

Nurse Anesthesia (RNA) Class of 2019 Specialty Specific Courses

Course Number: RNA602

Course Title: Applied Biochemistry for Nurse Anesthetists

Credits: 3 credits

Course Description: This course is intended to provide the students with an understanding of the biochemical basis of physiological processes including abnormal derangements. Students are expected to apply the biochemical principles to nurse anesthesia practice. Major topics covered include: 1) structures of the nucleic acids, synthesis of DNA, RNA and proteins; 2) protein structure and function, enzyme, pH and pKa, acids, bases, and buffers; 3) common metabolic pathways of carbohydrates, lipids, and amino acids; and 4) special topics including malignant hyperthermia. Lectures are supplemented by case studies and clinical correlate presentations related to anesthesia.

Course Number: RNA605

Course Title: The Principles of Anesthesia, Pharmacology & Coexisting Disease in Clinical Anesthesia Practice I

Credits: 4 credits

Course Description: This core integrates the basic principles of anesthesia with pharmacology, technology and coexisting disease. This course is designed to develop and analyze anesthesia specific content and relate it to the pharmacology I course and pathophysiology I course taught concurrently during the semester. Topic areas will include: anesthesia equipment and machine, cardiopulmonary disease and pharmacology, pharmacology of induction and inhaled anesthetics, airway management and preoperative/anesthetic planning.

Course Number: RNA606

Course Title: The Principles of Anesthesia, Pharmacology & Coexisting Disease in Clinical Anesthesia Practice II

Credits: 5

Course Description: This course builds upon the content taught in the Principle of Anesthesia Practice I course. This course will develop the basic content previously covered and apply it to advanced topics in anesthesia, pharmacology and disease. Students will apply this knowledge and develop the skills to create anesthetic care plans for a variety of specialty populations and surgical procedures in hospital and austere environments.

Course Number: RNA607

Course Title: The Principles of Regional Anesthesia and Vascular Access

Credits: 1

Course Description: This course integrates basic and advanced principles of anesthesia with the intent to expose the student to advanced concepts of regional anesthesia and vascular access for clinical practice. This course will integrate anesthesia relevant procedures and therapy with anatomy, physiology, acute and chronic pain management. Topic areas will include: ultrasound and nerve stimulation technology, nerve and vascular anatomy of peripheral and neuraxial structures and hands on practicum on cadaver, human, and simulation devices.

Course Number: RNA608

Course Title: The Principles of Anesthesia, Pharmacology & Coexisting Disease in Clinical Anesthesia Practice III

Credits: 3

Course Description: This core course is sequentially builds upon the content taught in the Principles of Anesthesia I & II courses. This course integrates the basic and advanced principles of anesthesia and pharmacology and synthesizes these concepts with advanced surgical procedures and complex coexisting disease states.

Course Number: RNA801

Course Title: DNP-Clinical Practicum and Seminar for Nurse Anesthesia Practice I

Credits: 1

Course Description: This course provides the foundation for the art and science of nurse anesthesia. The beginning clinical practicum will introduce the student to the anesthetic equipment and operating room environment. Basic, guided instruction is provided to begin to integrate the didactic principles provided in Patient Assessment, Basic and Advanced Principles of Anesthesia, Co-existing Disease and Clinical Pharmacology into the clinical practice settings. A targeted review of human anatomy will be integrated into the course during discussions of regional anesthesia or airway management as determined by the coordinator. This course is designed to give the student practical information regarding the administration of safe anesthesia with a significant amount of preceptor intervention.

Course Number: RNA802

Course Title: DNP-Clinical Practicum and Seminar for Nurse Anesthesia Practice II

Credits: 8

Course Description: This course is a clinical course and continues providing the foundation for the art and science of nurse anesthesia with a significant amount of preceptor intervention. This clinical practicum will begin with a review of the basic clinical anesthesia topics presented in Phase I and continue the introduction of the novice student to anesthetic equipment and the operating room environment. Progressive, guided instruction is provided for the clinical management of patients undergoing all forms of anesthesia. Legal and ethical aspects of anesthesia delivery and patient interaction strategies are also reviewed.

Course Number: RNA803

Course Title: DNP-Clinical Practicum and Seminar for Nurse Anesthesia Practice III

Credits: 8

Course Description: This clinical course focuses on individual in-depth study of basic science, basic and advanced clinical nurse anesthesia principles as well as a continued review of equipment/monitoring and professional aspects of the career. The student learns to manage more complex patients with an emphasis on advanced monitoring techniques, use of pharmacological agents, and handling higher stress situations. Students develop and utilize practical clinical applications of nurse anesthesia theory. They are individually assigned to specialty areas and formally evaluated at the end of each rotation. Case presentations and group discussion designed to assist the student in conceptualizing, analyzing, and evaluating various nurse anesthesia strategies are included.

Course Number: RNA804

Course Title: DNP-Clinical Practicum and Seminar for Nurse Anesthesia Practice IV

Credits: 5

Course Description: This clinical course is a continuation of advanced clinical nurse anesthesia administration. The student will continue to progress toward greater independent practice. Emphasis is on management of advanced anesthetic principles. Students continue out rotations in specialty areas. This semester will include a Professional Aspects/Wellness Focused Seminar. This is primarily a clinical semester with 4 credits reflected in the Clinical area and one as a seminar with specific topics listed on the semester schedule. The deliverable for this semester is a Clinical Case Report that will be a part of the student's DNP portfolio.

Course Number: RNA805

Course Title: DNP-Clinical Practicum and Seminar for Nurse Anesthesia Practice V

Credits: 8

Course Description: This clinical course is the continuation of advanced nurse anesthesia administration. In this semester the students synthesize and integrate all aspects of anesthesia care. Students should be preparing for entry into practice. The didactic review for this semester will focus on Cardiac/Neurology/Renal and Trauma Anesthesia.

Course Number: RNA806

Course Title: DNP-Clinical Practicum and Seminar for Nurse Anesthesia Practice VI

Credits: 8

Course Description: This clinical course is the continuation of advanced nurse anesthesia clinical administration. In this semester the students complete the synthesis and integration of all aspects of anesthesia care. Students are prepared to transit from student to independent practitioner status. The first part of this semester is a continued didactic review of Phase I topics. During the remainder of the semester the student will be focused on preparing for the National Board Certification Exam. This is the final clinical semester and the main focus continues to be on clinical anesthesia. There will be Operational Leadership in Anesthesia Seminar held during the second portion of the semester.