# **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 Point of Care Ultrasound 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 evidencebased 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 evidencebased 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.