# PHYSICIAN ASSISTANT, DSC.P.A.

- Emergency Medicine, DSc.P.A. (https://catalog.baylor.edu/graduateschool/affiliated-programs/physician-assistant/emergency-medicinedscpa/)
- Orthopedics, DSc.P.A. (https://catalog.baylor.edu/graduate-school/ affiliated-programs/physician-assistant/orthopaedics-dscpa/)
- Surgery and Critical Care, DSc.P.A. (https://catalog.baylor.edu/ graduate-school/affiliated-programs/physician-assistant/surgerycriticalcare/)

### **Clinical Orthopaedics (MCO)**

# 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 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 evidencebased 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.

### **Emergency Medicine (MEM)**

### MEM 6210 Emergency Airway, Anesthesia, and Pain Management (2) Pre-requisite(s): MEM 6330

The MEM 6210 rotation orients the emergency medicine physician assistant (EMPA) to the concepts and application of emergency airway management, the spectrum of anesthesia, and pain management in emergency medicine. This is a comprehensive rotation composed of a two-week rotation within the hospital setting.

# 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 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 6310 Medical Research Design (3)

Co-requisite(s): MEM 6330

This course introduces medical research design. This course focuses on generation of a testable research question, developing a research design that addresses the question and conducting a literature review that supports the study design.

### MEM 6311 Approaches to Medical Data Collection and Analysis (3) Pre-requisite(s): MEM 6310 and MEM 6330

This course introduces approaches to medical data collection and analysis. This course focuses on executing a research protocol, collecting outcome measures accompanying data analysis.

### MEM 6312 Techniques for Medical Research and Presentation (3) Pre-requisite(s): MEM 6311

This course introduces various techniques for medical research presentation. This course 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 doctoral defense and presentation at local and national venues.

### MEM 6322 Concepts of Emergency Medicine 3 (3)

Pre-requisite(s): MEM 6411

This didactic course provides foundational knowledge and skills for the physician assistant to practice in the specialty of emergency medicine. It will introduce emergency medicine physician assistants (EMPA) to the concepts of emergency stabilization, treatment, and resuscitation of common conditions and concerns seen in the emergency department. The key areas of focus include emergency resuscitation, endocrinology, environmental injuries, gastroenterology, genitourinary, gynecology, infectious disease, neurology, obstetrics, orthopedics, trauma management, pediatrics, wound management, and social issues. This will form the basis of knowledge for clinical rotations.

### MEM 6330 Introduction 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 6331 Clinical Emergency Medicine 1 (3)

### Pre-requisite(s): MEM 6330

This clinical course introduces emergency medicine physician assistants (EMPA) to the concepts of emergency stabilization, treatment, and resuscitation of common conditions and concerns seen in the emergency department. The key areas of focus include obtaining patient histories, performing physical examinations, developing differential diagnoses, procedural competency, and management of emergency department patients. This course facilitates the translation of medical knowledge into clinical application.

### MEM 6332 Clinical Emergency Medicine 2 (3) Pre-requisite(s): MEM 6330

This clinical course introduces emergency medicine physician assistants (EMPA) to the concepts of emergency stabilization, treatment, and resuscitation of common conditions and concerns seen in the emergency department. The key areas of focus include obtaining patient histories, performing physical examinations, developing differential diagnoses, procedural competency, and management of emergency department patients. This course facilitates the translation of medical knowledge into clinical application.

### MEM 6333 Clinical Emergency Medicine 3 (3)

Pre-requisite(s): MEM 6330

This clinical course introduces emergency medicine physician assistants (EMPA) to the concepts of emergency stabilization, treatment, and resuscitation of common conditions and concerns seen in the emergency department. The key areas of focus include obtaining patient histories, performing physical examinations, developing differential diagnoses, procedural competency, and management of emergency department patients. This course facilitates the translation of medical knowledge into clinical application.

### MEM 6334 Clinical Emergency Medicine 4 (3)

Pre-requisite(s): MEM 6330

This clinical course introduces emergency medicine physician assistants (EMPA) to the concepts of emergency stabilization, treatment, and resuscitation of common conditions and concerns seen in the emergency department. The key areas of focus include obtaining patient histories, performing physical examinations, developing differential diagnoses, procedural competency, and management of emergency department patients. This course facilitates the translation of medical knowledge into clinical application.

### MEM 6335 Clinical Emergency Medicine 5 (3)

Pre-requisite(s): MEM 6330

This clinical course introduces emergency medicine physician assistants (EMPA) to the concepts of emergency stabilization, treatment, and resuscitation of common conditions and concerns seen in the emergency department. The key areas of focus include obtaining patient histories, performing physical examinations, developing differential diagnoses, procedural competency, and management of emergency department patients. This course facilitates the translation of medical knowledge into clinical application.

### MEM 6336 Emergency Department 6 (3)

Pre-requisite(s): MEM 6330

This clinical course introduces emergency medicine physician assistants (EMPA) to the concepts of emergency stabilization, treatment, and resuscitation of common conditions and concerns seen in the emergency department. The key areas of focus include obtaining patient histories, performing physical examinations, developing differential diagnoses, procedural competency, and management of emergency department patients. This course facilitates the translation of medical knowledge into clinical application.

### MEM 6337 Emergency Care Elective 1 (3)

MEM 6338 Emergency Care Elective 2 (3)

### 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 6410 Concepts of Emergency Medicine 1 (4)

#### Pre-requisite(s): MEM 6330

This didactic course provides foundational knowledge and skills for the physician assistant to practice in the specialty of emergency medicine. It will introduce emergency medicine physician assistants (EMPA) to the concepts of emergency stabilization, treatment, and resuscitation of common conditions and concerns seen in the emergency department. The key areas of focus include anesthesia, diagnostic imaging, endocrinology, gastroenterology, genitourinary, gerontology, gynecology, hematology, neurology, obstetrics, oncology, ophthalmology, orthopedics, otolaryngology, toxicology, pain management, pediatrics, psychiatry, and social issues. This will form the basis of knowledge for clinical rotations.

### MEM 6411 Concepts of Emergency Medicine 2 (4)

#### Pre-requisite(s): MEM 6410

This didactic course provides foundational knowledge and skills for the physician assistant to practice in the specialty of emergency medicine. It will introduce emergency medicine physician assistants (EMPA) to the concepts of emergency stabilization, treatment, and resuscitation of common conditions and concerns seen in the emergency department. The key areas of focus include cardiology, diagnostic imaging, emergency resuscitation, endocrinology, environmental injuries, hematology, infectious disease, neurology, oncology, orthopedics, oral maxillofacial conditions, trauma management, toxicology, psychiatry, pulmonology, wound management, and social issues. This will form the basis of knowledge for clinical rotations.

### 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)

The MEM6445 rotation orients the emergency medicine physician assistant (EMPA) to the concepts and application of ultrasound in emergency medicine. This is a comprehensive rotation composed of a four-week rotation of ultrasound (US) in the Emergency Department.

### MEM 6447 Clinical Critical Care 1 (4)

### 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 Clinical Critical Care 4 (4)

### Military General Surgery (MCG)

MGS 6330 Orientation to General Surgery (3) This rotation emphasizes the clinical skills of providing care and treatment to patients with surgical disease.