigenvalues, harmonic oscillator, and hydrogen atom. WKB approximation, collision theory, matrix formulation of quantum mechanics, transformation theory, and representation theory, including Schrdinger and Heisenberg picture.

#### PHY 5371 Quantum Mechanics II (3)

Pre-requisite(s): PHY 5370

Angular momentum algebra, Pauli Principle, many-particle systems, conservation laws, symmetry principles, time-dependent approximation methods, time-independent approximation methods, atoms, molecules, and relativistic wave equations.

#### PHY 5381 Special Topics in Physics (3)

Pre-requisite(s): Consent of instructor and the departmental adviser Selected topics in physics. May be repeated once with change of content.

#### PHY 5V95 Graduate Research (1-9)

Pre-requisite(s): Consent of student's research supervisor and departmental adviser

The research is intended for those students who have not yet passed the Ph.D. qualifying examination and who have not yet selected a Ph.D. dissertation topic. May be repeated for no more than twelve semester hours of credit. (Not to be counted on master's degree). (0-9) or

# PHY 5V99 Thesis (1-6)

Pre-requisite(s): Twelve semester hours of graduate work and consent of the department

# PHY 6350 Relativistic Astrophysics (3)

Pre-requisite(s): PHY 5350 and 5351

Relativistic astrophysics, and the final stages of stellar evolution; supernovae, binary stars, accretion disks, pulsars; extragalactic radio sources; active galactic nuclei; compact objects.

#### PHY 6351 Cosmology (3)

Pre-requisite(s): PHY 5350 and 5351

Cosmology: extragalactic distance determinations; relativist relativistic cosmological models; galaxy formation and clustering; thermal history of the universe, microwave background; cosmological tests, advanced topics in general relativity.

#### PHY 6352 High-Energy Astrophysics (3)

Pre-requisite(s): PHY 5330, 5340, 5360 and 5370

Radiative transfer, scattering, the interaction of matter and radiation, atomic and molecular structure, magnetodrodynamics and plasma physics, accretion disks and spiral density waves.

### PHY 6370 Advanced Quantum Mechanics (3)

Pre-requisite(s): PHY 5371

Identical particles and symmetry, self-consistent field theory, spin and angular momenta, electromagnetic interactions, semiclassical radiation theory, many-body perturbation theory, topics in scattering theory. Applications to atomic, molecular, and nuclear systems.

#### PHY 6371 Relativistic Quantum Mechanics (3)

Pre-requisite(s): PHY 5371

Klein-Gordon equation, Dirac equation, solutions of Dirac equation for scattering and bound states, non-relativistic limits of Dirac solutions, hole theory, Feynman diagrams, quantum electrodynamics, renormalization procedures, non-electromagnetic processes, solutions.

### PHY 6372 Elementary Particle Physics (3)

Pre-requisite(s): PHY 5371

Basic concepts of elementary particle physics; symmetries, groups, and invariance principles; hadron-hadron interactions; static quark model of hadrons; weak interactions; brief introduction to quantum chromodynamics.

#### PHY 6373 Quantum Field Theory I (3)

Pre-requisite(s): PHY 4374, 5370, 5371, or 6371; or consent of instructor Second quantization of free fields; second quantization of interacting fields; elementary processes - Q.E.D. and non-Q.E.D. examples; perturbation theory methods for higher order processes; renormalization theory; path integral realization of quantum field theory.

#### PHY 6374 Quantum Field Theory II (3)

Pre-requisite(s): PHY 6373

Modern formulation of quantum field theory: quantization and renormalization of gauge theories, both Abelian and non-Abelian; third quantization; applications in the Q.E.D. example; SU2L XU1 theory; quantum chromodynamics; grand unified theories; theories of everything including quantum gravity such as the superstring theory.

#### PHY 6375 Quantum Field Theory III (3)

Pre-requisite(s): PHY 6374

Continuation of 6374: Detailed theory of higher order corrections to Standard Model and beyond the Standard Model processes; detailed presentation of recent developments in superunification, superstring/ M theory, superstring field theory, and other approaches to quantum general relativity, depending on instructor. May be repeated for credit by instructor for a maximum of nine credits.

### PHY 6380 Special Topics in Advanced Physics (3)

Pre-requisite(s): Consent of student's graduate committee Special topics which are related to specialized fields of research sponsored in the department. May be repeated once with change of content.

### PHY 6V00 Dissertation Proposal (1-9)

Pre-requisite(s): Permission of Physics Graduate Program Director Research for doctoral students studying for preliminary examinations or preparing their dissertation topic proposals.

#### PHY 6V99 Dissertation (1-12)

Pre-requisite(s): Consent of the student's supervisory committee and admission to candidacy

A minimum of twelve semester hours is required.

# **Political Science (PSC)**

#### PSC 5199 Non-Thesis Degree Completion (1)

To fulfill requirements for non-thesis master's students who need to complete final degree requirements other than coursework during their last semester. This may include such things as a comprehensive examination, oral examination, or foreign language requirement. Students are required to be registered during the semester they graduate.

#### PSC 5310 Seminar in American Politics (3)

Examination of American politics, institutions, and behavior. Topics will vary within the subfield of American politics. May be repeated three times for graduate credit when topics differ.

#### PSC 5311 Readings from the Philosophers (3)

Cross-listed as PHI 5311

See PHI 5311 for course information.

#### PSC 5312 Social Science Data Analysis (3)

Cross-listed as SOC 5312

See SOC 5312 for course information.

#### PSC 5315 Development of International Relations Thought (3)

A study of major thinkers on international politics through history, with reference to contemporary international relations thought.

#### PSC 5320 Seminar in Comparative Public Policy (3)

Modern industrial state in Western democracies from a comparative policy perspective, with selected emphasis on such topics as economic management, re-industrialization, social welfare, environmental protection, education, health care, defense, and housing/transportation.

### PSC 5321 Seminar in Public Law (3)

Role(s) of the judiciary in American politics and administration. Areas examined may include American constitutional development, constitutional and legal interpretation, judicial behavior and politics, including the role of interest groups and public opinion, and judicial recruitment. May be repeated three times for graduate credit when topics differ.

#### PSC 5322 Seminar in Public Administration (3)

Special topics, including organizational theory, administrative behavior, and personnel management, financial management and budgeting, program management and evaluation, and quantitative analysis. May be repeated for credit when topics differ.

#### PSC 5323 Research Design and Research Methods (3)

Cross-listed as ENV 5323

Introduction to the discipline of political science, focusing particularly on research methods, research design, and questions relating to the philosophy of science.

#### PSC 5324 Seminar in Comparative Politics (3)

Political culture, institutions, processes, and policies from a cross national perspective. Emphasis on role of political, economic, social, and cultural factors relating to political development, stability, and organization. Research topics and primary country analyses may vary.

#### PSC 5325 Seminar in International Relations (3)

Theories concerning relations among nations, foreign policy formation and administration, cases of cooperation and conflict within the society of nations. Research topics vary so as to cover a broad range of contemporary issues, problems, and diplomatic practice.

#### PSC 5330 American Political Development (3)

Cross-listed as AMS 5330

Study of the development and reform of political institutions and practices over the course of American history.

#### PSC 5333 Seminar in Political Philosophy (3)

Cross-listed as PHI 5333

Select topics and issues in contemporary political theory developed and explored with an emphasis on the seminal writings of original thinkers and on the contemporary debates surrounding these writings. Possible themes of this course include postmodern political thought, neo-Kantian and neo-Hegelian political theory, contemporary liberal and communitarian thought, theories of justice, contemporary relevance of ancient political philosophy.

#### PSC 5335 Seminar in National Security Decision Making (3)

Analysis of the components of national security strategy and those international and domestic factors that shape it. Seminar covers the process, factors, institutions, and issues in national security decision making.

#### PSC 5340 The American Founding (3)

Cross-listed as AMS 5340

Study of the debates on the proper structure, institutional arrangements, and purposes of government during the Founding period focusing on the creation and ratification of the American constitution.

### PSC 5342 Seminar on Religion, Law, and Politics (3)

Cross-listed as PHI 5342, REL 5340

See PHI 5342 for course information.

### PSC 5343 Classical Political Thought (3)

Cross-listed as PHI 5343

Study of selected major texts in classical (Greek and Roman) political thought, with an emphasis on the origin of political philosophy in the thought of Socrates and its development in the works of Plato and Aristotle. This course may be repeated, for a maximum of nine credit hours, when content differs.

#### PSC 5344 Comparative Constitutional Law (3)

Comparative analysis of constitutional theory and development, the link between democracy and constitutionalism, and the role of judicial review. Different constitutional approaches to issues such as executive-legislative relations, federalism, political participation, and civil liberties will be considered.

### PSC 5345 American Foreign Policy (3)

Course examines the theory and practice of American foreign policy. Emphasis is on major issues in United States diplomacy and basic ideas governing American foreign policy.

#### PSC 5350 Seminar in Presidential Rhetoric (3)

Cross-listed as CSS 5350

Survey of the genres of presidential rhetoric and theories of the rhetorical presidency; critical analysis of presidential discourse in selected eras, with focus on texts in context; methods of evaluating presidential communication.

#### PSC 5353 Medieval Political Thought (3)

Cross-listed as PHI 5353

Study of selected major texts in medieval political thought, with an emphasis on either major thinker(s), or theme(s). Themes may include nature and grace, politics and salvation, theology and practical wisdom. This course may be repeated, for a maximum of nine credit hours, when content differs.

#### PSC 5355 Development of Strategic Thought (3)

This seminar will examine the ideas of strategic thinkers who lived in a variety of historical periods. Students will read works by major strategists including Thucydides, Sun Tzu, Machiavelli, and Clausewitz.

### PSC 5363 Modern Political Thought (3)

Cross-listed as PHI 5363

Pre-requisite(s): Admission to graduate program at Baylor University or consent of instructor

Study of selected major texts in modern political thought, from Machiavelli to Nietzsche. Course may be repeated, for a maximum of nine credit hours, when content differs.

#### PSC 5373 Contemporary Democratic Theory (3)

Study of themes, issues and debates defining the contemporary conversation about democracy among political theorists. Texts will include works of major importance to recent democratic theory.

#### PSC 5391 Reading Course in Political Science (3)

Pre-requisite(s): Graduate standing and consent of instructor A tutorial course designed for advanced graduate study in political science to supplement other course requirements. The nature, limits, and requirements will be established in each instance after consultation between professor and student. May be repeated under a different topic for a total of six hours credit.

#### PSC 5392 Professional Paper in Public Policy and Administration (3)

Satisfies the non-thesis option for the Master of Public policy and Administration degree and the Master of Arts degree in international relations. A problem or topic in either public policy or administration will be selected, and the student will write a substantial paper for submission to the faculty. May not be taken if PSC 5V12 (Internship) is required.

#### PSC 5393 Advanced Seminar in Political Philosophy (3)

Cross-listed as PHI 5393

Concentrated study of major thinkers or texts in the history of political philosophy. This course may be taken more than once, for a maximum of eighteen credit hours, when content differs.

#### PSC 5395 Professional Paper in International Relations (3)

Under the direction of a supervising professor, a problem or topic in international relations to be selected and a substantial paper to be written. This is one of the options for the master's degree in international relations.

# PSC 5396 Teaching Political Science (3)

Directed readings done in conjunction with an undergraduate course for which the student serves as a teaching apprentice. Course requirements include graduate-level research paper and annotated bibliography of undergraduate course materials. May be taken three times for graduate credit, in conjunction with different undergraduate courses.

#### PSC 5V12 Graduate Internship (1-6)

Pre-requisite(s): Consent of Director of Graduate Studies required Internship of a minimum of three months of supervised, full-time employment. The experience combines practical field experience and research. Completion of the course requires a written report on the work done during the internship. Students seeking the MA in International Relations must work in a public or private concern involved in international affairs. Students seeking the MA in Public Policy Administration or the JD/MPPA must work in a public sector agency. All students must secure the permission of the Director of Graduate Studies to take this course.

# PSC 5V99 Thesis (1-6)

Research, data analysis, writing, and oral defense of an approved master's thesis. At least six hours of PSC 5V99 are required.

#### PSC 6V10 Prospectus Research (1-6)

Pre-requisite(s): Completion of regular coursework

Supervised research for developing and writing a dissertation prospectus that will be the subject of an oral defense that will admit students to candidacy. A student may repeat this course for credit with a maximum of twelve total hours. Registration for this course is the equivalent of full-time status for graduate students.

#### PSC 6V99 Dissertation (1-12)

Pre-requisite(s): Consent of the student's supervisory committee and admission to candidacy

Supervised research for the doctoral dissertation with a minimum of twelve semester hours required. Three to six of these hours may be taken in a section of 6V99 designed for the purpose of discussion and criticism of dissertation chapters and journal articles. Dissertation writing group will also serve as a forum for research presentations for job interviews when appropriate.

# **Psychology (PSY)**

# PSY 5100 Psychology and Neuroscience Seminar (1)

Professional development through participation in and peer review of public presentation of contemporary research.

### PSY 5128 Group Dynamics Laboratory (1)

Pre-requisite(s): Psy.D. students only

A laboratory in group dynamics for Psy.D. students emphasizing interprofessional relationships.

#### PSY 5199 Non-Thesis Degree Completion (1)

To fulfill requirements for non-thesis master's students who need to complete final degree requirements other than coursework during their last semester. This may include such things as a comprehensive examination, oral examination, or foreign language requirement. Students are required to be registered during the semester they graduate.

### PSY 5301 Introduction to Experimental Design (3)

Pre-requisite(s): Graduate standing

Simple and complex analysis of variance and analysis of covariance designs. The general linear model approach, including full-rank and less than full-rank models, will be emphasized.

#### PSY 5302 Measurement in Psychology (3)

Pre-requisite(s): PSY/STA 5301 or consent of the instructor Principles and methodology underlying scaling techniques, rating devices, psychological tests, and other forms of measurements used in psychology. Includes an introduction to psychometrics and applications to objective personality assessment.

#### PSY 5305 Advanced Experimental Design (3)

Pre-requisite(s): PSY 5301 or consent of instructor

The course examines a variety of complex experimental designs that are available to researchers including split-plot factorial designs, confounded factorial designs, fractional factorial designs, incomplete block designs, and analysis of covariance. The designs are examined within the framework of the general linear model. Extensive use is made of computer software.

#### PSY 5307 Advanced Statistics II (3)

Pre-requisite(s): PSY 5388; or consent of instructor Selected topics from correlation, regression, path analysis, and generalized linear models.

#### PSY 5311 Seminar in Memory and Cognition (3)

Cross-listed as NSC 5311

See NSC 5311 for course information.

#### PSY 5313 Advanced Measurement in Psychology (3)

Pre-requisite(s): PSY/STA 5301

An introduction to item response theory and computerized adaptive testing. Emphasis on the three parameter logistic model. Topics include parameter and ability estimation, item bias, detection of multidimensionality, appropriateness measurement, and Owens-Bayes algorithm.

### PSY 5315 Quantitative Psychology (3)

Pre-requisite(s): PSY/STA 5301

Mathematical foundations of contemporary psychology.

# PSY 5316 Clinical Psychopathology (3)

Pre-requisite(s): Psy

D. (CPSY) students only. Clinical case formulation, including the assessment and diagnosis of problems, case conceptualization, and treatment planning, based on current theory and research.

#### PSY 5317 Psychotherapy III: Seminar in Psychotherapy (3)

Pre-requisite(s): Psy.D. students only

Advanced study of current research, theory and practice in evidencebased psychotherapy, interventions, and treatment planning.

# PSY 5318 Perception (3)

Cross-listed as NSC 5318

See NSC 5318 for course information.

### PSY 5319 Clinical Neuroscience - Advanced (3)

Cross-listed as NSC 5319

See NSC 5319 for course information.

# PSY 5320 Learning and Behavior Theory (3)

Cross-listed as NSC 5320

See NSC 5320 for course information.

### PSY 5321 Developmental Psychology (3)

Pre-requisite(s): Graduate standing in psychology

Current research and theory on normal and psychopathological development of human behavior from conception through senescence.

#### PSY 5322 Human Engineering (3)

Pre-requisite(s): Consent of instructor

Application of the methods and techniques of psychology to the problems of designing equipment for efficient human use and the design of man-machine systems.

# PSY 5323 Biological Foundations of Behavior (3)

Pre-requisite(s): Psychology Ph

D or Psy.D. students only, or consent of instructor. An introduction to the biological mechanisms underlying behavior. A review of basic neuroanatomy, neuron function, neurotransmitters, emotional process, language, learning and memory function. Will also review biological correlates of targeted mental disorders such as mood and anxiety disorders, schizophrenia, and developmental and cognitive disorders.

#### PSY 5325 Ethics and Professional Issues in Clinical Psychology (3)

Pre-requisite(s): Psy.D. students only

The application of current ethical and professional standards to professional practice.

#### PSY 5327 Family and Marital Psychotherapy (3)

Pre-requisite(s): Psy.D. students only

Practice, theory, and research of psychological consultation with couples and families. Emphasis upon systems and interpersonal orientations.

#### PSY 5330 Neuropharmacology (3)

Cross-listed as NSC 5330

See NSC 5330 for course information.

# PSY 5333 Psychological Assessment III (3)

Pre-requisite(s): Psy

D. students only. Advanced study of integrated assessment, focusing on special populations including gerontology, infant assessment, health-related assessments and additional disorder-based assessments.

#### PSY 5334 Clinical Health Psychology (3)

Pre-requisite(s): Psy.D. students only

Foundations of clinical health psychology, applications of behavioral medicine, and the promotion and maintenance of health.

#### PSY 5335 Multicultural Issues (3)

Pre-requisite(s): Psy.D. students only

An exploration of multicultural issues in the delivery of psychological services.

# PSY 5339 Social Psychology (3)

Review of advanced theory and contemporary research in social psychology.

# PSY 5340 Doctoral Project in Professional Psychology I (3)

Pre-requisite(s): Psy.D. students only

Arrangements are made for Psy.D. candidates to undertake individual scholarly projects under the direction of a clinical psychology professor. Work includes individual study and preparation of a detailed proposal for a project in clinical psychology.

#### PSY 5341 Doctoral Project in Professional Psychology II (3)

Pre-requisite(s): Psy.D. students only

A continuation of PSY 5340, including the execution and completion of the doctoral project.

### PSY 5342 Advanced Topics in Social Psychology (3)

Advanced study of theory and research in social psychology.

# PSY 5344 History of Psychology, Racism, and the United States (3)

Pre-requisite(s): Psy

D. students only. The history of psychology, medicine, science, racism, and culture in the United States, with an emphasis on how these components are interconnected, how psychology was born into a racist academic world, and how power systems have served to benefit some and oppress many.

# PSY 5350 Advanced Personality Psychology (3)

A review of classic personality theory and contemporary personality psychology research.

#### PSY 5360 Neurophysiology (3)

Cross-listed as NSC 5360

See NSC 5360 for course information.

#### PSY 5370 Administration and Supervision (3)

Pre-requisite(s): Psy.D. students only

Training in health care administration, supervision, consultation, program development, and evaluation.

#### PSY 5371 Clinical and Research Practicum I (3)

Pre-requisite(s): Psy.D. students only

Supervision, development, and evaluation of Psy.D. students in all aspects of their work. Introduction to clinical interviewing skills, therapeutic relationship, theories of psychotherapy, and common factors in psychotherapy and clinical assessment.

#### PSY 5372 Clinical and Research Practicum II (3)

Pre-requisite(s): Nine hours of PSY 5371

Intermediate level practicum experience of supervision, development, and evaluation of Psy.D. students in all aspects of their work.

#### PSY 5373 Clinical and Research Practicum III (3)

Pre-requisite(s): Nine hours of PSY 5372

Advanced practicum experience. Supervision, development, and evaluation of Psy.D. students in all aspects of their work.

# PSY 5374 Clinical Practicum and Professional Development (3)

Pre-requisite(s): Nine hours of PSY 5373

Practicum focusing on refining clinical and research skills. Supervision, development, and evaluation of the Psy.D. student in all aspects of her or his work.

#### PSY 5380 Multidimensional Scaling (3)

Pre-requisite(s): PSY/STA 5301

Basic scaling theory with emphasis on metric, non-metric, and individualdifferences multidimensional scaling models and methodology. Applications of scaling methods to measurement problems in the behavioral and health sciences, education, and business.

# PSY 5384 Multivariate Statistical Methods (3)

Pre-requisite(s): PSY/STA 5301

Discriminant analysis, canonical correlation analysis, and multivariate analysis of variance.

#### PSY 5386 Exploratory Factor Analysis (3)

Pre-requisite(s): PSY/STA 5384 and 5301

Exploratory factor analysis with emphasis on applications in the behavioral and health sciences, education, business, including the description and use of available software.

#### PSY 5388 Advanced Statistical Methods (3)

Selected issues in applied statistics.

# PSY 5389 Mathematical Models in Psychology (3)

Pre-requisite(s): PSY/STA 5301

Introduction to mathematical formulations in a wide range of psychological research including learning theory, decision and choice, reaction time, theory of signal detection, and other selected topics.

# PSY 5390 Confirmatory Factor Analysis and Structural Equations Models (3)

Pre-requisite(s): PSY/STA 5301

Confirmatory factor analysis, path analysis and structural equations models, analysis of covariance structures, least squares and maximum likelihood estimation, and application to psychological processes.

#### PSY 5391 Multilevel Modeling (3)

Pre-requisite(s): PSY 5301

An introduction to multilevel modeling and hierarchical linear modeling in the behavioral sciences. Content includes both the theory behind and the application of multilevel modeling, including the analysis of unconditional models, estimation of effect size, conditional effects, growth curve models, and the analysis of dyadic data.

### PSY 5410 Psychopathology and Assessment in Children (4)

Pre-requisite(s): Psy

D. students only. This course is designed to provide an overview of emotional and behavioral disorders of children and adolescents and theoretical foundations and applications of psychological assessment with this population.

#### PSY 5423 Psychotherapy II: Advanced Cognitive Behavior Therapy (4)

Pre-requisite(s): Psy.D. students only

Continued study of cognitive-behavioral psychotherapy. Introduction to third wave cognitive-behavioral psychotherapies including dialectical behavior therapy, acceptance and commitment therapy, motivational interviewing, mindfulness, theory, and applications. Lab required.

#### PSY 5426 Clinical Intervention with Children (4)

Pre-requisite(s): Psy.D. students only

Theory and research of clinical intervention procedures including family therapy used with children and adolescents with psychological disorders.

#### PSY 5428 Group and Systems Approaches to Psychotherapy (4)

Pre-requisite(s): Psy.D. students only

Theory, research, and practice of systems approaches to group, couples, and family psychotherapy. Experiential practice in refining psychotherapy skills

### PSY 5429 Psychotherapy I: Cognitive-Behavior Therapy (4)

Pre-requisite(s): Psy

D. students only. Current research and theory on cognitive-behavioral therapy approaches to clinical problems.

#### PSY 5430 Neuroanatomy (4)

Cross-listed as NSC 5430

See NSC 5430 for course information.

#### PSY 5431 Psychological Assessment I (4)

Pre-requisite(s): Psy

D. students only. Introduction to assessment principles and approaches. Administration, scoring, and interpretation of intellectual, cognitive, and neuropsychological measures. Introduction to integrated report writing.

#### PSY 5432 Psychological Assessment II (4)

Pre-requisite(s): Psy.D. students only

Continued study of assessment. Introduction to objective and projective personality measures and disorder-based assessments and integration of the tests with various cognitive, intellectual, or neuropsychological measures. Lab required

#### PSY 5V04 Graduate Research (1-3)

For research credit prior to admission to candidacy for an advanced degree. May be repeated for credit.

#### PSY 5V06 Individual Studies in Psychology (1-3)

hrs.

# PSY 5V24 Individualized Professional Development and Research (1-6)

Pre-requisite(s): Psy.D. students only

Opportunity for clinical psychology doctoral students to develop further their clinical research skills. Course may be repeated.

#### PSY 5V51 Supervised Teaching (1-3)

Cross-listed as NSC 5V51

See NSC 5V51 for course information.

#### PSY 5V71 Selected Topics in Psychology (1-3)

Advanced study in an area of psychology not covered by formal courses. Course may be repeated with a different topic of study.

#### PSY 5V85 Consulting, Research and Teaching in Statistics (1-3)

Statistics program. Supervised experience in statistical research, consulting, and teaching. Course may be repeated each semester.

# PSY 5V96 Research Methods in Experimental Psychology (1-3)

Selected laboratory methods and techniques in Experimental Psychology. May be repeated with change in content. Maximum of 3 credit hours per semester with an overall maximum of 12 credit hours.

#### PSY 5V99 Thesis (1-3)

Research, data analysis, writing, and oral defense of an approved master's thesis. At least three hours are required.

#### PSY 6V01 Clinical Internship (1-6)

Course open only to fourth-year clinical psychology doctoral students who are off campus on internship. Must be taken for three semesters.

#### PSY 6V10 Prospectus Research (1-6)

Pre-requisite(s): Completion of required course work for PhD degree Supervised research for developing and writing a Dissertation Prospectus Proposal that will be subject to review and approval by the Supervisory Committee.

# PSY 6V99 Dissertation (1-12)

Supervised research for the doctoral dissertation. These hours may be distributed over more than one semester.

# **Public Health (PUBH)**

#### PUBH 5001 Professional Seminars in Public Health (0)

Orients students in the Baylor Master of Public Health program to the degree program purpose, requirements, and opportunities. Includes concepts and practical guides for developing professional skills and preparing to enter the public health workforce.

#### PUBH 5121 Public Health Immersion I (1)

Pre-requisite(s): PUBH 5315, 5334, 5337, and 5350

Interprofessional experience with graduate students and professionals from diverse sectors to assess community needs and assets in order to generate collaborative and interdisciplinary approaches to community health.

#### PUBH 5122 Public Health Immersion II (1)

Pre-requisite(s): PUBH 5121, 5315, 5334, 5337, and 5350 Students engage in literature reviews and data collection to facilitate the development of a graduate project proposal for field-based practice.

# PUBH 5199 Non-Thesis Degree Completion (1)

To fulfill requirements for non-thesis master's students who need to complete final degree requirements other than coursework during their last semester. This may include such things as a comprehensive examination, oral examination, or foreign language requirement. Students are required to be registered during the semester they graduate.

#### PUBH 5220 Public Health Immersion Experience (2)

Interprofessional experience with graduate students and professionals from diverse sectors to assess community needs and assets in order to generate collaborative and interdisciplinary approaches to community health. Literature reviews and data collection facilitate the development of a graduate project proposal for field-based practice.

#### PUBH 5302 Foundations of Environmental Health Science (3)

Cross-listed as ENV 5302

See ENV 5302 for course information.

#### PUBH 5315 Theoretical Foundations of Public Health (3)

Theoretical models and concepts of social and behavioral health. Theory-based approaches to public health education and health promotion.

#### PUBH 5329 Current Topics in Public Health (3)

Current health issues and directed study to provide appropriate graduatelevel experience in health-content areas.

#### PUBH 5334 Foundations of Public Health (3)

Foundational concepts, principles, and practices of public health and population health.

#### PUBH 5337 Public Health Concepts in Epidemiology (3)

A foundational course in study designs and descriptive and analytic epidemiologic methods.

#### PUBH 5338 Methods in Epidemiology (3)

Pre-requisite(s): PUBH 5337

This course provides an in-depth study of common methods used by epidemiologists to obtain valid measures of associations of exposures and outcomes. Basic principles of causal inference, the identification and control of confounding and effect measure modification, and regression-based methods will be covered. In addition, the course covers survival analysis and an overview of methods to handle missing data.

#### PUBH 5347 Global Health Epidemiology (3)

An in-depth study of the application of epidemiology to improve global health through a multidisciplinary approach. Topics include utilizing epidemiological tools to help generate evidence on interventions; determining how social and economic factors influence the spread/distribution of diseases, particularly in low-income settings; estimating disease burden; and translating epidemiologic evidence to policy.

# PUBH 5348 Applied Data Analysis for Epidemiology and Population Health (3)

Pre-requisite(s): PUBH 5337 and PUBH 5300 or equivalent An applied computer analytic course designed to provide a foundational background in health-related data management and analysis using SAS software. Topics include primary data collection, importing and managing data sets, creating and modifying variables, univariate analysis, bivariate analysis, and introduction to linear and logistic regression models.

### PUBH 5350 Assessment and Planning in Public and Community Health (3)

Principles, models, and methods of assessment and program planning in public health.

#### PUBH 5358 Global Public Health (3)

Pre-requisite(s): PUBH 5315, 5334, 5337, 5350, 5379 and STA 5300 Global Public Health is an introductory course for graduate students in community/public health and allied health fields to provide a foundation in key global health concepts. Topics include global health determinants and trends, global health economics and system, culture, grassroots community development, and specific global health issues. Class lectures are interspersed with active learning exercises and in-class practice problems.

#### PUBH 5360 Evaluation in Public and Community Health (3)

Pre-requisite(s): PUBH 5350

Program evaluation and measurement concepts and practical applications in public health.

#### PUBH 5370 Physical Activity and Public Health (3)

This course introduces and explores the social and behavioral epidemiology of physical activity in public health, including outcomes, influences, and promotion for individuals, various settings, communities, and the population at large. In addition, this course will develop an understanding of policy and advocacy as it pertains to physical activity promotion.

# PUBH 5377 Principles and Philosophy in Health, Human Performance and Recreation (3)

Bases of principles, the evolution of principles and philosophies, and the interpretation and application of principles to program development and conduct.

#### PUBH 5378 Administration and Leadership in Public Health (3)

Public health policy and systems thinking. Administrative and leadership approaches to developing and managing fiscal and human resources in public health programs.

#### PUBH 5379 Research Methods in Public Health (3)

Developmental theory, investigation and gathering of data, statistical analysis and evaluation, and research reporting as these relate to research in public health.

# PUBH 5380 Determinants of Health & Health Equity (3)

Pre-requisite(s): PUBH 5315, 5334, 5337, 5350, 5379, and STA 5300 This course provides an overview of health disparities and inequities in the U.S., based on the social determinants of health, and prepares students to be effective practitioners by approaching public health practice with a focus on equity and the root causes of health outcomes. Factors such as race/ethnicity, socioeconomic status, health communication, urban and rural contexts, the built environment, and cultural competency are also examined.

# PUBH 5390 Public Health Policy and Practice (3)

Pre-requisite(s): PUBH 5315, 5334, 5337, 5350, 5379 and STA 5300 This course introduces students to health care policymaking and the impact of decision-making processes on health care delivery in the United States. Students utilize a health in all policies framework to examine current health care policies and understand the significance of equity to advance public health policy and practice.

# PUBH 5399 Epidemiology Capstone (3)

Pre-requisite(s): PUBH 5001, 5315, 5334, 5337, 5338, 5347, 5348, 5379 and STA 5300

This course pursues the integration of epidemiology competencies through an independent research investigation and publication of findings. Students conduct independent data analyses, make written and oral presentations of findings, and practice peer review to simulate a professional research and practice experience.

#### PUBH 5699 Community Health Capstone (6)

 $\label{eq:pre-requisite} Pre-requisite(s): PUBH \, 5001, \, 5315, \, 5334, \, 5337, \, 5350, \, 5360, \, 5379, \, 5V94, \\ and \, STA \, 5300$ 

Students integrate public health and community health competencies into a culminating experiential learning project.

# PUBH 5V70 Special Topics in Public Health (1-6)

Opportunities for intensive, in-depth study of areas of public health of special professional interest and need to the student. Supervision and support is given by selected resource persons.

# PUBH 5V74 Professional Literature Seminar in Public Health (1-6) Supervised readings in public health. May be repeated once.

Supervised readings in public health. May be repeated onc

# PUBH 5V75 Seminar in Public Health (1-3)

Seminar topics in Public Health.

#### PUBH 5V90 Public Health Internship (6-7)

Full-time experience in an agency, corporation, or hospital for on the job training in a professional field.

#### PUBH 5V94 Public Health Practicum (3-4)

Part-time experience in an agency, corporation, or hospital for exposure to various professional areas of employment. Lab fee \$50.

#### PUBH 5V99 Thesis (1-6)

Credit received when thesis approved. A total of six hours will be required

#### PUBH 6101 Mentored Teaching in Public Health I (1)

Doctoral students in public health are assigned to an experienced public health instructor as a teaching mentor and a course taught by the mentor. They observe the mentor in each class period, assist with various teaching aspects, develop and teach some course lectures and class activities, and obtain feedback from the mentor.

### PUBH 6102 Mentored Teaching in Public Health II (1)

Pre-requisite(s): PUBH 6101

Doctoral students in public health are assigned to an experienced public health instructor as a teaching mentor and a course taught by the mentor. They co-teach the course and assist with various teaching aspects, lecture and lead class activities and projects, and help revise course materials for future use.

#### PUBH 6300 Mentored Public Health Research (3)

Doctoral students in public health work with their faculty mentors on various aspects of research (e.g., literature review, study design/instrument development, study implementation, data analysis/interpretation, manuscript development, grant and report writing). Projects are specific to the student's research interests and needed skills. Students enroll in this 3-hour course in each of 3 semesters for a total of 9 credit hours.

### PUBH 6321 Advanced Theory & Practice in Behavioral Health I (3)

Advanced study of sociobehavioral theories and applications in public health research. Focus on societal-level influences, social structures, sociocultural factors, and individual attitudes and beliefs. Procedures for developing and validating quantitative and qualitative instruments that assess health behaviors and related theoretical constructs examined. Adapting measurement approaches to address cultural and sociodemographic factors included.

# PUBH 6322 Advanced Theory & Practice in Behavioral Health II (3)

Pre-requisite(s): PUBH 6321 Advanced skill development for the examination and construction of measurements related to behavior change constructs and theories

Building upon PUBH 6321 Advanced Theory & Practice in Behavioral Health I, content focuses on additional methods of theory testing, assessment design, scale validation for different populations, and application to community based participatory research (CBPR).

#### PUBH 6331 Advanced Epidemiologic Methods (3)

Study of methodologic issues and epidemiologic applications in public health and medicine. Includes causation and causal inference, measures of occurrence, measures of effect and measures of association, concepts of interaction, validity and precision in epidemiologic studies, design strategies to improve study accuracy, applications of stratified analysis methods, social epidemiology, meta-analysis, and emerging ethical issues in research.

# PUBH 6332 Advanced Epidemiologic Data Analysis (3)

Pre-requisite(s): PUBH 6331

Study of advanced epidemiologic data analysis: underlying principles and assumptions, practical application, and correct interpretation of epidemiologic multivariable models. Includes exploratory and descriptive statistical methods, linear regression, logistic regression, survival analysis, repeated measures and longitudinal data analysis, generalized linear models, causal inference, predictor selection, missing data, and complex surveys.

#### PUBH 6370 Grant Writing and Research Ethics in Public Health (3)

Focus on grant writing process, seeking and securing funding, and grant management. Students apply advanced methods from their respective public health concentrations to write external grant proposals appropriate for their proposed lines of public health research and participate in the peer-review of proposals drafted by other students. Ethics, principles, and regulations applicable to prevention and public health research are also addressed.

#### PUBH 6380 Seminar on Professional Writing in Public Health (3)

Development of technical writing skills among students pursuing a Public Health doctorate. Students learn writing and manuscript development basics and work with their faculty mentors to write literature review/research-focused manuscripts designed for publication.

### PUBH 6V99 Doctoral Dissertation in Public Health (1-12)

Pre-requisite(s): Instructor consent

Must have completed all required courses and passed qualifying exam. Doctoral students in public health gain approval of a written dissertation and research, analyze, write, and defend their dissertation. A total of 12 credit hours of dissertation work is required and counts toward the degree. These credits are commonly divided across multiple semesters and only begin after students have successfully completed all course work and passed their doctoral qualifying examinations.

# **Quantitative Business Analysis (QBA)**

# QBA 5131 Quantitative Methods for Decision Making: Part I (1)

Pre-requisite(s): Admission to MBA program

Today's managers operate within the constraints of highly competitive markets. To plan effectively under these circumstances requires both rigorous analytical tools and a sophisticated sense of how to balance the demands of oft-times conflicting constituencies. QBA 5131, using a mix of theory and case studies, enables students to develop a rich portfolio of tools to assist them in the planning process. The course seeks to develop students' technical skills in sampling, data analysis, and risk management tools essential to effective planning.

# QBA 5132 Quantitative Methods for Decision Making: Part II (1)

Pre-requisite(s): QBA 5131

In today's highly competitive markets, implementing decisions effectively requires both rigorous analytical tools and a sophisticated sense of how to balance the demands of oft-times conflicting constituencies. QBA 5132, using a mix of theory and case studies, enables students to develop tools essential to effective implementation. The course seeks to prepare students to use analytical tools including correlation analysis, regression analysis, and time series analysis.

# QBA 5133 Quantitative Methods for Decision Making: Part III (1)

Pre-requisite(s): QBA 5132

To effectively adapt to today's ever changing competitive environment requires both rigorous analytical tools and a sophisticated sense of how to balance the demands of conflicting constituencies. QBA 5133, using a mix of theory and case studies, enables students to develop a set of tools to help them adapt to an organization's changing needs. The course seeks to develop students' technical skills in linear programming, quality control and improvement, and experimental design.

#### QBA 5215 Statistical Analysis (2)

Pre-requisite(s): Acceptance into the executive MBA program Application of statistical reasoning and methods to business-oriented problems. Topics include descriptive statistics, sampling distributions, confidence intervals, hypothesis testing, simple and multiple regression, quality control, and nonparametric methods.

#### QBA 5302 Business Foundations - Statistics (3)

This course is required for MBA and MSIS students who do not have an undergraduate degree in business from an AACSB accredited institution. The course will provide students with the business foundation in statistics which is expected of all business graduate students.

#### QBA 5330 Business Analytics for Decision Making (3)

An introduction to analytical techniques in the three areas of business analytics – descriptive, prescriptive, and predictive – and their application to business decision making.

#### QBA 5435 Business Statistics (4)

Statistical theories and techniques are applied to business situations. The use of theory and case studies enables students to develop technical skills in planning, analysis, and assessment of data to adapt to an organization's changing needs.

#### QBA 5V98 Special Studies In QBA (1-6)

QBA 5V99 Thesis (1-9)

# **Recreation & Leisure Services (RLS)**

# RLS 5301 Leadership and Supervision of Outdoor Adventure Activities (3)

Leadership of outdoor adventure activities in a variety of leisure settings with focus on liability, supervision, and management standards.

# RLS 5379 Research Methods in Health, Human Performance, and Recreation (3)

Cross-listed as HED 5379, HP 5379, RED 5379 See HP 5379 for course information.

# RLS 5V70 Special Topics in Health, Human Performance, and Recreation (1-6)

Cross-listed as HED 5V70, HP 5V70, RED 5V70 See HP 5V70 for course information.

# RLS 5V74 Professional Literature Seminar in Health, Human Performance and Recreation (1-6)

Cross-listed as HED 5V74, HP 5V74 See HP 5V74 for course information.

#### RLS 5V90 Internship (1-6)

Cross-listed as HED 5V90, HP 5V90, RED 5V90 See HP 5V90 for course information.

#### RLS 5V94 Practicum in HHPR (1-3)

Cross-listed as HED 5V94, HP 5V94, RED 5V94 See HP 5V94 for course information.

#### RLS 5V99 Thesis (1-6)

Cross-listed as HP 5V99

See HP 5V99 for course information.

# **Religion (REL)**

#### REL 5101 Old Testament Colloquium (1)

Pre-requisite(s): Ph.D. students only

A seminar in which doctoral students concentrating in Old Testament Studies meet with the Old Testament faculty for written presentations and discussion of guided readings in classical and contemporary studies in the discipline. May be taken six times for credit.

#### REL 5111 New Testament Colloquium (1)

Pre-requisite(s): Ph.D. students only

A seminar in which doctoral students concentrating in New Testament Studies meet with the New Testament faculty for written presentations and discussion of guided readings in classical and contemporary studies in the discipline. May be taken six times for credit.

#### REL 5131 Historical Area Colloquium (1)

Pre-requisite(s): Doctoral students only

A seminar in which doctoral students concentrating in the Historical Area meet with the Historical Area faculty for written presentations and discussions of guided readings in classical and contemporary studies in the discipline. May be taken six times for credit.

#### REL 5151 Theology Colloquium (1)

Pre-requisite(s): Ph.D. students only

A seminar in which doctoral students concentrating in theology will meet with faculty for written presentations and discussions of guided readings in patristic, medieval, reformations, and modern texts in theology and related fields. May be taken six times for credit.

#### REL 5199 Non-Thesis Degree Completion (1)

To fulfill requirements for non-thesis master's students who need to complete final degree requirements other than coursework during their last semester. This may include such things as a comprehensive examination, oral examination, or foreign language requirement. Students are required to be registered during the semester they graduate.

#### REL 5301 Contemporary Issues in Old Testament Study (3)

A selected major issue in contemporary Old Testament scholarship. The course may be taken up to three times when content differs.

### REL 5302 Seminar in the Torah (3)

A designated portion of the Old Testament scriptures chosen from the Torah. Attention will be given to critical and theological problems, relevant bibliography, contributions of significant scholars, and contemporary issues in interpretation. The course may be taken up to three times when content differs.

# REL 5303 Seminar in the Former Prophets (3)

A designated portion of the Old Testament scriptures chosen from the Former Prophets. Attention will be given to critical and theological problems, relevant bibliography, contributions of significant scholars, and contemporary issues in interpretation. The course may be taken up to three times when content differs.

#### REL 5304 Seminar in the Latter Prophets (3)

A designated portion of the Old Testament scriptures chosen from the Latter Prophets. Attention will be given to critical and theological problems, relevant bibliography, contributions of significant scholars, and contemporary issues in interpretation. The course may be taken up to three times when content differs.

#### REL 5305 Seminar in the Writings (3)

A designated portion of the Old Testament scriptures chosen from the Writings. Attention will be given to critical and theological problems, relevant bibliography, contributions of significant scholars, and contemporary issues in interpretation. The course may be taken up to three times when content differs.

#### REL 5308 Old Testament Theology (3)

The history and nature of the discipline Old Testament Theology focusing on methodology, personalities, major works, and central themes.

### REL 5309 Selected Documents from the Hebrew Scriptures (3)

Cross-listed as HEB 5309

See HEB 5309 for course information.

#### REL 5311 Contemporary Issues in New Testament Study (3)

A selected major issue in contemporary New Testament scholarship. The course may be taken up to three times when content differs.

#### REL 5312 Seminar in the Pauline Epistles (3)

A designated portion of the New Testament scriptures chosen from the Pauline Epistles. Attention will be given to critical and theological problems, relevant bibliography, contributions of significant scholars, and contemporary issues in interpretation. The course may be taken up to three times when content differs.

#### REL 5313 Seminar in the Synoptic Gospels (3)

A designated portion of the New Testament scriptures chosen from the Synoptic Gospels. Attention will be given to critical and theological problems, relevant bibliography, contributions of significant scholars, and contemporary issues in interpretation. The course may be taken up to three times when content differs.

# REL 5314 Seminar in the Johannine Literature (3)

A designated portion of the New Testament scriptures chosen from the Johannine Literature. Attention will be given to critical and theological problems, relevant bibliography, contributions of significant scholars, and contemporary issues in interpretation. The course may be taken up to three times when content differs.

#### REL 5315 Seminar in Acts, Hebrews, and the General Epistles (3)

A designated portion of the New Testament scriptures chosen from Acts, Hebrews, or the General Epistles. Attention will be given to critical and theological problems, relevant bibliography, contributions of significant scholars, and contemporary issues in interpretation. The course may be taken up to three times when content differs.

### REL 5317 Seminar in New Testament Greek (3)

Cross-listed as GRK 5317

Hellenistic Greek based upon the translation and exegesis of selected portions of the New Testament and other early Christian literature. Attention will be given to grammar, lexicography, and textual criticism. The course may be taken up to three times when content differs.

# REL 5318 New Testament Theology (3)

The history and nature of the discipline New Testament Theology, focusing on methodology, personalities, and major works.

#### REL 5323 The History of Ancient Israel (3)

Pre-requisite(s): M.A. or Ph.D. standing in the department A graduate seminar focusing on ancient Israelite history and historiography. The course will involve a thorough overview of the history of Syria-Palestine and a rigorous examination of the interests and intentions of the ancient writers. While archaeological and geographic evidence will to some extent inform the subject matter of the course, the primary emphasis will be on information gained from the written sources, both biblical and epigraphic.

#### REL 5324 Syro-Palestinian Archaeology (3)

Pre-requisite(s): M.A. or Ph.D. standing

A graduate seminar focusing upon the archaeology of Syria and Palestine from the Early Bronze Age through the Persian Period (ca. 3300-334 B.C.E). Emphasis will be given to the use and interpretation of archaeological data with special reference to the Old Testament.

#### REL 5325 Ugaritic Grammar and Lexicography (3)

Cross-listed as UGA 5306

See UGA 5306 for course description.

#### REL 5326 Akkadian (3)

Cross-listed as AKK 5307

See AKK 5307 for course information.

#### REL 5330 The Pentecostal Tradition (3)

A study of the Pentecostal tradition in Christianity, with particular attention to roots in the Holiness movement of the nineteenth century, origins and developments, and subsequent growth in Charismatic expressions of faith. The course may be taken up to two times if the content differs.

# REL 5331 History of Ancient Christianity (3)

Patristic literature up to 500 CE. Selections for study will be made from apocryphal, apologetic, polemical, doctrinal and biographical types of literature. Careful attention will be given to at least one of the following ecclesiastical histories: Eusebius of Caesarea, Socrates, Sozomen, and Theodoret. The course may be taken up to three times when content differs.

# REL 5332 History of Medieval Christianity (3)

Eastern and western medieval Christianity from the fall of Rome to the fall of Constantinople, with particular emphasis on such topics as the papacy, monasticism, the Carolingian Renaissance, the separation of eastern and Western Catholicism, scholasticism, and medieval sectarianism. The course may be taken up to three times when content differs.

#### REL 5333 History of the Continental Reformation (3)

Lutheran, Reformed, and the Roman Catholic aspects of the sixteenth-century Reformation in Europe. This course may be taken up to three times when content changes.

# REL 5334 History of the English Reformation (3)

The Reformation as it developed in England with particular attention to the background of the English church in the late Middle Ages; the influence of Wycliffe, Tyndale, and the English Bible; the progress of reform under the Tudors and the Stuarts; the rise of Puritanism and nonconformity; the Civil Wars; and toleration. The course may be taken up to three times when content differs.

#### REL 5335 Modern European Christianity (3)

History of European Christianity since the Reformation. The course may be taken up to three times when content differs.

#### REL 5336 History of American Christianity (3)

Cross-listed as AMS 5336

History of American Christianity from pre-Columbian Christian settlements to the present, with particular emphasis on major movements and problems such as Puritanism, religious liberty, revivalism, westward expansion, the rise and growth of denominations, and post-Civil War trends. The course may be taken up to three times when content differs.

#### REL 5337 Baptist History (3)

Source materials of Baptist history and polity with particular attention devoted to Baptist origins, development, theological positions, leaders, and current trends. The seminar approach will be followed, and the course may be taken up to three times when content differs.

#### REL 5340 Seminar on Religion, Law, and Politics (3)

Cross-listed as PHI 5342, PSC 5342

See PHI 5342 for course information.

#### REL 5349 The Radical Reformation (3)

An in-depth look at the Radical Reformation, also called the Believers' Church movement and the Anabaptist tradition. Examination of key primary texts to illustrate the diverse and developing theology of these reformers and their offspring, plus their institutional manifestations. Research essays and bibliographic work required.

#### REL 5350 Issues and Themes Within Patristic Thought (3)

Knowledge of French or German required. Formulation of a Christian doctrine of God came to a crisis in the fourth century when a series of conflicts over the relation of the Father and Son erupted and absorbed the intellectual energies of the Church for almost a century. As a result of the so-called "Arian controversy," various points of Trinitarian and Christological doctrine became canonized for defining orthodoxy. These have functioned as norms for all subsequent doctrinal and exegetical development, profoundly shaping the theological identity of the Church. Moreover, in the last thirty years, scholarship has been greatly altered by a number of changes in the interpretation of major figures and doctrinal development in the fourth century such that a significant amount of rewriting of historical theology is currently taking place. It is clear that the Nicene-"Arian" conflicts went through distinct stages, and were more complicated and less compartmentalized than presented in many histories of the period. Course may be taken up to three times when content changes.

#### REL 5351 Medieval Theology (3)

The thought and practice of Christianity in the Middle Ages. Select major texts will be read, either in a format that examines the works of various writers, or with a focus on one major theologian (e.g., Anselm, Aquinas) or theme (e.g., monasticism, scholasticism). A reading knowledge of Latin is preferable, and either French or German is required. Course may be taken up to three times when content differs.

REL 5352 The Nicene-'Arian' Controversies of the Fourth Century (3) Investigation of the development of Trinitarian theology in the first four decades of the fourth century leading up to the council of Nicaea and its immediate aftermath. After touching on antecedent works by Origen and Eusebius, the course focuses upon the writings of Athanasius and Arius of Alexandria, Eusebius of Caesarea, Eusebius of Nicomedia, and Marcellus of Ancyra, concluding with the council of Serdica (342/3). Course may be taken up to three times when the content differs.

#### REL 5353 Nineteenth-Century Theology (3)

Major developments of nineteenth-century theology and their continuing relevance. One or more selected major theologians or movements will be examined. The course may be taken up to three times when the content differs.

#### REL 5354 Twentieth-Century Theology (3)

Major developments of twentieth-century theology and their continuing relevance. One or more selected major theologians or movements will be examined. Course may be taken up to three times when content differs.

#### REL 5356 Contemporary Systematic Theologies (3)

Systematic theology as a genre of theology within the Christian tradition. Emphasis will be placed on systematic theologies written after Barth and Tillich. Analysis of these works will focus on questions of method as well as content. Special attention will be paid to issues related such developments as liberation and feminist theology and postmodern thought. Course may be taken up to three times when the content differs.

#### REL 5357 The 20th Century Catholic Renaissance (3)

The resurgence of Roman Catholic theology and literature in the previous century, as well as its continuing relevance for our time.

#### REL 5358 Seminar on Liberation Theology (3)

Various liberation theologies that have emerged over the last decades in Latin America, Africa, Asia, and North America. Included will be the pioneering work of James Cone, Gustavo Gutierrez, Rosemary Ruether and the theological and political schools of thought that have followed and extended their analyses. Course may be taken up to three times when the content differs.

#### REL 5360 Contemporary Theological Problems (3)

Important theological problems which confront the theologian and the Christian community today. Problems such as faith and science, theological language, evil, theology and history, and Christian selfhood and modern psychology studied. Both historical and contemporary attempts to deal with the problems will be considered. The course may be taken up to three times when content differs.

# REL 5362 Christian Anthropology (3)

Meaning and relevance of the Christian understanding of humanity for contemporary existence in the light of Biblical, classical, ancient, and modern interpretations. Course may be taken up to three times when the content differs.

# REL 5363 Christology (3)

Historical development and theoretical systematization of major Christological themes, giving special attention to interrelation of materials from Biblical studies, history of dogma, and systematic theology. Course may be taken up to three times when the content differs.

#### REL 5372 Church and State During the Reformation Era (3)

Church-state relations were among many cultural relationships that were redefined during the Protestant Reformation period; however, scholars differ as to the reformers' influence in this transformation and in the development of liberal social orders throughout Europe. Martin Luther, John Calvin, Ulrich Zwingli, Anabaptist leaders, Anglican scholars, Catholic officials, and many others contributed unique and often conflicting views of the "appropriate" relationship between church and state. This course examines the broad contours of church-state thought during the Reformation period beginning with the conciliar movement in the 14th and 15th centuries, and ending with the Peace of Westphalia in 1648 and its influence in constructing the modern nation-states of Europe.

#### REL 5373 Contemporary Issues in Historical Studies (3)

A selected major issue in contemporary Historical Studies scholarship. The course may be taken up to three times when content differs.

### REL 5380 History of the Christian Movement (3)

This course examines the world Christian movement in its ecclesial and para-ecclesial cross-cultural, inter-religious processes, including transatlantic, postcolonial, and decolonial interpretations from the global south, particularly Africa, Asia, and Latin America.

#### REL 5381 Christianity in Latin America & the Caribbean (3)

Examines Christianity in South/Central America and the Spanish Caribbean with transatlantic, postcolonial, and decolonial methodological frameworks, including intra and inter Christian dynamics with Amerindian and Afro-Latin American religions, geopolitical history, and migratory movements.

#### REL 5382 Christianity in Africa and in Africa-Diaspora Regions (3)

Examines Christianity on the continent of Africa, with particular interest in Early African Christianity, the interaction with traditional religions and Islam, and Western African transatlantic history.

#### REL 5393 Contemporary Problems in Christian Ethics (3)

A research seminar focusing on ethical problems in the contemporary society and the resources available in the Judeo-Christian traditions for analyzing these problems. Students will work on a specific problem or problems Emphasis will be placed on developing technique and discovering the resources available for ethical analysis. The course may be taken up to three times when content differs.

### REL 5398 Theories of Religion (3)

This course examines the ways in which scholars have asked – and answered – different questions about religion, religions, religious expressions, and traditions.

#### REL 5399 Religion Colloquy (3)

Pre-requisite(s): Twenty-four semester hours of graduate course work Required as a co-requisite for participation in the Teaching Fellows Program. The colloquy will address a broad range of institutional and pedagogical issues related to the teaching of religious traditions and especially the Christian tradition in an academic context.

#### REL 5V00 Special Studies in Religion (1-3)

Special research projects that are needed in the students' graduate programs, but that are unavailable in the regular curriculum. The course may be for up to three hours credit, with preference given to those in their final year of study.

#### REL 5V99 Thesis (1-3)

Students register for the thesis and receive credit when the thesis is finally approved.

#### REL 6V00 Dissertation Proposal and Prospectus (1-3)

Research for doctoral students studying for preliminary examinations, preparing their topic proposal, or writing their prospectus in anticipation of candidacy. The course may be repeated.

### REL 6V99 Dissertation (1-9)

Supervised research for the doctoral dissertation. A total of at least nine semester hours is required for the completion of the dissertation.

# **Russian (RUS)**

### RUS 5370 Russian for Reading Knowledge I (3)

Co-requisite(s): RUS 5371

Reading of intermediate-level Russian texts. No previous language experience required. Limited to graduate students or undergraduate students by petition. Does not count towards foreign language requirement for undergraduate students.

# RUS 5371 Russian for Reading Knowledge II (3)

Co-requisite(s): RUS 5370

Continuation of RUS 5370. Reading of more advanced Russian texts. Limited to graduate students or undergraduate students by petition. Does not count towards foreign language requirement for undergraduate students.

# Social Innov. Collaborative (SIC)

#### SIC 5V98 Special Topics in Social Innovation (1-4)

Pre-requisite(s): Graduate standing or permission of the instructor Study of advanced topics in social innovation, with attention to a particular "wicked" problem. This course may be repeated three times when topics differ, not to exceed nine semester hours.

# Social Work (SWO)

#### SWO 5190 Introduction to Advanced Internship (1)

Pre-requisite(s): SWO 5301, or a grade of B or better in SWO 5492, or a grade of B or better in SWO 4492; and credit or concurrent enrollment in SWO 5337 and 5379; and credit or concurrent enrollment in SWO 5376 or

Introduction to the advanced internship in a specialization

#### SWO 5213 Cross Cultural Interactive Seminar IV (2)

Pre-requisite(s): Consent of instructor

Through this course, students have the opportunity to synthesize learning from the explicit and implicit social work curriculum of the MSW program, identify major learning gleaned through the program, and prepare for reentry into their social work practice in international context.

#### SWO 5221 Introduction to the Profession (2)

Pre-requisite(s): Admission to Master of Social Work program History and development of the social work profession, social work values and ethics, foundations of knowledge, and fields of practice with systems of all sizes.

#### SWO 5282 Evaluation of Practice I (2)

Pre-requisite(s): Credit or concurrent enrollment in SWO 4492 with a grade of B or better; and credit or concurrent enrollment in either SWO 5375 or 5379

Selection and implementation of outcome-based evaluation of practice protocols to inform intervention decisions by advanced practice social workers.

#### SWO 5283 Evaluation of Practice II (2)

Pre-requisite(s): SWO 5282

Selection and implementation of outcome-based program evaluation protocols to inform intervention decisions by advanced practice social workers.

#### SWO 5298 Capstone (2)

Pre-requisite(s): Credit or concurrent enrollment in SWO 5490 or 5790, and credit or concurrent enrollment in SWO 5283

Integrative seminar to demonstrate readiness to practice social work at an advanced level in the student's area of specialization. A grade of B or better must be received in this course in order to complete requirements for the master's degree.

# SWO 5301 Advanced Practice Readiness I (3)

Pre-requisite(s): Admission into the Master of Social Work program This course prepares students for entrance into Baylor's Advanced standing MSW Program. Introduces the mission of the program with an emphasis on integrated faith and social work practice, the strengths perspective, and building communities. Overviews the professional foundation to include human behavior and the social environment and social work practice with individuals, families, groups, communities, and organizations.

#### SWO 5310 International Social Work (3)

This course provides students the opportunity to conceptualize international social work practice in domestic contexts and abroad. Through four seminars and an experiential learning weekend, students explore social work within a human rights framework; develop cultural competency; grasp specific international social issues, strengths, and intervention strategies; and contextualize social work skills with international client systems.

#### SWO 5311 International Research and Strategic Planning (3)

In this course, students identify and analyze a global social issue of their choice, research systemic causality of the issue, explore best practice models, and create a strategic approach for addressing the issue utilizing accumulated research and governmental, non-governmental, and congregational resources. This multidisciplinary course explores community interventions informed by engineering, nursing, business, and public health.

#### SWO 5322 Social Policy For Social Work Practice (3)

Pre-requisite(s): SWO 5221 or 5122

Introduces the historical context of social policy and services in the United States, the analysis of current developments, and how social workers influence social welfare policy and provide social services.

### SWO 5323 Administrative Practice in Social Work (3)

Pre-requisite(s): SWO 5322; or a grade of B or better in SWO 4492 Administrative Practice in Social Work prepares students to perform managerial functions in public, nonprofit, and faith-based human service organizations with particular emphasis on those with programs designed to improve human wellness. Specific attention is given to the topics of leadership, human resources, fund raising, organization development, structure and governance, resource management, and efforts to link human service organizations in an integrated community-wide service delivery system.

#### SWO 5335 Frameworks and Perspectives for Community Practice (3)

Pre-requisite(s): Credit or concurrent enrollment in SWO 5492 with a grade of B or better, or SWO 4492 with a grade of B or better Guides advanced practice social workers in the evaluation and selection of frameworks for community change. Emphasizes values, professional role, and cultural influences on how change is envisioned, enacted, and evaluated.

# SWO 5337 Advanced Clinical Theories and Models (3)

Pre-requisite(s): credit or concurrent enrollment in SWO 5492 with a grade of B or better, or SWO 4492 with a grade of B or better
Prepares students learn and apply developmental, sociological, psychological, and therapeutic theories to the needs of individuals, families, groups, and communities. The course explores advanced clinical theories and empirically informed and emerging models for practice.

# SWO 5362 Professional Practice with Groups (3)

Pre-requisite(s): A minimum grade of B or concurrent enrollment in SWO 5561

Knowledge, values, and skills needed for working with groups.

#### SWO 5375 Advanced Practice I: Community Practice (3)

Pre-requisite(s): Credit or concurrent enrollment in SWO 5335 Prepares advanced practice social workers to promote community problem-solving and development. Emphasizes community assets; leadership development; and change strategy selection, enactment, and evaluation. Focuses on congregations and religiously affiliated organizations as agents of community change.

#### SWO 5376 Advanced Clinical Practice: Health Settings (3)

Pre-requisite(s): B or better in SWO 5379 or concurrent enrollment Prepares students with specialized application of theory, models, and skills for advanced clinical practice within health practice contexts. Uses social work knowledge, skills, and values to prepare students to assess and intervene at the levels of individual, family, and group in health care settings. A grade of B or better must be received in this course in order to complete requirements for the master's degree.

#### SWO 5377 Advanced Clinical Practice: Children and Families (3)

Pre-requisite(s): B or better in SWO 5379 or concurrent enrollment Emphasizes application of theory, models, and skills in contexts of practice with children and families. Includes instruction on models and theories and the impact of crisis and trauma on the family. Exposes students to a variety of themes in child and family practice such as grief, levels of need, strengths, and collaborative work. A grade of B or better must be received in this course in order to complete requirements for the master's degree.

#### SWO 5378 Advanced Practice II: Community Practice (3)

Pre-requisite(s): B or better in SWO 5375

Continuation of 5375. Prepares advanced practice social workers to promote community problem-solving and development. Emphasizes community assets; leadership development; and change strategy selection, enactment, and evaluation. Focuses on congregations and religiously affiliated organizations as agents of community change. A grade of B or better must be received in this course in order to complete requirements for the master's degree.

# SWO 5379 Advanced Clinical Practice: Individuals, Families, and Groups (3)

Pre-requisite(s): Credit or concurrent enrollment in SWO 5337 Prepares students with specialized knowledge and skills for advanced clinical practice within a broad array of practice contexts. Uses social work knowledge, skills, and values to prepare students to assess and intervene at the levels of individual, family, and group with some discussion of organizational and community practice. The course provides an overview of major theoretical clinical practice models.

#### SWO 5381 Research for Social Work Practice (3)

Pre-requisite(s): A minimum grade of C in SWO 5221 or a minimum grade of C in SWO 5122

Critical evaluation and use of research and conducting research in one's own professional practice.

# SWO 5463 Professional Practice with Communities and Organizations (4)

Pre-requisite(s): A minimum grade of B or better in both SWO 5362 and 5561

Knowledge, values, and skills needed for working with communities and organizations.

#### SWO 5490 Part II Advanced Internship (4)

Pre-requisite(s): Credit in 5335 or 5337; a minimum grade of B in SWO 5494; and a minimum grade of B in SWO 5375 or 5379; and credit or concurrent enrollment in SWO 5376, 5377, or 5378; and credit or concurrent enrollment in SWO 5323

Second of two semesters of the advanced internship in a specified area of specialization

#### SWO 5491 Foundation Internship I (4)

Pre-requisite(s): A minimum grade of C in SWO 5122 or a minimum grade of C or concurrent enrollment in SWO 5221; and a minimum grade of B or concurrent enrollment in both SWO 5362 and SWO 5561 Orientation and introduction to field internship, at least 240 hours of applied learning in the field, and an integrative seminar.

#### SWO 5492 Foundation Internship II (4)

Pre-requisite(s): B or higher in SWO 5362, 5491, and 5561; and credit or concurrent enrollment in SWO 5463, 5381, and 5322

Additional 240 hours of field experience; continuation of SWO 5491. Includes more sophisticated social work practice opportunities and expectations.

#### SWO 5494 Part I Advanced Internship (4)

Pre-requisite(s): credit or concurrent enrollment in SWO 5492 with a grade of B or better, or 4492 with a grade of B or better; and credit or concurrent enrollment in SWO 5337 or 5335; and credit or concurrent enrollment in SWO 5379 or 5375

Introduction and first of two semesters of the advanced internship in a specified area of specialization

#### SWO 5561 Professional Practice with Individuals and Families (5)

Pre-requisite(s): A minimum grade of C or concurrent enrollment in SWO 5221; or a minimum grade of C in SWO 5122

Knowledge, values, and skills needed for working with individuals and families.

#### SWO 5790 Advanced Internship (7)

Pre-requisite(s): SWO 5323 and 5337; and a grade of B or better in SWO 5190 or 5494; and a grade of B or better in SWO 5376 or 5377; and a grade of B or better in SWO 5379

Advanced internship in specialization area

### SWO 5V70 Independent Study in Social Work (1-3)

Pre-requisite(s): Consent of instructor

Independent study in Social Work course may be repeated up to six times with different topics of study, not to exceed a maximum of six semester hours to fulfill elective credit.

### SWO 5V80 Advanced Special Topics (1-3)

Pre-requisite(s): Graduate student

Provides advanced instruction in areas of social work knowledge, values, and/or skills that are not available in the standard social work graduate curriculum. Special topics in social work. Course may be repeated up to six times with different topic of study, not to exceed a maximum of six semester hours.

#### SWO 6331 Christianity, Ethics, and Social Work (3)

Pre-requisite(s): Admission to PhD program; SWO major Explores research, theory, and practices related to religion and spirituality as they can inform social work practice. Specific emphasis is placed on the role of religion in contemplating the meaning of well-being and social justice.

### SWO 6332 Social Policy and the Religious Sector (3)

Pre-requisite(s): Admission to PhD program; SWO major Through current research, congregations and religiously affiliated organizations are examined, specifically through the lens of history, social work practice, social capital, and organizational theories, behaviors, and identities.

#### SWO 6333 Religious and Cultural Diversity (3)

Pre-requisite(s): Admission to PhD program; SWO major Draws on the world religions to reflect on divergent cultural, ethical, and helping systems for believers. Offers the foundations for helping by looking within a wide variety of religious traditions for support and understanding.

# SWO 6342 Academic Leadership and Administration in Social Work Education (3)

Pre-requisite(s): Admission to PhD program; SWO major Explores research, theory, and practices of leadership in social service organizations, social work education, and communities.

#### SWO 6343 Program Evaluation (3)

Pre-requisite(s): Admission to PhD program; SWO major This course focuses on planning evaluation research for human service and educational programs and will prepare students to develop program evaluations to help agencies document their outcomes.

#### SWO 6351 Theory and Model Development for Social Work Practice (3)

Pre-requisite(s): Admission to PhD program; SWO major Students will critically examine historic, philosophical, aesthetic, and social science foundations for classic and current social work intervention theories and models.

# SWO 6352 Higher Educational Teaching and Learning in Social Work (3)

Pre-requisite(s): SWO 6351

This interactive course prepares students for teaching in higher education. Exploration of learning styles, content delivery, teaching methods, curriculum and lesson plan development, and critical thinking stimulation prepares the student to develop and deliver courses in social work higher education venues. The course uses theory and practical skill development, including demonstration of teaching methods and student learning.

#### SWO 6353 Teaching Practicum (3)

Pre-requisite(s): SWO 6351 and 6352

Students work with their peers and the instructor as they navigate all aspects of planning and executing a successful course of instruction for social work students.

#### SWO 6380 Quantitative Research for Social Work (3)

Pre-requisite(s): Admission to PhD program; SWO major Focuses on quantitative research methodology as applied to research in the human services and social work. Emphasizes the epistemological basis of different research methods, forming appropriate research questions and hypotheses, conducting literature reviews, developing research designs, and selecting and applying preliminary data analysis techniques.

### SWO 6381 Statistical Analysis for Social Work (3)

Pre-requisite(s): Admission to PhD program; SWO major
An overview of statistical tests used to analyze data in social work.
Emphasizes critical-thinking skills needed to evaluate others' use of statistical tests as well as to conduct one's own analyses, choose a statistical test, check that assumptions have been met, and interpret SPSS output. The course covers: correlation, Student's t-test, the ANOVA family, linear regression, and logistic regression.

#### SWO 6382 Qualitative Research for Social Work (3)

Pre-requisite(s): Admission to PhD program; SWO major Study of the philosophical underpinnings of qualitative methods. Students explore the similarities and differences between post-positivism and constructivism as they develop qualitative proposals for social work research.

# SWO 6384 Introduction to Doctoral Research (3)

Pre-requisite(s): Admission to PhD program; SWO major
This course assists students in articulating a broad research agenda
as a solid foundation for developing a dissertation topic, becoming
familiar with and articulating the state of the current literature within their
research agenda, and becoming socialized to scholarly and first phase of
dissertation proposal writing, the publication process, and ways in which
a strong empirically-informed argument can strengthen a research grant
proposal.

#### SWO 6385 Measurement in Social Work (3)

Pre-requisite(s): SWO 6381

Content prepares students for questionnaire construction and sample selection in conjunction with measurement development.

#### SWO 6386 Advanced Qualitative Research (3)

Pre-requisite(s): SWO 6382

Focus is on the theoretical, methodological, and practical aspects of collecting, managing, and analyzing data from different qualitative traditions. Specific content is tailored to topics relevant for dissertation research.

#### SWO 6387 Research Practicum (3)

Pre-requisite(s): SWO 6381 and 6382

Students refine proposals from the quantitative and qualitative courses, submit them for review, and carry out the studies from problem formulation to submission of two manuscripts suitable for peer-reviewed journal publications.

#### SWO 6V00 Dissertation Proposal and Prospectus (1-3)

Prerequisites(s): SWO 6381, SWO 6382, SWO 6583, SWO 6284, SWO 6385, SWO 6386. Research for doctoral students studying for preliminary examinations, preparing a topic proposal, or writing a prospectus in anticipation of candidacy. The course may be repeated.

#### SWO 6V76 Special Topics in Social Work Practice and Research (3-6)

Pre-requisite(s): SWO 6351, SWO 6380, SWO 6382, and SWO 6384 Special topics in social work practice and research. May be repeated for credit, provided that the topic is not duplicated, for a maximum of 6 credit hours.

#### SWO 6V99 Dissertation (1-12)

Pre-requisite(s): Admission to PhD program; SWO major Research, data analysis, and writing and oral/written defense of an approved doctoral dissertation. At least nine hours of SWO 6V99 are required. Students may not enroll for dissertation hours until they have been officially accepted into candidacy for the Ph.D. degree.

# Sociology (SOC)

#### SOC 5303 Social Measurement and Causal Modeling (3)

Advanced multivariate statistical techniques; causal modeling; problems of research design, validity, and reliability. The course also involves the utilization of social science computer programs in the analysis of large-scale survey data.

# SOC 5310 Social Demography (3)

A survey of demographic change, issues, and methods as they impact our social world. Emphasis is on the social and cultural aspects of demography, as well as the impact of the changing population in society.

#### SOC 5312 Social Science Data Analysis (3)

Cross-listed as PSC 5312

Pre-requisite(s): Permission of instructor

This is a data-intensive course designed to acquaint students with the wide variety of available data types and sources for social science research. Students learn to access, analyze, and critique these various data types. In analyzing these data, we begin with simple univariate distributional statistics and progress through bivariate regression and correlation.

#### SOC 5314 Regression Analysis for the Social Sciences (3)

Pre-requisite(s): SOC 5312

Regression analysis with continuous, categorical, and count outcomes, including ordinary least squares (OLS), logistic, ordered logistic, multinomial logistic, Poisson, and negative binomial regression.

#### SOC 5320 Seminar on the Community (3)

Theories of community structure and dynamics, methods community analysis, and techniques for community change.

#### SOC 5330 Evaluative Research (3)

Cross-listed as GRT 5330

Conceptual, methodological, and administrative aspects of program evaluation. Problems of translating research findings into policies and programs are explored.

#### SOC 5332 The Sociology of Health: Health Delivery Systems (3)

Cross-listed as GRT 5332

Special health problems of the aged person, with particular stress on related social factors and the strengths and weaknesses of existing health care systems. Alternate models for meeting the health needs of the aged are considered.

#### SOC 5336 The Family in Later Life (3)

Cross-listed as GRT 5336, SOC 5334, SWO 5336 See SWO 5336 for course information.

#### SOC 5341 Introduction to Sociology of Religion (3)

Acceptance into the graduate program. Introduction to the main theories and empirical studies in the sociology of religion.

#### SOC 5342 Data Sources and Publishing in Sociology (3)

Introduction to various data sources, accompanied by training in how to publish research.

#### SOC 5343 Theory in the Sociology of Religion (3)

Pre-requisite(s): SOC 5341; or consent of instructor In depth analysis of the major social theories of religion.

### SOC 5345 Sociology of Power (3)

Overview of the concepts, theories, and methods for studying power in human social life. Topics include power, oppression, inequality, the state, protest, and social change. Students read original texts, engage in critical thinking exercises, and write research papers.

#### SOC 5354 Seminar in Family Sociology (3)

Review of theoretical frameworks used in the study of family sciences. Emphasis is on classical and emerging approaches and the use of theory in research and program development.

#### SOC 5357 Seminar in Comparative Sociology (3)

Pre-requisite(s): SOC 6307 and 6314

This in-depth introduction to comparative sociology begins with a philosophical discussion of what constitutes comparative research and the criteria for social causation. Next, it examines the strengths and weaknesses of various theoretical approaches to comparative sociology. Third, it analyzes important contemporary comparative studies.

#### SOC 5374 Sport in the Social Context (3)

Cross-listed as HP 5374

See HP 5374 for course information.

#### SOC 5381 Advanced Research Methods (3)

Research projects under direct supervision of a faculty member. Although specific methodological areas will vary by project, content analysis, controlled experimental design, sampling, survey analysis, computer skills, and statistical techniques, will be emphasized.

#### SOC 5386 Community Based Research (3)

In this course students acquire first-hand experience in operationalizing a community-driven research project which includes the design, execution, and delivery of a final report to the community stakeholders.

#### SOC 5390 Summer Writing Practicum in Sociology (3)

Students spend the summer working with a faculty supervisor to improve their scholarly writing in the areas of framing a testable hypothesis, operationalizing and measuring concepts, and writing to the broader discipline. A publishable research article is the goal of the course.

#### SOC 5391 Advanced Sociological Theory (3)

Pre-requisite(s): SOC 4391; or consent of instructor

Seminar on recent developments in sociological theory. Discussions will include critical evaluation of major theoretical systems, the development and use of paradigms, and the process of theory construction.

#### SOC 5392 Leisure Well-Being in Later Life (3)

Focus on how to create leisure opportunities to contribute to well-being of individuals in later years. Students will be involved in developing innovative approaches to leisure experiences for senior adults. Lab experience required.

#### SOC 5395 Sociopsychological Aspects of Counseling Adults (3)

Cross-listed as GRT 5395

Pre-requisite(s): SOC 4393 or PSY 4355 and SOC 4395; or consent of instructor

Adult development and socialization from the perspective of counseling interventions. Opportunities to develop counseling skills with middle-age and older persons will be provided along with appropriate supervision.

#### SOC 5397 Methods in Aging Research (3)

Cross-listed as GRT 5397, SWO 5397

See SWO 5397 for course information.

#### SOC 5398 Advanced Sociological Theory II: Detailed Investigations of Contemporary Theory (3)

Pre-requisite(s): SOC 5391

This seminar builds on Advanced Sociology Theory with detailed investigations of contemporary theory. In particular, discussion focuses on how to utilize social theory in research.

#### SOC 5V71 Special Topics in Sociology (1-6)

Pre-requisite(s): Consent of instructor

Designed for students who wish to study with a professor in an area of sociology not covered by a formal course. Students will contract with professor regarding study and number of semester hours.

#### SOC 5V97 (1-6)

Supervised teaching experience. The student will teach SOC 1305 under the supervision of a graduate faculty member. Lesson plans, syllabi, handouts, lecture examples, etc., will be discussed before and after classes. Videotaping of selected classes will provide media for critique and growth.

#### SOC 5V99 Thesis (1-6)

Research, data analysis, writing, and oral defense of an approved master's thesis. At least six hours of SOC 5V99 are required.

#### SOC 6083 Proseminar in Sociology (0)

Pre-requisite(s): Enrolled in Department of Sociology's Ph.D Program. This seminar aids students in professional development. Weekly speakers discuss current research, publishing, teaching, and important topics/events in the sociology of religion. The course is pass/ fail and required of all students pursuing a Ph.D. with an emphasis in sociology of religion. Course may be repeated 12 times.

#### SOC 6301 Focus Group Research (3)

Pre-requisite(s): Consent of instructor

Students will apply information gathered from a review of the current literature to conduct a focus group research project under the supervision of the instructor. Students will conduct all phases of a focus group research project including design, sampling, administration and analysis.

#### SOC 6303 Telephone Surveys (3)

Pre-requisite(s): Consent of instructor

Students will acquire knowledge of telephone survey techniques and use this information to conduct a telephone survey under the supervision of the instructor. Special emphasis will be given to issues of non-contact, refusals, demographic and behavioral screens, and random digit versus add a digit techniques.

#### SOC 6307 Statistical Methods for Survey Research (3)

Pre-requisite(s): Consent of instructor

An introduction to several multivariate statistical techniques appropriate for the analysis of discrete qualitative social science survey data measured at the nominal level of measurement. Emphasis in the course is on logic regression, log linear analysis and latent class/latent structure analysis. Application to major social science data sets will be made.

#### SOC 6310 Mail Surveys (3)

Pre-requisite(s): Consent of instructor

Students will design, conduct, and analyze a mail survey in this course. Special emphasis will focus on questionnaire construction, question design, sampling techniques, cover letters and research identity, and other special problems unique to self-administered surveys.

#### SOC 6314 Advanced Quantitative Analysis for Sociology (3)

Pre-requisite(s): SOC 5312 and 6307; or equivalent

This course covers cutting-edge data analysis techniques used in the toptier sociology journals.

#### SOC 6317 Community Spatial Analysis (3)

Pre-requisite(s): SOC 5312

Geographic information systems (GIS) and spatial modeling techniques are applied to contemporary community issues and social problems such as inequality, poverty, housing, employment, economic development, demographics, and transportation. Particular emphasis is placed on government and other sources of current data for community analysis.

#### SOC 6318 Sampling Techniques (3)

Pre-requisite(s): Three hours of statistical methods

Planning, execution, and analysis of sampling from finite populations. Simple random, stratified random, ratio, systematic, cluster, sub sampling, regression estimates, and multi-frame techniques are covered.

#### SOC 6320 Sociological Covariance Modeling (3)

Pre-requisite(s): SOC 5314

Introduction to sociological applications of covariance structure analysis, including reciprocal effects and correlated equations involving personal and social factors. Recursive and nonrecursive models with and without latent variables are taught and implemented.

#### SOC 6323 Qualitative Methods (3)

Training in qualitative research methods, including interviewing, content analysis, participant observation, and case studies. Students gain experience conducting, analyzing, and reporting qualitative research.

#### SOC 6325 Needs Assessment (3)

Pre-requisite(s): Consent of instructor

An introduction to community needs assessment in which available data (e.g. crime rates, poverty levels) and newly created data (e.g. elite surveys, program inventories) are combined to estimate various levels and types of community needs. Emphasis is on all facets of needs assessment including need definition, data selection, data creation, analysis, interpretation and presentation.

#### SOC 6331 The Sociology of Religiosity (3)

Pre-requisite(s): SOC 5341 or consent of instructor

Introduction to the measurement and definition of religiosity.

#### SOC 6332 The Sociology of Religious Organizations (3)

Pre-requisite(s): SOC 5341; or consent of instructor

Analysis of how religious organizations change, including membership dynamics, authority systems, and congregational cultures.

#### SOC 6333 Religion, Politics, and Society (3)

Analysis of religious change at the societal level with an emphasis on church-state relationships.

#### SOC 6334 The Sociology of Religious Deviance (3)

Pre-requisite(s): SOC 5341; or consent of instructor Analysis of deviant religious groups with an emphasis on defining religious deviance and explaining group membership.

#### SOC 6335 Religion, Morality and Social Change (3)

Pre-requisite(s): SOC 5341; or consent of instructor Analysis of the role of religion in creating, sustaining and challenging the moral order of societies, and how cultural change can affect religion's moral impact.

#### SOC 6336 Religion, Race and Gender (3)

Pre-requisite(s): SOC 5341; or consent of instructor Analysis of the interconnections of religion with race and gender with an emphasis on how race, ethnicity and gender have shaped religion and

#### SOC 6340 Face to Face Surveys (3)

been shaped by religion.

Pre-requisite(s): Consent of instructor

Students will develop and conduct a face-to-face survey under the direction of the instructor. In this process, students will train interviewers in the interpersonal dynamics of interviewing which comply with current federal guidelines concerning the protection of human subjects. In addition, the issues of dialects, illiteracy, and multicultural awareness will be addressed

#### SOC 6345 Sociology of Regional Processes (3)

Pre-requisite(s): SOC 5391; or equivalent; or consent of instructor This course examines in detail sociological theories of regional growth and development. Students will gain a working knowledge of the core assumptions of each perspective along the structure-agency continuum. In addition, students will do significant readings of empirical research in this field, and conduct an original empirical study.

#### SOC 6350 Seminar in Human Resource Management (3)

Cross-listed as MGT 5336

See MGT 5336 for course information.

#### SOC 6351 Seminar in Population Health (3)

An examination of individual differences in health and well-being in the United States. Focuses on (1) health disparities by socioeconomic status, gender, race/ethnicity, and age; and (2) biological and sociological theories of illness and disease. Risk factors for poor health and coping resources that enhance mental and physical well-being are identified.

#### SOC 6357 Health Inequalities in America (3)

Pre-requisite(s): SOC 5314

A seminar focused on critiquing a wide selection of recent scientific articles on health and society. Chosen articles will deal with social inequalities in health observed in the United States and other advanced nations.

#### SOC 6360 Demographic Techniques (3)

Pre-requisite(s): Consent of instructor

An introduction to the various models of demographic projection and modeling including linear regression, ratio techniques and cohort component. Emphasis is on mastery of base data acquisition and model construction to determine demographic trends and predict population levels, crime rates and disease patterns.

#### SOC 6363 Directed Readings in Sociology (3)

Students spend the summer working with a faculty supervisor to prepare for the PhD Preliminary Exam. Students review major sociological theories, research methods, and dominant research in one substance area.

#### SOC 6384 Religion and Family Life (3)

Focuses on the ways religion influences family life in the context of significant family change in the United States. Specific topics include how religious institutions have responded to changes in family life, sexual behavior, marriage and fertility timing, cohabitation, gender roles, parenting, marital quality, and divorce. Also examines how family life influences religious commitment.

#### SOC 6391 Grant Writing and Proposal Development (3)

Provides intensive exposure to the technical and political aspects of grant writing and proposal development. Emphasis is placed on defining proposal ideas to match funding sources, researching private foundations, corporations and government funding agencies, and developing successful proposals. Participants will prepare a grant proposal during the course, which will be submitted to an appropriate private or public agency.

#### SOC 6V37 Special Topics in the Sociology of Religion (1-3)

Pre-requisite(s): Consent of instructor

Analysis of special topics in the sociology of religion. The course may be repeated once when the content varies.

#### SOC 6V71 Special Topics (1-3)

Pre-requisite(s): Consent of instructor

A social research project in selected areas of sociology. The project must be approved by the members of the graduate faculty supervising the student. A final journal-quality paper summarizing the research effort and findings must be submitted to the instructor. This course may be repeated up to six times for credit up to a total of eighteen semester hours provided the research area is different.

#### SOC 6V99 Dissertation (1-6)

Supervised research for the doctoral dissertation. A total of at least twelve semester hours is required for completion of the dissertation.

## Spanish (SPA)

#### SPA 5199 Non-Thesis Degree Completion (1)

To fulfill requirements for non-thesis master's students who need to complete final degree requirements other than coursework during their last semester. This may include such things as a comprehensive examination, oral examination, or foreign language requirement. Students are required to be registered during the semester they graduate.

#### SPA 5302 Literary Theory, Research and Writing (3)

Pre-requisite(s): Graduate standing

Theories and models of literary criticism, as well as library resources and their use applied to the analysis of texts in Spanish to produce scholarly papers.

#### SPA 5310 Medieval Spanish Literature (3)

Pre-requisite(s): SPA 5351

A study of Spanish literature from the end of the first millennium through the consolidation of the various Spanish kingdoms under Ferdinand and Isabella.

#### SPA 5315 Spanish Literature of the 16th and 17th Century (3)

Pre-requisite(s): SPA 5302; or consent of graduate adviser Representative works of poetry, prose narrative, and drama from Boscan to Calderon. Close reading of texts with special attention to major historical, artistic, and literary trends of the sixteenth and seventeenth centuries.

#### SPA 5324 Spanish Poetry and Drama: 19th and 20th Centuries (3)

Pre-requisite(s): SPA 5302; or consent of graduate adviser Major historical and literary movements and major historical, literary, and artistic figures of nineteenth-and twentieth-century Spain. Analysis of texts through close reading.

#### SPA 5326 Nineteenth and Twentieth Century Spanish Narrative (3)

This course is an introduction to the major movements and writers of prose fiction in Spain in the last two hundred years.

#### SPA 5331 Latin American Colonial Literature (3)

This course is designed to give an overview of literary trends in Hispanic-American literature from pre-Hispanic times to the eighteenth century.

#### SPA 5334 Latin American Romanticism to Modernism (3)

This course is designed as a survey of the Latin American novel, short story, poetry and theatre from the nineteenth century to the first half of the twentieth century.

### SPA 5335 Latin American Literary Trends: Early to Mid 20th Century (3)

Pre-requisite(s): Graduate standing

This course is designed as a survey of the Latin American novel, shortstory, poetry and theatre of the first half of twentieth century.

## SPA 5337 Latin American Literary Trends: Mid Twentieth Century to Present (3)

This course is designed as a survey of the Latin American novel, shortstory, poetry, and the theatre from the second half of the twentieth century to the present.

#### SPA 5350 Introduction to Romance Linguistics (3)

An introductory course for the field of linguistics and its components: phonology, morphology, syntax, semantics, and language change.

#### SPA 5351 History of the Spanish Language (3)

Historical developments of the language from Latin to modern Spanish.

## SPA 5356 The Acquisition of Spanish as a First and Second Language (3)

Pre-requisite(s): SPA 5350; or consent of instructor An examination of studies on the acquisition of Spanish as a first and second language; language acquisition in both formal and informal environments is studied.

#### SPA 5357 Spanish Syntax and Semantics (3)

The course intends to examine the grammatical structures of Spanish and English for students who are intermediate to advanced learners of Spanish.

#### SPA 5358 Phonology and Morphology (3)

The course intends to examine the phonological and morphological structures of Spanish as they relate to English.

#### SPA 5359 Seminar in Language Acquisition and Applied Linguistics (3)

Theory, review of literature, and practice in language acquisition and applied linguistics for graduate students who will be teaching Spanish as a second language.

#### SPA 5370 Spanish for Graduate Students I (3)

Reading of intermediate-level Spanish texts. No previous language experience required. Limited to graduate students or to undergraduates by petition. Does not count toward foreign language requirement for undergraduate students.

#### SPA 5371 Spanish for Graduate Students II (3)

Pre-requisite(s): SPA 5370; or consent of instructor

Continuation of SPA 5370. Reading of intermediate-level Spanish texts. No previous language experience required. Limited to graduate students or to undergraduates by petition. Does not count toward foreign language requirement for undergraduate students.

#### SPA 5388 Topics in Hispanic Language and Literature (3)

Pre-requisite(s): Graduate standing

A study of an author, work, period, genre, or trend of Hispanic literature or of an aspect of the Spanish language. May be taken more than once as topic changes from semester to semester.

#### SPA 5V90 Independent Study (1-3)

Pre-requisite(s): Consent of division director

#### SPA 5V99 Thesis (3-6)

Research, data analysis, writing, and oral defense of an approved master's thesis. At least six hours of SPA 5V99 are required.

## **Sports Management (SPM)**

#### SPM 5327 Financial Management in Sport (3)

Income sources available to sport organizations such as tax support, municipal and corporate bonds, ticket sales, concessions, fund raising, sponsorship, licensing, and PSLs.

#### SPM 5328 Athletic Fundraising and Development (3)

Introduces the fundamental principles and best practice in sports fundraising. Focuses on the particular challenges of fundraising and development in intercollegiate and interscholastic athletics, youth sport organizations, and non-profit sport organizations.

#### SPM 5336 Sport Marketing (3)

A study of sport marketing plans utilizing the concepts of product, price, public relations, promotion, sales and advertising.

#### SPM 5338 Public Relations in Sport (3)

Aspects of external and internal communication in sport pertaining to community, customer, employee, and media relations.

#### SPM 5341 NCAA Policies & Procedures (3)

Provides an in-depth and hands-on approach in understanding, applying, and conveying NCAA regulations. Designed to emphasize career preparation for leadership in college athletics by developing the necessary philosophical perspective and practical knowledge for compliance with NCAA standards.

#### SPM 5372 Legal Issues in Sport (3)

This course examines the legal aspects of sport. Areas of study include, but are not limited to, administrative rules and regulations, constitutional law, legislative enactments, negligence, and case law related to professional, intercollegiate, interscholastic and recreational sport.

#### SPM 5373 Sport Management (3)

The general objectives of this course are to understand the role of management in sport programs, to develop a philosophy of management, to understand various management theories, and to acquire knowledge and skills to make decisions and solve problems in sport management. These general objectives will be applied to such specific areas as human resource management, marketing, legal liability, facility management, finance, economics, and ethics.

#### SPM 5374 Sport in the Social Context (3)

A course that investigates sport function from an economic, political, sociological and educational perspective and studies the interaction of various social influences such as the mass media, race, gender, and group behavior on sport.

#### SPM 5375 Governance in Sport (3)

Various governing agencies in sport emphasizing investigation of the legal ramifications, organizational structure, authority, membership, and influence of sport governing bodies.

#### SPM 5376 Facility and Event Management (3)

Practical background in all facets of managing a sports event and facility. The content includes organizational structure and staffing, financial management, risk management, operations and maintenance, crowd control and security, marketing an event, and measuring the economic impact of an event.

#### SPM 5398 Contemporary Ethical Issues in Sport (3)

A research seminar focusing on ethical problems in the contemporary sport industry and the theoretical models available for analyzing these problems.

#### SPM 5V90 Internship in Sports Mgt. (1-6)

Pre-requisite(s): Consent of instructor

Provides full-time supervised experience in a sport organization or agency for job-based professional training including a project jointly developed by the sponsoring organization and faculty. Students will complete 400 clock hours.

#### SPM 5V94 Practicum in Sports Mgt. (1-3)

Pre-requisite(s): Consent of instructor Provides part-time supervised experience in a sport organization or agency for job-based professional training including a project jointly developed by the sponsoring organization and faculty

Students will complete 200 clock hours.

## **Statistics (STA)**

#### STA 5180 SAS and SAS Programming for Statistical Analysis (1)

Pre-requisite(s): STA 2381 or STA 5300 or equivalent; STA 3381 or equivalent

Concepts in SAS programming, including methods to establish and transform SAS data sets, perform statistical analyses, and create general customized reports. Methods from both BASE SAS and SAS SQL are considered. Successful completion of the course prepares students to take the SAS certification exam.

#### STA 5300 Statistical Methods (3)

Introduction to descriptive and inferential statistics. Topics may be selected from the following: descriptive statistics and graphs, probability, regression, correlation, tests of hypotheses, interval estimation, measurement, reliability, experimental design, analysis of variance, nonparametric methods, and multivariate methods.

#### STA 5301 Introduction to Experimental Design (3)

Pre-requisite(s): Graduate standing

Simple and complex analysis of variance and analysis of covariance designs. The general linear model approach, including full-rank and less than full-rank models, will be emphasized.

#### STA 5303 Applied Regression Analysis (3)

Pre-requisite(s): STA 5300 or equivalent Regression modeling, estimation, and diagnostics with emphasis on applications

Topics include simple linear regression, multiple regression, logistic regression, and Poisson regression. The statistical programming language R is used.

#### STA 5305 Advanced Experimental Design (3)

Pre-requisite(s): STA 5353 and 5381

The course examines a variety of complex experimental designs that are available to researchers including split-plot factorial designs, confounded factorial designs, fractional factorial designs, incomplete block designs, and analysis of covariance. The designs are examined within the framework of the general linear model. Extensive use is made of computer software.

#### STA 5320 Predictive Analytics (3)

Pre-requisite(s): STA 5303 Concepts, methods, and tools used for predictive modeling and data analytics with applications are considered The focus of this course is on advanced tools using various multivariate regression techniques, statistical modeling, machine learning, and simulation for forecasting. Practical applications are emphasized.

#### STA 5350 Statistical Machine Learning (3)

Pre-requisite(s): STA 5303

Fundamental topics of machine learning including supervised/ unsupervised learning, cost function optimization, feature selection and engineering, and bias/variance trade-off. Learning algorithms including classification methods, support vector machines, decision trees, neural networks, and deep learning are covered.

#### STA 5351 Introduction to Theory of Statistics (3)

Pre-requisite(s): MTH 2321 or equivalent or consent of instructor Introduction to mathematics of statistics. Fundamentals of probability theory, convergence concepts, sampling distributions, and matrix algebra.

#### STA 5352 Theory of Statistics I (3)

Co-requisite(s): STA 5380, STA 6375

Pre-requisite(s): MTH 2321 or STA 5351 or consent of instructor Theory of random variables, distribution and density functions, statistical estimation, and hypothesis testing. Topics include probability, probability distributions, expectation, point and interval estimation, and sufficiency.

#### STA 5353 Theory of Statistics II (3)

Co-requisite(s): STA 5381 Pre-requisite(s): STA 5352

Topics include sampling distributions, likelihood and sufficiency principles, point and interval estimation, loss functions, Bayesian analysis, asymptotic convergence, and test of hypothesis.

#### STA 5360 Introduction to Bayesian Data Analysis (3)

Pre-requisite(s): STA 3381 or equivalent or consent of instructor Overview of analytic and computational methods in Bayesian inference beginning with two-sample t-inference procedures, and extending through regression, focusing on state-of-the-art software for Bayesian computation.

#### STA 5361 Methods in Time Series Analysis (3)

Co-requisite(s):

Pre-requisite(s): STA 3386 or STA 5303 or equivalent or concurrent enrollment or consent of instructor

Statistical methods of analyzing time series including autocorrelation, model identification, estimation, forecasting, and spectral analysis. Applications in a variety of areas including economics and environmental science will be considered. Credit cannot be earned for both this course and STA 5362.

#### STA 5362 Time Series Analysis (3)

Pre-requisite(s): STA 5352

Statistical methods for analyzing time series. Topics include autocorrelation function and spectrum, stationary and non-stationary time series, linear filtering, trend elimination, forecasting, general models, and autoregressive integrated moving average models with applications in economics and engineering. Students cannot receive credit for this course and for STA 5361.

#### STA 5363 Advanced Data-Driven Methods (3)

Pre-requisite(s): STA 5381, 5383, and 6376

Advanced topics and theoretical underpinnings of modern data-driven methods are presented, including supervised and unsupervised methods from both statistical and machine learning perspectives; uncertainty analysis, model selection and development; and both nonlinear and linear methods.

#### STA 5364 Survival and Reliability Theory (3)

Pre-requisite(s): STA 5352

Basic concepts of lifetime distributions. Topics include types of censoring, inference procedures for exponential, Weibull, extreme value distributions, parametric and nonparametric estimation of survival function and accelerated life testing.

#### STA 5365 Design of Experiments and Clinical Trials (3)

Pre-requisite(s): STA 5381

Traditional designs of experiments are presented within the framework of the general linear model. Also included are the latest designs and analyses for clinical trials and longitudinal studies. Credit cannot be received for this course and STA 5375.

#### STA 5367 Managerial Epidemiology (3)

Cross-listed as HPA 5367

See HPA 5367 for course information.

#### STA 5371 Methods in Data Mining and Management (3)

Pre-requisite(s): STA 3386 or STA 5303 or equivalent course or consent of instructor

An introduction to the methods and practices of data mining and management. Concepts, principles, methods, implementation techniques, and applications of data mining, with a focus on modeling, pattern discovery, and cluster analysis.

#### STA 5372 Statistical Process Control (3)

Pre-requisite(s): STA 3381 or equivalent; STA 2381 or equivalent Development of statistical concepts and theory underlying procedures used in statistical process control applications. Topics include sampling inspection procedures, continuous sampling procedures, theory of process control procedures, and experimental design and response surface analysis to design and analyze process experiments.

#### STA 5373 Computational Statistical Methods (3)

Pre-requisite(s): STA 2381 or STA 5300 or an equivalent course in statistical methods

Methods, programming, and algorithms used in computational statistics; topics include, but are not limited to, Monte Carlo simulation, bootstrap, cross-validation, and MCMC. Programming in R and to write R functions.

#### STA 5374 Applied Sampling Techniques (3)

Pre-requisite(s): A grade of C or better in any one of STA 2381 or STA 5300 or an equivalent course in statistical methods
Planning, execution, and analysis of sampling from finite populations.
Simple random, stratified random, ratio, systematic, cluster, subsampling, regression estimates, and multi-frame techniques are covered. Use of computer software for analyzing data collected from designs covered in class.

#### STA 5376 Methods in Biostatistics (3)

Pre-requisite(s): STA 2381 or STA 5300, or an equivalent course in statistical methods

A survey of methods of data analysis for biostatisticians in the biomedical and pharmaceutical fields. Regression analysis, experimental design, categorical data analysis, clinical trials, longitudinal data, and survival analysis.

#### STA 5377 Spatial Statistics (3)

Pre-requisite(s): STA 5353; or consent of instructor Exploratory spatial data analysis using both graphical and quantitative descriptions of spatial data including the empirical variogram. Topics include several theoretical isotropic and anisotropic variogram models and various methods for fitting variogram models such as maximum likelihood, restricted maximum likelihood, and weighted least squares. Techniques for prediction of spatial processes will include simple, ordinary, universal and Bayesian kriging. Spatial sampling procedures, lattice data, and spatial point processes will also be considered. Existing software and case studies involving data from the environment, geological and social sciences will be discussed.

#### STA 5380 Methods in Statistics I (3)

Co-requisite(s): STA 5352, STA 6375

Pre-requisite(s): MTH 2311 and MTH 2321, or consent of instructor Descriptive parametric and nonparametric inferential methods for qualitative and quantitative data from a single population. Parametric and nonparametric inferential methods for qualitative and quantitative data from two populations. Linear regression using matrix notation, including topics in multiple regression, modeling diagnostic procedures, and model selection.

#### STA 5381 Methods in Statistics II (3)

Co-requisite(s): STA 5353

Pre-requisite(s): STA 5380 or consent of instructor

A continuation of STA 5380 with robust regression, quantile regression, and regression trees. K population descriptive and inferential methods. A matrix approach to one-way analysis of variance and least squares in balanced designs with fixed and random effects. Multiple comparison procedures, power, and sample size. A brief introduction to generalized linear models.

#### STA 5383 Introduction to Multivariate Analysis (3)

Pre-requisite(s): STA 5353 and STA 5381 or equivalent Statistical models and procedures for describing and analyzing random vector response data. Supporting theoretical topics include matrix algebra, vector geometry, the multivariate normal distribution and inference on multivariate parameters. Various procedures are used to analyze multivariate data sets.

#### STA 5384 Multivariate Statistical Methods (3)

Discriminant analysis, canonical correlation analysis, and multivariate analysis of variance.

#### STA 5385 High-Dimensional Data Analysis (3)

Pre-requisite(s): STA 5383

Methods for analyzing high-dimensional multivariate data. Topics include matrix computation of summary statistics, graphical techniques using linear dimension reduction, statistical inference of high-dimensional multivariate parameters, high-dimensional principal components analysis and singular value decompositions, and supervised classification methods for high-dimensional sparse data.

#### STA 5387 Stochastic Processes (3)

Pre-requisite(s): STA 5353

The study of probability theory as motivated by applications from a variety of subject matters. Topics include: Markov chains, branching processes, Poisson processes, continuous time Markov chains with applications to queuing systems, and renewal theory.

#### STA 5388 Seminar in Statistics (3)

Pre-requisite(s): Consent of instructor

Selected topics in Statistics. May be repeated once with change of topic.

#### STA 5V85 Practice in Statistics (1-3)

Consulting, research, and teaching in statistics.

#### STA 5V95 Topics in Statistics (1-3)

Pre-requisite(s): Consent of instructor

Selected topics in statistics. May involve texts, current literature, or an applied data model analysis. This course may be repeated up to four times with change of topic.

#### STA 5V99 Thesis (1-3)

Supervised research for the master's thesis. A maximum of three semester hours to count for the degree.

#### STA 6351 Large Sample Theory (3)

Pre-requisite(s): STA 5353

Large sample theory, including convergence concepts, laws of large numbers, central limit theorems, and asymptotic concepts in inference.

#### STA 6352 Bayesian Theory (3)

Pre-requisite(s): STA 5353 or equivalent

Bayesian statistical inference, including foundations, decision theory, prior construction, Bayesian point and interval estimation, and other inference topics. Comparisons between Bayesian and non-Bayesian methods are emphasized throughout.

#### STA 6353 Semiparametric Regression Models (3)

Pre-requisite(s): STA 5353

Semiparametric inference, with an emphasis on regression models applicable to a wider class of problems than can be addressed with parametric regression models. Topics include scatterplot smoothing, mixed models, additive models, interaction models, and generalized regression. Models are implemented using various statistical computing packages.

#### STA 6360 Bayesian Methods for Data Analysis (3)

Pre-requisite(s): STA 5353 or equivalent

Bayesian methods for data analysis. Includes an overview of the Bayesian approach to statistical inference, performance of Bayesian procedures, Bayesian computational issues, model criticism, and model selection. Case studies from a variety of fields are incorporated into the study. Implementation of models using Markov chain Monte Carlo methods is emphasized.

#### STA 6366 Statistical Bioinformatics (3)

Pre-requisite(s): STA 5353 and 5383; or consent of instructor Critical evaluation of current statistical methodology used for the analysis of genomic and proteomic data.

#### STA 6375 Computational Statistics I (3)

Co-requisite(s): STA 5352, STA 5380 Pre-requisite(s): MTH 2311 and 2321

A comprehensive introduction to computing for statisticians. Topics range from information technology and fundamentals of scientific computing to computing environments and workflows, statistical document preparation for reproducible research, and programming languages. Students cannot receive credit for this and for STA 5373.

#### STA 6376 Computational Statistics II (3)

Pre-requisite(s): STA 6375

A continuation of STA 6374 with an emphasis on computational and applied mathematics, pseudo-random variate generation, and Monte Carlo methods. Credit cannot be received for this course and for STA 5373.

#### STA 6380 Modern Trends in Data Science Computing (3)

Pre-requisite(s): STA 6375 and 6376

A hands-on survey of practical data science technologies and tools used in industry. Topics vary and may include version control systems and collaborative software development; distributed computing; data storage and access; cloud computing; web technologies, applications, and dashboards; and workflow and pipelining tools.

#### STA 6382 Theory of Linear Models (3)

Pre-requisite(s): STA 5353 and 5381; and knowledge of matrix theory Theory of general linear models including regression models, experimental design models, and variance component models. Least squares estimation. Gauss-Markov theorem and less than full rank hypotheses.

#### STA 6383 Advanced Multivariate Analysis (3)

Pre-requisite(s): STA 5383

Multivariate normal and related distributions. Topics include generalizations of classical test statistics including Wilk's Lambda and Hotelling's T2, discriminant analysis, canonical variate analysis, and principal component analysis.

#### STA 6384 Analysis of Categorical Responses (3)

Pre-requisite(s): STA 5353 and STA 5381 or equivalent Theory of generalized linear models including logistic, probit, and log linear models with special application to categorical and ordinal categorical data analysis.

#### STA 6V99 Dissertation (1-6)

Supervised research for the doctoral dissertation. maximum of nine semester hours will count for the degree. A student may register for one to six semester hours in one semester.

## **Theater Arts (THEA)**

#### THEA 5101 Introduction to Graduate Theatre Studies (1)

A two week introductory intensive designed to prepare students for graduate level theatre research, analysis, and teaching.

#### THEA 5199 Non-Thesis Degree Completion (1)

To fulfill requirements for non-thesis master's students who need to complete final degree requirements other than coursework during their last semester. This may include such things as a comprehensive examination, oral examination, or foreign language requirement. Students are required to be registered during the semester they graduate.

#### THEA 5301 Contemporary Directing Styles (3)

Analysis of contemporary directing styles.

#### THEA 5304 History and Theory of Directing (3)

An historical and theoretical study of the development of the director, with emphasis on the late nineteenth century to the present.

#### THEA 5306 Play Analysis for Directors (3)

Advanced study of several methodologies for analyzing dramatic structure and composition; approaches to the direct application of analysis to play production.

#### THEA 5307 Contemporary Performance Theory (3)

Development of twentieth-century performance theory.

#### THEA 5308 Dramatic Theory and Criticism (3)

Dramatic theory and criticism from Aristotle to the twentieth century.

#### THEA 5310 Seminar in Classical Drama (3)

An historical and theoretical study of selected classical masterworks in performance.

#### THEA 5311 Directing Modern Plays (3)

A study of theories and techniques used in directing selected European and American masterworks with emphasis on script analysis and interpretation, staging practices, and particular concept and style.

#### THEA 5312 Directing Classical Plays (3)

Directing theories and concepts of tragedy and comedy from the Greeks through the nineteenth century.

#### THEA 5313 Production Design (3)

Research, analysis, and practical experience in designing scenery, lighting, sound, costumes, and makeup for a realized production.

#### THEA 5315 Seminar in Modern Drama (3)

This seminar course offers advanced study of modern American and British and European drama specifically for graduate students of theatre.

#### THEA 5335 Director's Workshop (3)

Practical experience in all areas of theatre production for the public presentation of a full-length play.

#### THEA 5351 Theatre Scholarship and Research Methods (3)

Seminar study of practical issues in advanced theatre scholarship, research methods, application of theory, academic writing, and scholarly publication.

#### THEA 5370 Seminar in Dramatic Production (3)

Research and critical analysis of plays and their productions.

#### THEA 5372 Independent Study (3)

Guided study of pre-approved topic(s).

#### THEA 5373 Dramaturgy (3)

Application of directorial script analysis and dramaturgical tools in production planning, development of the production script, and rehearsal.

#### THEA 5374 Collaborative Theater Process (3)

An investigation through research and discussion of the elements of design, the relationship between the director and designers, and the process of unifying various elements of theatre production. Students will submit proposals for designs of both classic and modern plays and justify their ideas through literary and pictorial research.

#### THEA 5375 Actor-Director Collaboration (3)

Through scene work and acting exercises, directors explore the theories, common vocabularies, and basic skills and techniques needed to work with actors from differing backgrounds. Attention will also be given to auditioning, casting and rehearsal strategies as well as the major directorial performance styles of the twentieth century.

#### THEA 5376 Playwriting (3)

A study of the art and craft of playwriting, emphasizing analytic approaches to writing, developing a personal voice, narrative, characters, and point of view. Workshop required.

#### THEA 5398 Thesis Production and Research (3)

Master of Fine Arts students only. Research, design, and direction of the thesis production.

#### THEA 5V99 Thesis (1-9)

Research, data analysis, writing, and oral defense of an approved master's thesis. At least six hours of THEA 5V99 are required.

## **Ugaritic (UGA)**

UGA 5306 Ugaritic Grammar and Lexicography (3)

Cross-listed as REL 5325

Pre-requisite(s): HEB 2301; or equivalent

Fundamentals of the language of Ugarit with special attention to the relationship of Ugaritic with Hebrew grammar and lexicography.

# **Graduate School Faculty Graduate Faculty**

Members of the Graduate Committee Faculty and their program affiliations are listed on the Graduate School website: www.baylor.edu/graduate/index.php?id=959408 (https://www.baylor.edu/graduate/? id=959408). The procedures for appointment of faculty to membership in the Graduate Faculty, as approved by the Graduate Council, are available on the Graduate School website.

The following rights and responsibilities are reserved to members of the Graduate Faculty:

- 1. to serve on standing committees of the Graduate School,
- 2. to chair dissertation or thesis committees, and
- 3. to serve as an official member of a dissertation or thesis committee.

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