ADDENDUM NO. 3

TO

2019-2020
KEISER UNIVERSITY GRADUATE SCHOOL CATALOG
VOLUME 7, NO. 1, September 2, 2019

Effective December 1, 2019

KEISER UNIVERSITY GRADUATE SCHOOL CATALOG ADDENDUM

Keiser University continually reviews, improves and updates its programs, courses and curricula. It is incumbent on the University to reflect these revisions in its publications. The following _Addendum No. 3_ represents additions, changes and deletions to the _2019-2020 Keiser University Graduate School Catalog_, Volume 7, No. 1, and is effective December 1, 2019.

Contents

Page 42, Program-Specific Admissions Requirements

Insert the following new program-specific admissions requirements above the Doctor of Nurse Anesthesia Practice (Post-Master's) program:

DOCTOR OF NURSE ANESTHESIA PRACTICE (ENTRY-INTO-PRACTICE)

Admission is limited and very competitive, the number of applicants surpasses the number of admission seats. The applicant is responsible for compiling and submitting the completed. Incomplete applications will not be reviewed. Applicants must meet Keiser University Graduate School Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

Admission Criteria: Doctor of Nurse Anesthesia

Applicants must be a Registered Nurse with completion of a:

- Baccalaureate degree in nursing (BSN) from an accredited nursing program
- Non-nursing Baccalaureate degree may be considered on a case by case basis
- A preferred grade point average (GPA) of 3.2 on a 4.0 scale. An emphasis is placed on science course work. Applicants with a graduate degree from a regionally accredited college or university will have their graduate and undergraduate GPA included for admissions consideration.
- A completed application to Keiser University
- Application fee to be submitted at time of application
- Three letters of recommendation from:
  - One must be from the applicant's current clinical supervisor
  - One preferred recommendation attesting to academic work
  - One recommendation must be from individuals who can assess the applicant's performance and level of clinical expertise in an acute care setting
- 7.   Current Resume
- 8.   A minimum of 40 hours required shadowing an anesthesia provider, preferable a CRNA.
- 9.   A personal statement letter (three pages, excluding cover and references) addressing the following:
  - A clear statement of your goals and expectations for entering the program
  - Your understanding of the role of a Certified Registered Nurse Anesthetist (applicants are encouraged to shadow a CRNA)
  - Include at least one article supporting your understanding of the role of a Certified Registered Nurse Anesthetist, cited according to current APA Format standards
- Current and unrestricted (clear/active) license as a Registered Nurse in one of the states, or one of the protectorates of the United States, with eligibility for Florida R.N. licensure, which must be obtained prior to admission.
- Completion of required undergraduate coursework and official transcripts from all academic institutions attended. If prerequisite science coursework is more than 10 years old, repeating or supplementing with a refresher course at the undergraduate level is highly recommended. An overall science GPA of 3.0 is preferred. that indicate successful completion (preferred B or better) in:
  - Statistics course
  - Undergraduate Health Assessment course
  - Two Anatomy and Physiology courses

- o Two different Chemistry courses (one with laboratory component) A chemistry lecture and lab. Successful completion (grade B or better) of one college chemistry course with a laboratory component. The course (not the laboratory component) must have been taken within five years of beginning the Program (organic chemistry or bio-chemistry preferred). Introduction to Chemistry and Survey to Chemistry courses are not accepted.
- Graduate Record Exam (GRE), taken within 5 years of application
  - o A combined score (verbal 153 and quantitative 144) with a score of 297 (preferred)
  - o Analytical section must be reported with a score of 3.5 (preferred)
- An applicant who is from a country where American English is not the primary language or whose bachelor degree is not from an accredited US institution, must submit a minimum:
  - o TOEFL score of 550 (paper-based test); 213 (computer-based test)
- Evaluation of bachelor's degree by a recognized U.S. evaluation service attesting to the fact that the degree is equivalent to that required for admission to the program
- Minimum of one-year experience as a Registered Nurse in a critical care area; experience is preferred in the areas of ICU, CCU, Trauma ICU, Neuro ICU and CVRU.
- Students must have BLS, ACLS and PALS (preferred) certifications that are current please provide copies to Keiser University. All students are required to certify for BLS, ACLS and PALS twice during the curriculum; these certifications are made through Keiser University.
- Driver's license copy- Current, valid unrestricted driver's license from one jurisdiction of the United States
- Acceptable background check

Qualified applicants are not guaranteed an interview. Admissions interviews are by invitation, with approval of the Nurse Anesthesia Admissions Committee.

Deferral for Admission
An applicant may request a deferral to a future class up to one year after initial application with no further application fee. The applicant must specify their request in writing and must update their application packet as designated by the Admissions Committee.

Deferral Once Admitted into the Program
Once admitted into the program, the student may not defer. If the student does not come into the program, they will need to reapply and re-interview for the program. At this point, the student will be treated as a re-applicant.

Admission Health Status
Prior to enrollment, each student must show proof of current physical status to include:
- Current Hepatitis B, MMR, and Varicella vaccine status and titers.
- Current Purified Protein Derivative (PPD) / Tuberculosis (TB) test status. If the student presents with a positive PPD/TB test, the student must show proof of no active disease by x-ray prior to admission.

All students must have an annual PPD/TB Test and provide that documentation to the Program.
If positive for the first time, the student must have documentation by a physician that the student does not have active TB before they will be allowed to continue in the clinical area.
If the student was positive upon enrollment, the student will complete a health (cough) questionnaire every year and have a chest x-ray taken if symptomatic. Keiser University students are subject to and must adhere to polices established by the clinical affiliate sites.
TB tests are not to be read by Keiser University clinical preceptors, faculty, students, or family members.

Additional Qualifications for Student Admission, Progression, and Graduation
Although this is not an all-inclusive list, Keiser University believes the following qualifications represent some of the reasonable physical and intellectual requirements necessary to perform safely in both the educational program and profession of nurse anesthesia:

Observation and Communication
- Ability to communicate clearly and effectively with patients of all ages, family members, and other members on the health care team in written and spoken English.
- Ability to process large amounts of information and activity in the operating room using visual, auditory, tactile, and other sensory cues to monitor and plan patient care.

- Ability to audibly distinguish the changes of pitch and tone of patient monitor devices and alarms.

Motor
- Display fine motor skills, coordinating touch and vision, necessary to complete complex tasks such as cannulation of veins and arteries, performance of regional anesthesia and direct laryngoscopy etc.
- Demonstrate strength and ability to assist safe transfer of patient.
- Stamina to stand or sit for extended periods of times.
- Respond quickly to changes in patient condition and participate in intervention, including but not limited to cardio-pulmonary resuscitation and emergency transportation.

Cognitive
- Possess foundational knowledge and ability to complete complex mathematical calculations without the use of electronic assistance.
- Skill to read and retain large amounts of information and draw from this information to critically analyze and problem solve.
- Ability to distinguish standard patient responses from non-standard responses and plan interventions accordingly using critical thinking. Also possess judgment to know when to call for assistance from other members of healthcare team.

Behavior
- Exhibit professional and appropriate behavior when interacting with patients, all members of the healthcare team, and the general public.
- Maintain professionalism and confidentiality when dealing with patient issues, adhering to HIPAA guidelines.
- Demonstrate flexibility and efficiency while working in a rapidly changing environment.
- Display good judgment and ethical behavior that including honesty, integrity, sensitivity to culture and the person, and adherence to the professional nursing code of ethics.

Health and Malpractice Insurance

Keiser University requires that all students enrolled in the Nurse Anesthesia Program must participate in the accident & health insurance program sponsored by the university, unless proof of comparable coverage is documented each year.

Please review your current coverage to be sure you are adequately covered. For those having adequate coverage, you will need to waive out of the Keiser University Student Health Plan. Many students have insurance coverage under their parent's or spouse's plan. If that plan is a managed care type plan, providing benefits through certain network providers, the student should determine what benefits will be available in the vicinity of the school.

The health insurance information can be accessed at: http://www.insuranceforstudents.com/kunaples

Keiser University will facilitate Student Registered Nurse Anesthetist's (SRNA) purchase of medical malpractice insurance in the amount of $1,000,000/ $6,000,000 (per occurrence/aggregate) prior to their clinical practicum assignment. The medical malpractice insurance must be kept active for the duration of the program.

Criminal Background Check

Criminal background checks will be conducted before, during and after matriculation. The university reserves the right to deny an application. Additionally, should the student become involved in criminal activity after program acceptance, in which the initial criminal background clearance status becomes compromised, the student will be withdrawn from the program. The program and the university will not modify the curriculum for students who have an unsatisfactory criminal background status.

All students must complete both a criminal background and drug screen checks. A student may encounter potential problems with completing clinical practice placements and/or obtaining licensure and certification if he or she has a criminal record. For specific information, contact the Board of Nursing through its website. If a student has a criminal record, it is the student's responsibility to inquire with the Board of Nursing and certification/credentialing body as to whether a criminal record may limit the student's ability to obtain licensure and/or certification or to practice in certain settings. Additionally, students must disclose any criminal record /prior arrest to the admissions committee. The criminal record may disqualify an applicant for admissions.

Health and background / Drug screening

All applicants must affirm and attest to sound physical health, emotional stability, and personal integrity that will enable them to successfully complete the educational program and to comply with criteria for nursing licensure and adherence to American Association of Nurse Anesthetist's professional codes of conduct and practice. Applicants must affirm and attest that they are free of addiction to substances of abuse, are not restricted in their practice of nursing or under investigation by any Board of Nursing, and are willing to adhere to Drug Free Workplace policies and procedures of affiliate clinical training sites, to include submission to randomized drug testing and/or testing for cause and upon Program demand.

Students should notify Keiser University of any change in health status, if it may inhibit his/her ability, to participate in the program.

Many drugs alter one's physical and mental status, and optimal physical and mental status is crucial during the provision of anesthesia. Students may be screened for drugs and alcohol at any time they are committed to either clinical or classroom assignments. All students involved in medication errors and narcotic discrepancies will be required to submit to a drug screen at their own expense. Students should be aware that if they are found to test positive for any prohibited substance or for alcohol, they may be subject to disciplinary action at the discretion of the Program Director. All students must be aware that taking any drug may impair the ability to safely participate in their education, including the safe administration of anesthesia in the clinical environment.

Page 66, Other Fees

Please add the following:

- Duplicate Diploma and Cover (Graduate degrees): $30.00
- Duplicate Cover (Graduate degrees): $17.50
- Duplicate Diploma (Graduate degrees): $12.50

Page 103, Degree Requirements

Insert the following new program degree requirements (above Post-Masters requirements:

REQUIREMENTS FOR DOCTOR OF NURSE ANESTHESIA PRACTICE (ENTRY-INTO-PRACTICE)

To earn a Doctor of Nurse Anesthesia Practice (Entry-into-Practice) degree from Keiser University, students must accomplish the following:

- Successful completion of a minimum of 90 credit hours of doctoral level course work
- Cumulative GPA of 3.0 or greater in the DNAP program
- Have no more than one course with a grade of "C"
- Completion of DNAP Clinical Practice requirements
- Completion of DNAP Capstone requirements
- Successful completion of all DNAP courses in any given semester serves as a prerequisite for progression to the following semester

Page 111, Program Offerings by the Graduate School

Add the following program at the Ft. Lauderdale Online Division:
MBA   Health Services Administration (Spanish)   online

Page 116, Program Offerings by the Graduate School

For programs offered at the Naples campus, add "(Post-Master's)" after the existing DNAP Nurse Anesthesia Practice program title. Also add the following program at the Naples campus:
DNAP Nurse Anesthesia Practice (Entry-into-Practice)

Page 161, Program Title, DOCTOR OF NURSE ANESTHESIA PRACTICE DEGREE

Expand the title of the NURSE ANESTHESIA PRACTICE (POST-MASTERS) program to read DOCTOR OF NURSE ANESTHESIA PRACTICE (POST-MASTERS).

Page 161, Program Descriptions, DOCTOR OF NURSE ANESTHESIA PRACTICE (ENTRY-INTO- PRACTICE) DEGREE

Insert the following new program beneath this heading prior to the Nurse Anesthesia Practice (Post-Masters) program information:

DOCTOR OF NURSE ANESTHESIA PRACTICE (ENTRY-INTO-PRACTICE)

Program Description
The Doctor of Nurse Anesthesia Practice program graduate will possess advanced competencies for nurse anesthesia practice, faculty, and leadership roles in nurse anesthesia. The program curriculum consists of didactic and the clinical components. The program integrates research, pathophysiology, pharmacology, health assessment, general principles of anesthesia, and anesthesia for surgical procedures for application in the clinical setting. During the program of study, students will have the opportunity to apply evidence-based practices through the development of anesthesia care plans and hands-on experience in the operating room. Additionally, students will complete a capstone project that culminates with the completion of a scholarly work that demonstrates the ability to translate findings into practice, research, education, and/or administration applicable to nurse anesthesia practice. The final written work product may be in the form of a manuscript submitted for publication, a poster presented at a national meeting, design of innovative clinical practice model, or other effective means of dissemination.

The curriculum focuses on preparing registered nurses with a bachelor's degree to become Certified Registered Nurse Anesthetists (CRNA). Upon completion of the DNAP: Entry into Practice program, graduates who fulfill all program requirements will be eligible to sit for the National Certification Exam through the National Board of Certification and Recertification for Nurse Anesthetists (NBCRNA) and upon passing the exam, will become a CRNA.

The Doctor of Nurse Anesthesia Practice: Entry into Practice program is accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs (COA) and consists a 90 credit, 36-month program.

Program Mission
The program incorporates a practitioner scholar model to prepare students as expert clinicians in the full scope of nurse anesthesia practice.

Program Objectives
- Appreciate the scholarship of leadership in a variety of clinical settings
- Deliver patient-centered care in accordance with safety standards
- Implement evidenced based practice in decision making as anesthesia providers
- Incorporate information systems/technology to support multidisciplinary collaboration

Student Learning Outcomes
- Perform comprehensive patient history and physical assessment across the life span (Assessment)
- Analyze health outcomes for a diverse population in a variety of clinical settings (Health Outcomes)
- Apply ethical principles and advanced clinical judgment to decision making processes (Ethics and Clinical Judgement)
- Provide leadership in promoting inter/intraprofessional collaboration (Leadership)
- Utilize technologies that support science-based theories, concepts and healthcare outcomes (Technology)
- Advocate for healthcare policy at institutional, state and/or national levels (Policy)
- Disseminate scholarly work using evidence-based practice/research (Scholarship)

Program Outline
To receive a Doctor of Nurse Anesthesia Practice degree, students must earn 90 graduate semester credit hours including didactic courses (63 Credits), DNAP Capstone courses (12 credits), and clinical practice courses (15 credit hours). Courses in the DNAP: Entry into Practice program are 16 weeks in length and scheduled two to five courses concurrently. The length of this program is approximately 36 months.

Doctor in Nurse Anesthesia Practice Courses (90.0 credit hours)

Course	Title	Credits
NGR701	Chemistry, Biochemistry, and Physics for Anesthesia	3.0 credit hour
NGR703	Advanced Principles of Physiology and Human Anatomy	3.0 credit hour
NGR704C	Anesthesia Equipment, Instrumentation, and Technology: Application and Evaluation	3.0 credit hour
NGR705	Advanced Pharmacology	3.0 credit hour
NUR702	Scientific Underpinnings of Evidence-Based Practice	3.0 credit hour
NGR715	Advanced Pharmacology for Anesthesia	3.0 credit hour
NGR714C	General Principles of Anesthesia	3.0 credit hour

NGR713	Advanced Pathophysiology Across the Lifespan I	3.0 credit hour
NGR717	Advanced Health Assessment for Diverse Populations	3.0 credit hour
NGR723	Advanced Pathophysiology Across the Lifespan II	3.0 credit hour
NGR724C	Anesthesia for Surgical Procedures I	3.0 credit hour
NGR728C	Nurse Anesthesia Care for Co-Existing Disease and Injury I	3.0 credit hour
HSC761	Health Informatics	3.0 credit hour
NGR729C	Regional Anesthesia	3.0 credit hour
NGR831	Anesthesia for Special Populations	3.0 credit hour
NGR834C	Anesthesia for Surgical Procedures II	3.0 credit hour
NGR838C	Nurse Anesthesia Care for Co-Existing Disease and Injury II	3.0 credit hour
NUR706	Economic & Business Management in Evidence-Based Practice	3.0 credit hour
NGR830	Nurse Anesthesia Roles	3.0 credit hour
NGR844	Nurse Anesthesia Clinical Practicum I	3.0 credit hour
NGR840	Leadership in Advanced Practice Nursing: Influencing Policy and Improving Patient Outcomes	3.0 credit hour
NGR842	Capstone I: Topic & Literature Review	3.0 credit hour
NGR854	Nurse Anesthesia Clinical Practicum II	3.0 credit hour
NGR852	Capstone II: Methodology & IRB Submission	3.0 credit hour
NGR965	Nurse Anesthesia Clinical Practicum III	3.0 credit hour
NGR962	Capstone III: Implementation	3.0 credit hour
NGR975	Nurse Anesthesia Clinical Practicum IV	3.0 credit hour
NGR972	Capstone IV: Evaluation of Outcomes & Dissemination	3.0 credit hour
NGR980	Synthesis Seminar	3.0 credit hour
NGR985	Nurse Anesthesia Clinical Practicum V	3.0 credit hour

Page 244, Course Descriptions

Insert the following new course descriptions:

NGR701 (3.0 credit hours)
Chemistry, Biochemistry, and Physics for Anesthesia
Investigates principles of chemistry, biochemistry, and physics related to anesthesia and operating room safety.

NGR703 (3.0 credit hours)
Advanced Principles of Physiology and Human Anatomy
This course will appraise physiology and human anatomy from the cellular through the organ system level. This course focuses on developing depth and breadth of knowledge related to the normal physiological function of humans and how normal function at the cellular, tissue, organ, and organ system levels establish homeostasis in humans.

NGR704C (3.0 credit hours)
Anesthesia Equipment, Instrumentation, and Technology: Application and Evaluation
This course focuses on principles related to the evaluation and application of equipment, instrumentation, and technology used in anesthesia practice. This a combination lecture and simulation laboratory course. Students will apply principles from the classroom in a simulated operating room environment.

NGR705 (3.0 credit hours)
Advanced Pharmacology

The course focuses on principles of drug action for classes of pharmaceutical agents taken by patients undergoing anesthesia. Emphasis is placed on pharmacokinetics, pharmacodynamics, and clinical applications of pharmaceutical agents as they relate to the patient undergoing anesthesia.

NUR702 (3.0 credit hours)
Scientific Underpinnings of Evidence-Based Practice
This course prepares students to iintegrate nursing science with knowledge from ethics and the biophysical, psychosocial, analytical, and organizational sciences as the basis for the highest level of nursing practice. Students will use evidence-based theories and concepts from nursing and other disciplines to study health care delivery phenomena and their outcomes. Analytic methods to critically appraise existing literature and other evidence to determine and implement the best evidence for high quality practice will be examined.

NGR715 (3.0 credit hours)
Advanced Pharmacology for Anesthesia
This course focuses on principles of anesthetic pharmacology with an emphasis on receptor theory. Importance is placed on pharmacokinetics, pharmacodynamics, and clinical applications of pharmaceutical agents. Interactions between anesthetic agents and non-anesthesia pharmacology will be explored and emphasized.

NGR714C (3.0 credit hours)
General Principles of Anesthesia
The course examines general principles of anesthesia which serve as the foundation for anesthesia practice. Course topics include: fluid assessment and management, patient positioning, utilization and interpretation of laboratory data, airway management, monitored anesthesia care, and pain management/theory.

NGR713 (3.0 credit hours)
Advanced Pathophysiology Across the Lifespan I
This course focuses on the advanced pathophysiological processes which effect the normal function of the hepatic, nervous, and endocrine systems. Emphasis is placed on the body's homeostatic mechanisms and how disease and genetics may alter it.

NGR717 (3.0 credit hours)
Advanced Health Assessment for Diverse Populations
This course focusing on preparing students to synthesize concepts from nursing and the biopsychosocial sciences in the formulation of a comprehensive health assessment. This course emphasizes two distinct areas of assessment: comprehensive assessment skills and judgment needed to perform preoperative assessment of the surgical patient across the lifespan (anesthesia assessment) and a holistic, comprehensive, and culturally sensitive assessment utilized in advanced practice nursing.

NGR723 (3.0 credit hours)
Advanced Pathophysiology Across the Lifespan II
This course focuses on the advanced pathophysiology of the cardiovascular, renal and respiratory systems. Emphasis is placed on the body's homeostatic mechanisms and how disease and genetics may alter it.

NGR724C (3.0 credit hours)
Anesthesia for Surgical Procedures I
This course provides an in-depth investigation into anesthesia management for surgical procedures. Emphasis will be placed on students formulating written and verbal anesthesia plans and applying those plans to the management of patients in a simulated operating room environment.

NGR728C (3.0 credit hours)
Nurse Anesthesia Care for Co-Existing Disease and Injury I
This course focuses on the incorporation of the principles of anesthetic management for patients experiencing traumatic injury, and diseases of the cardiovascular, respiratory, endocrine, renal, hepatic, neurological, and musculoskeletal systems.

HSC761 (3.0 credit hours)

Health Informatics

This course discusses and analyzes the history and current status of healthcare information systems and the varied applications in use by a wide range of healthcare entities. The content will focus on information architectures, applications, evidence-based medicine, decision support systems, security and confidentiality, bioinformatics, information system cycles, the electronic health record, key health information systems and standards, and medical devices. This course also explores the issues, benefits, and challenges of using health information systems.

NGR729C (3.0 credit hours)
Regional Anesthesia

This course focuses on theoretical and practical considerations of perioperative patients undergoing regional anesthesia. Students will utilize principles of anatomy, physiology, and pharmacology to select appropriate regional anesthetics and techniques in order to optimize localized pain control and anesthesia.

NGR831 (3.0 credit hours)
Anesthesia for Special Populations

This course focuses on an in-depth discussion of the anesthetic management of special populations, include: pediatrics, obstetrics, geriatrics, and obesity. Pathophysiology, pharmacology, and clinical considerations will be emphasized when planning the anesthetic management of these populations.

NGR834C (3.0 credit hours)
Anesthesia for Surgical Procedures II

This course provides an in-depth investigation into anesthesia management for surgical procedures. Emphasis will be placed on students formulating written and verbal anesthesia plans and applying those plans to the management of patients in a simulated operating room environment.

NGR838C (3.0 credit hours)
Nurse Anesthesia Care for Co-Existing Disease and Injury II

This course focuses on the incorporation of the principles of anesthetic management for patients experiencing traumatic injury, and diseases of the cardiovascular, respiratory, endocrine, renal, hepatic, neurological, and musculoskeletal systems.

NUR706 (3.0 credit hours)
Economic & Business Management in Evidence-Based Practice

This course focuses on the principles of health care economics and finance and their effects on global, national, state, and local health care systems and organizations. Students will learn to employ business, finance, economic, and organizational science to lead practice management efforts, and develop business plans for independent and/or organizational practice. They will be able to evaluate the cost-effectiveness of care and design realistic budget(s) for practice-level or system-wide initiatives.

NGR830 (3.0 credit hours)
Nurse Anesthesia Roles

This course investigates the role of the nurse anesthetist in clinical practice. Topics include: scope of practice, ethics, vigilance while providing patient care, protecting patients from iatrogenic complications, wellness and substance abuse, and expectations of a student entering clinical.

NGR844 (3.0 credit hours)
Nurse Anesthesia Clinical Practicum I

This course focuses on progressing previous didactic and in-hospital observation experiences to the development of entry-level anesthesia practice. Applications of concepts gleaned from previous semesters are integrated throughout the clinical experience. Students will learn about the components of the operating room department, to proactively prepare the room for a surgical case and appreciate proper operating room etiquette. An emphasis on patient safety and vigilance, perianesthesia topics of pre-operative evaluation, comprehensive equipment check and prevention of iatrogenic complications for general anesthesia are explored. Students develop, implement, and evaluate anesthesia care plans for all patient populations based on best evidence. This course develops the workflow from arriving to the operating room, preparing the room, comprehensively assessing the patient, and then safely navigating the induction phase of anesthesia. Experiential learning reflects upon the construction of care

plans and bridging of skills and knowledge taught in the didactic phase of the education. The student will spend a minimum three days per week (or equivalent) in the clinical setting as a requirement for the clinical portion of this course.

NGR840 (3.0 credit hours)
Leadership in Advanced Practice Nursing: Influencing Policy and Improving Patient Outcomes
This course focuses on applying principles of leadership to influence health care policy and improve outcomes. Students will analyze policy/outcomes and formulate plans to enact change through influencing facility leadership and politicians.

NGR842 (3.0 credit hours)
Capstone I: Topic & Literature Review
Students in this course will choose the topic and format of their Capstone Project. Each student will work with faculty to form a Capstone Project team. The Capstone project may take many forms depending on each student's area of interest, in addition to community and organizational needs in the student's geographical area. The student will conduct a critical review of literature relevant to the proposed project and begin writing the Capstone Project Paper.

NGR854 (3.0 credit hours)
Nurse Anesthesia Clinical Practicum II
This course expands upon the clinical knowledge and foundational concepts developed in Clinical Practicum I and in-hospital experiences. Students begin to incorporate evidence-based research practices in the clinical arena. This course concentrates on transitioning from the preoperative and induction of phase of anesthesia to the maintenance phase. Clinical autonomy is accentuated as the student learns to adapt to dynamic changes in the operating room. An emphasis is placed on patient safety and vigilance, culturally competent care of the patient throughout the perianesthesia continuum, interpersonal communication and integration of critical and reflective thinking of an anesthesia provider. The student will spend a minimum of five days per week (or equivalent) in the clinical setting as a requirement for the clinical portion of this course.

NGR852 (3.0 credit hours)
Capstone II: Methodology & IRB Submission
This course focuses on developing an appropriate methodology for the Capstone Project. A proposal delineating the project problem/issue, conceptual framework, and methodology will be presented to the Capstone Proposal Review Committee to ensure that the proposed project meets expected requirements, scope, and focus. Students will continue writing the Capstone Project Paper.

NGR965 (3.0 credit hours)
Nurse Anesthesia Clinical Practicum III
This course builds upon the clinical knowledge and foundational concepts developed in Clinical Practicums I and II and in-hospital experiences. While mastering the previous clinical concepts, this course further aims to prepare the student to safely and timely emerge an anesthetized patient. Students begin to incorporate evidence-based research practices in the clinical arena. An emphasis is placed on patient safety and vigilance, culturally competent care of the patient throughout the perianesthesia continuum, interpersonal communication and integration of critical and reflective thinking of an anesthesia provider. The student will spend a minimum of five days per week (or equivalent) in the clinical setting as a requirement for the clinical portion of this course.

NGR962 (3.0 credit hours)
Capstone III: Implementation
During this course students will work with practice mentors to implement their planned Capstone projects and collect and analyze relevant data. Students will continue writing the Capstone Project Paper.

NGR975 (3.0 credit hours)
Nurse Anesthesia Clinical Practicum IV
This course builds upon the didactic and clinical principles and skills learned in Clinical Practicum I, II, and III and integrates the scientific and anesthetic principles utilized in previous semesters. Students use critical thinking skills and best practices in the synthesis and correlation of didactic information to the clinical practice of nurse anesthesia. Applications of clinical concepts specific to obstetrical anesthesia, regional anesthesia, pediatric anesthesia, cardiovascular and thoracic anesthesia, neurosurgical anesthesia and more advanced anesthesia specialty cases including pain management are fundamentally explored. The student

will spend a minimum of five days per week (or equivalent) in the clinical setting as a requirement for the clinical portion of this course.

NGR972 (3.0 credit hours)
Capstone IV: Evaluation of Outcomes & Dissemination
This final Capstone Project course will include both evidence-based evaluation of Capstone Project results and dissemination of the Project. Dissemination may take many forms, including webinar/video presentation, poster or podium presentation, executive summary to stakeholders, publication in print or online media, or grand rounds. Students will complete the Capstone Project Paper during this course.

NGR980 (3.0 credit hours)
Synthesis Seminar
This course focuses on preparation for the National Certification Exam. Student's participate in a comprehensive review of anesthesia topics included on the NBCRNA's National Certification Exam Content Outline. The student will spend a minimum of three days per week (or equivalent) in the clinical setting as a requirement for the clinical portion of this course.

NGR985 (3 credit hours)
Nurse Anesthesia Clinical Practicum V
This course further develops concepts from all previous clinical semesters to prepare the student to safely and autonomously perform any type of anesthesia. Students use critical reasoning skills, best practices and reflective thinking in the synthesis and correlation of didactic information to the clinical practice of nurse anesthesia. Clinical experiences focus on anesthesia care of ASA I through IV patients across the lifespan undergoing elective and emergency surgical and diagnostic procedures. Emphasis on advanced health assessment and differential diagnosis, specialty surgical procedures, insertion of invasive pressure monitoring catheters, advanced airway management and safety and vigilance are reinforced.