COURSES

DNPNA 710 Epidemiology/Population Health 3 CREDITS Epidemiological concepts as they relate to health and healthcare are introduced in this course. The advanced practice nurse will develop an understanding of population health, screening, prevention, and disease control.

DNPNA 715 Health Care Policy and Economics **3 CREDITS** This course will explore health care policies and laws that control the structure of healthcare in the United States. Advance practice nurses will explore current and emerging issues and principles of business finance related to health care practices. National, state, and local levels will be addressed. Prerequisites: none

DNPNA 720 Evidence-Based Nursing Practice **3 CREDITS** This course explores the theoretical foundations of practice, implementation of research, and evidence based approaches to practice. Learning focuses on the integration of scientific evidence in to practice to promote safe, cost effective healthcare with improved outcomes. Prerequisites: none

DNPNA 725 Leadership and Roles **3 CREDITS** This course will explore the development of the advanced practice role as it relates to our complex healthcare system. Regulation of practice and professional responsibilities are included. Professional development and leadership models are addressed. Leadership related concepts such as professional integrity, credibility, and interprofessional collaboration will also be emphasized. Prerequisites: none

DNPNA 730 Adv. Statistics for Clinical Practice **3 CREDITS** This course provides an understanding of qualitative and quantitative statistics including some mathematical skills relevant to understanding the application of statistics in health care. Advance practice nurses will develop skills to read and interpret medical literature. Prerequisites: none

DNPNA 731 **Advanced Health Assessment 3 CREDITS**

This course will focus on health assessment across the lifespan. Students will discuss health assessment as it relates to overall patient well-being and apply these concepts to their anesthesia preoperative interviews. Charting and lab value interpretation will be discussed.

3 CREDITS DNPNA 732 **Gross Anatomy**

An in-depth analysis of human anatomy will occur through the use of handson cadaver dissection and class discussion. Dissection of the nervous system will allow for regional anesthesia application.

Research Methods 2 CREDITS **DNPNA 733**

Basic concepts of research practice will be incorporated into an interactive student-faculty approach towards evidenced based practice. Key terminology and literature review will guide the student towards mastering concepts in all facets of research practice.

DNPNA 734 Chemistry and Physics 2 CREDITS

This course will focus on measurements and math, physics, chemistry, fluids, gas laws, states of matter, pressure, tension, radiation, electricity, acid-base balance, and a thorough understanding of the anesthesia machine.

DNPNA 740 Advanced Theory and Ethics in Anp **3 CREDITS** This course focuses on theory directed design and implementation of evidence to transform healthcare systems. Advanced practice nurses will explore ethical dilemmas in healthcare delivery based on evidence. Ethics related to decision making at an individual, organizational, and systems level will be investigated. Prerequisites: none

DNPNA 745 Informatics in Health Care Systems 3 CREDITS This course explores major existing and emerging technologies and their potential impact on healthcare systems. Use of technology in healthcare will be emphasized and will include systems that support patient centered, effective, timely, safe, and equitable care. Prerequisites: none

DNPNA 750 Quality and Safety Across Healthcare 3 CREDITS This course analyzes the economic, social, and political issues that affect quality healthcare in today's environment. The advance practice will gain tools to influence quality improvement in today's healthcare systems. Prerequisites: none

DNPNA 760 Legal Concerns

2 CREDITS This course will explore the major legal issues in nurse anesthesia practice and health care. Students will learn to apply legally sound decision-making processes in the healthcare and academic environments using critical thinking and logical argument techniques to rationally debate controversial legal issues. Students will learn to defend a controversial health care legal decision using recent research and explain the most effective ways to keep anesthesia providers safe from frivolous lawsuits.

DNPNA 768 Directed Study 1 to 4 CREDITS

Consent of instructor required to pursue a special topic of interest. Prior to registration, a plan of study must be submitted for approval by the director of the DNPNA Program. This course is repeatable for credit.

DNPNA 811 Advanced Physiology **4 CREDITS**

This course will focus on physiology and pathophysiology across the life span. Basic cell structure will set the foundation for a comprehensive review of all human systems and its relevancy to anesthesia practice will be discussed.

Advanced Pharmacology I **4 CREDITS DNPNA 812**

This is the first course in a sequence of two courses designed to provide the nurse anesthesia student with an in-depth knowledge of pharmacology and its application to the clinical practice of anesthesia. Video conference lectures followed by discussion will be the format of these courses.

DNPNA 813 Anesthesia Principles I 2 CREDITS Introductory aspects of nurse anesthesia will be discussed. Concepts will include anesthesia history, progress and advancements over the years, antibiotics, preoperative evaluation and planning, airway emergencies, spinal and epidural placement, and regional anesthesia blocks.

DNPNA 814 Anesthesia Simulation I 2 CREDITS

This course will instruct students on how to properly perform an anesthesia machine check, choose medications and equipment necessary to perform anesthesia for a variety of simulated cases. Students will learn to perform an induction sequence, explain the most common problems and solutions during induction and perform a general anesthetic from beginning to end on a variety of simulated patients. Students will describe the indications and contraindications for an arterial and central line, and demonstrate how to place an arterial and central line in a simulated patient.

DNPNA 821 Advanced Pathophysiology **4 CREDITS**

This course is a continued review of physiology and pathophysiology. Concepts in nervous system development and disorders thereof will be discussed. Neurological, skeletal, and muscular systems will be discussed.

DNPNA 822 Advanced Pharmacology II **3 CREDITS**

This is the second course in a sequence of two courses designed to provide the nurse anesthesia student with an in-depth knowledge of pharmacology and its applications to the clinical practice of anesthesia. Video conference lectures followed by discussion will be the format of these courses.

DNPNA 823 Anesthesia Principles II 3 CREDITS

This course builds on basic principles of anesthesia and will introduce the student to varied surgical procedures and health complications that impact an anesthetic care plan. Obstetrics, pediatrics, renal, cardiac, geriatric, and malignant hyperthermia topics will be addressed.

DNPNA 824 Anesthesia Simulation II 2 CREDITS

This course will focus on the differences between a spinal and an epidural block and demonstrate placement of a spinal, epidural, and combined spinal epidural block on a simulated patient. Students will evaluate the effectiveness of a placed neuraxial block and describe the complications and corrections of a failed neuraxial block. Students will explain the major regional blocks and the indications and contraindications for each.

DNPNA 831 Anesthesia Seminar I **1 CREDIT**

This online course will outline anesthesia implications for ENT, laser, obesity, hepatobiliary, endocrine, and trauma patients.

DNPNA 832 Advanced Anesthesia Principles I 2 CREDITS This course will instruct students on how to formulate an advance anesthesia plan for otolaryngeal (ENT), laser, and laproscopic cases. Students will

construct an anesthesia plan for pre-operative assessment, intra-operative are, and post-operative care. Course content will include anesthesia planning for anesthesia complications, hepatobiliary gastrointestinal disturbances,

DNPNA 833 Clinical Practicum I

This course will introduce the student to the clinic facility. Students will perform all aspects of patient care will preparing for and planning an appropriate anesthetic plan. Students will conduct pre-operative and postoperative interviews.

4 CREDITS

endocrine disturbances, and trauma cases including airway management.

1 CREDIT DNPNA 911 Anesthesia Seminar II

This course will provide a platform for anesthesia case scenario discussion in a group format through distance education. Concepts will build on previously learned elements of nurse anesthesia practice.

Advanced Anesthesia Principles II DNPNA 912 2 CREDITS This course will teach the student to formulate an advance anesthesia plan for additional trauma cases and include the formulation of fluid, electrolyte and blood therapy replacement. Students will construct an advanced anesthesia plan for thoracic cases utilizing the development of respiratory and metabolic principles and monitoring. Students will formulate an advance anesthesia plan for vascular and cardiac cases including cardiac procedures.

DNPNA 913 Research Practicum I 1 CREDIT

This course will instruct students on using analytic methods to critically appraise existing literature and other evidence to determine and implement the best evidence for practice. Students will design and implement processes to evaluate outcomes of practice, practice patterns, and systems of care within a practice setting, health care organization, or community against national benchmarks to determine variances in practice outcomes and population trends. They will also design, direct, and evaluate quality improvement methodologies to promote safe, timely, effective, efficient, equitable, and patient-centered care. This is the first part of a two-part course, with DNP-NA 923 (2 credit hours).

DNPNA 914 Clinical Practicum II 4 CREDITS

Students will continue to demonstrate clinical practicum efficiency and safety through hands-on anesthesia care in the clinical setting. Additional opportunities for autonomy will be given and opportunities for staff presentations will be given.

DNPNA 921 Anesthesia Seminar III 1 CREDIT

Students will discuss anesthesia implications for neurological, ophthalmic, gynecological, urologic, and plastic surgery patients. Patient scenario assignments will be utilized that assist the student in evaluation and treating less-common surgical procedures.

DNPNA 922 Advanced Anesthesia Principles III 1 CREDIT This course will outline details for an advance anesthesia plan for neuro, ophthalmic, high-risk obstetrical cases include regional anesthesia, GYN, urology, and plastic surgery cases.

DNPNA 923 Research Practicum II 2 CREDITS

This course will instruct students on using analytic methods to critically appraise existing literature and other evidence to determine and implement the best evidence for practice. Students will design and implement processes to evaluate outcomes of practice, practice patterns, and systems of care within a practice setting, health care organization, or community against national benchmarks to determine variances in practice outcomes and population trends. They will also design, direct, and evaluate quality improvement methodologies to promote safe, timely, effective, efficient, equitable, and patient-centered care.

DNPNA 924 Clinical Practicum III 4 CREDITS

Students will continue to advance their clinical practicum skills in the clinical setting. Opportunities for more difficult case management will be given and more advanced planning will be expected and required.

DNPNA 931 Anesthesia Seminar IV

1 CREDIT This course will review anesthesia plan for orthopedic, spine, and neonatal cases.

DNPNA 932 Advanced Anesthesia Principles IV 1 CREDIT

This course will focus on constructing an anesthesia plan for orthopedic, podiatry, geriatric, high-risk pediatric, and burn cases. Regional anesthesia and cases outside of the surgery suite will be studied.

National Certification Exam Review DNPNA 933 1 CREDIT

This course will help the student evaluate and appraise the SEE exam in relationship to identifying critical study areas for the NCE exam, which will allow them to develop a comprehensive study plan. Students will report on progress of study plans, appraise board preparation skills, and discuss test taking skills.

Clinical Practicum IV 4 CREDITS DNPNA 934

Students will refine their anesthesia skills and demonstrate proficiency in all areas of their practice. Respect for patients, and others, will be expected. Care plan documentation will be expected to be completed without error and performance in the surgery suite will be evaluated for positive outcomes in all areas. Students will demonstrate mastery of anesthesia practice in areas outside the operating room.