The curriculum of the Nurse Anesthesia program offers entry-level post-bachelor’s to DNP and post-master’s CRNA to DNP degree options. The curricula and policies were developed in accordance with The Essentials of Doctoral Education for Advanced Nursing Practice (AACN) and the Standards for Accreditation of Nurse Anesthesia Educational Programs (COA). Core DNP courses taught by experienced nursing faculty and members of the Department of Biomedical Sciences and Health Sciences will be shared collaboratively with the other advanced practice DNP candidates. Nurse anesthesia students receive a strong science foundation as well as course content including patient safety and human factors as outlined in the standards.

The program’s goal—to develop knowledgeable, caring and compassionate nurse anesthetists who are committed to excellence in health care, preserving the dignity and rights of patients and advancing the profession—is congruent with the Quinnipiac University mission statement. The nurse anesthesia specialty is organized within the context of the DNP program in the School of Nursing. The DNP program builds on the generalist preparation of the bachelor’s-prepared nurse in the entrance-level DNP and the post-master’s level for the CRNA. The DNP prepares leaders in advanced practice roles who can synthesize knowledge from nursing and relevant fields of study as a basis for practice. The graduate curriculum provides both didactic and clinical experiences that facilitate critical thinking skills so that graduates are able to provide quality, cost-effective health services to individual clients, families and communities.

### Course Listing
**Post-Bachelor’s to DNP: Nurse Anesthesia Program**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BMS 518</td>
<td>Pathophysiology</td>
<td>3</td>
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<tr>
<td>NUR 514</td>
<td>Epidemiology and Population Health</td>
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<tr>
<td>NUR 516</td>
<td>Health Policy and Organizational Systems</td>
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<tr>
<td>NUR 517</td>
<td>Anatomy for the Nurse Anesthetist</td>
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<td>NUR 517L</td>
<td>Anatomy for the Nurse Anesthetist Lab</td>
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<tr>
<td>NUR 520</td>
<td>Advanced Health Assessment</td>
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<tr>
<td>NUR 520L</td>
<td>Advanced Health Assessment Lab</td>
<td>2</td>
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<tr>
<td>NUR 600</td>
<td>Evaluation and Synthesis of Scientific Evidence for Practice</td>
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<tr>
<td>NUR 602</td>
<td>Principles of Ethical Theory in Nursing</td>
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<tr>
<td>NUR 610</td>
<td>Clinical Scholarship and Inquiry in Nursing</td>
<td>2</td>
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<tr>
<td>NUR 610PBL</td>
<td>DNP Project I</td>
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<tr>
<td>NUR 612</td>
<td>Leadership and Collaboration for Change in Health Care</td>
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<tr>
<td>NUR 670</td>
<td>Basic Principles of Anesthesia II Lab</td>
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<td>NUR 671</td>
<td>Clinical Practicum I</td>
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<tr>
<td>NUR 672</td>
<td>Advanced Pharmacology II</td>
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<tr>
<td>NUR 673</td>
<td>Clinical Practicum II</td>
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<tr>
<td>NUR 674</td>
<td>Professional Aspects of Nurse Anesthesia Practice I</td>
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<tr>
<td>NUR 675</td>
<td>Clinical Practicum III</td>
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<td>NUR 676</td>
<td>Professional Aspects of Nurse Anesthesia Practice II</td>
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<td>NUR 677</td>
<td>Clinical Practicum IV</td>
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<td>NUR 678</td>
<td>Professional Aspects of Nurse Anesthesia Practice III</td>
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<td>Clinical Practicum V</td>
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<td>NUR 680</td>
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<tr>
<td>NUR 681</td>
<td>Clinical Practicum VI</td>
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<tr>
<td>NUR 682</td>
<td>Advanced Principles of Anesthesia I</td>
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<td>NUR 684</td>
<td>Advanced Principles of Anesthesia II</td>
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<tr>
<td>NUR 686</td>
<td>Advanced Principles of Anesthesia III</td>
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<td>NUR 688</td>
<td>Human Factors and Patient Safety</td>
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<tr>
<td>NUR 690</td>
<td>Advanced Principles of Anesthesia IV</td>
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<tr>
<td>NUR 695</td>
<td>Anesthesia Seminar I</td>
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<tr>
<td>NUR 696</td>
<td>Advanced Pharmacology and Basic Principles of Anesthesia I</td>
<td>4</td>
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<tr>
<td>NUR 697</td>
<td>Anesthesia Seminar II</td>
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<tr>
<td>NUR 698</td>
<td>Human Physiology Seminar</td>
<td>1</td>
</tr>
<tr>
<td>PY 501</td>
<td>Human Physiology</td>
<td>4</td>
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</table>

Total Credits 81

Prerequisites for entrance: undergraduate anatomy and physiology with labs (8 credits); chemistry: inorganic and organic (8 credits); microbiology (3–4 credits); pharmacology (3–4 credits); and statistics (3 credits).

Clinical practicum—6 semesters—approximate hours: 2,000.

**Curriculum Note:**

NUR 612PBL (DNP Project II) is repeated for 1 credit each semester until the DNP project is complete.

The semester-by-semester Learning Pathway for this program is available in the School of Nursing.

The curriculum for this program is subject to modification as deemed necessary by the nursing faculty to provide students with the most meaningful educational experience and to remain current with professional standards and guidelines.

**Student Learning Outcomes**

The objectives of the DNP program are designed to prepare graduates for advanced nursing practice who are capable of providing holistic health care for diverse individuals, families or populations in a variety of settings. Specifically, the program seeks to produce graduates who:
1. **Demonstrate** clinical reasoning through an understanding of science and evidence-based practice.

2. **Design, implement and evaluate** quality improvement initiatives across the systems in which health care is delivered.

3. **Analyze and critique** the available evidence for best practices in health care.

4. **Apply** technology and information fluency to conduct practice inquiry.

5. **Advocate** for rational health policies to improve patient care and enhance effective use of resources.

6. **Demonstrate** leadership through interprofessional collaboration to improve patient and population health outcomes.

7. **Direct** health promotion and disease prevention efforts to improve patient and population health outcomes.

8. **Provide** competent, culturally sensitive, and ethically based care to individuals and/or populations in a defined specialty of advanced nursing practice.

### Admission Requirements

An applicant to the DNP program must be a registered nurse or NCLEX eligible nurse and have a bachelor’s degree in nursing or another field. Applicants to the Nurse Anesthesia program must be registered nurses with two years of recent (within the past five years) critical care experience.

An undergraduate cumulative GPA of 3.0 or better is required. Applicants should submit the following to the Office of Graduate Admissions:

1. A completed admissions application including a resume and a personal statement addressing the following:
   a. professional goals and motivations
   b. a nursing experience that has influenced or shaped your practice
   c. a health care problem that interests you for potential doctoral study

2. Official transcripts from all schools previously attended.

3. Official recent results of the Test of English as a Foreign Language (TOEFL) or IELTS International English Language Testing System for international applicants.

4. Two letters of recommendation from persons with authority to evaluate your professional ability. Nurse Anesthesia candidates can see the requirements on the website (http://www.quinnipiac.edu/CRNA).

5. Proof of current licensure or eligibility for licensure as a registered nurse in the state of Connecticut.

6. Core sciences courses required: Anatomy, Physiology, Chemistry (two semesters total, of which one should be a general/inorganic chemistry), Statistics, Microbiology and Pharmacology. Core science courses must have been completed within the past 10 years. Refresher courses in Anatomy and Physiology (one semester) and Chemistry (one semester) must be taken for coursework greater than 10 years old in these subjects.

Candidates applying for full-time admission must submit a completed application by October 15 for the Post-Bachelor’s Nurse Anesthesia program. Candidates may be placed on a wait list in the event a space becomes available. However, acceptances are not deferred and wait-listed candidates need to reapply for the following year. Exceptions may be made in rare circumstances by the chair of the graduate nursing program.

All accepted students also are required to complete a background check and urine drug screen following acceptance and before the start of classes. Acceptances are conditional until satisfactory completion of both.

### Nurse Anesthesia Progression Requirements

In all of the nurse anesthesia courses (BMS 518, PY 501, NUR 517/NUR 517L, NUR 670, NUR 672, NUR 674, NUR 676, NUR 678, NUR 680, NUR 682, NUR 684, NUR 686, NUR 688, NUR 690, NUR 696, NUR 698) a minimum grade of B (83) in each nurse anesthesia course independent of cumulative GPA is required to progress in the program. If a student earns a grade below a B (83) in one nurse anesthesia course, but has a semester GPA of at least 3.0, the student will be placed on academic probation and will be required to retake the course when it is offered again at Quinnipiac University. Any grade below a C (73-76) in a nurse anesthesia course will result in dismissal from the nurse anesthesia program without probation and without the opportunity to repeat the deficient course.

Since nurse anesthesia courses are in sequence and no course may be taken ahead of any of its prerequisites, a student with a grade below a B (83) in an anesthesia course will not be allowed to 1) take any nurse anesthesia courses for which the deficient course is a prerequisite and 2) participate in the clinical practicum until the deficient course is successfully completed with a minimum grade of B (83). Thus the student will be placed in another student cohort and the student’s program completion date will be delayed.

Only one period of probation is permitted. The student must achieve a minimum grade of B (83) in all subsequent courses, health assessments, and practicums. Failure to meet this requirement will result in dismissal from the program without option to repeat or continue.

A student who earns unsatisfactory grades (grade of less than B) in two or more nursing courses in any semester is not eligible for probation and will be dismissed from the program. Any student who does not earn the required minimum 3.0 semester GPA will be dismissed from the program.

If a student believes his/her final grade was determined in an arbitrary, capricious or prejudicial manner, the student may appeal the sanction of probation or dismissal by following the procedure to appeal a final grade (http://catalog.qu.edu/university-policies/procedure-appeal-final-grade).

### Appeal Process

1. A student wishing to appeal a progression decision must write a letter to the chair of the graduate nursing program within one week of receiving notice of his/her inability to progress.

2. Appeals will be considered by a Faculty Appeals Committee and results will be communicated in writing to the student.

3. A student wishing to appeal a course grade should follow the grade appeal process (http://catalog.qu.edu/university-policies/procedure-appeal-final-grade).
BMS 518. Pathophysiology. 3 Credits.
Disease processes are studied as they relate to normal physiological and homeostatic mechanisms, basic pathology, pathogenesis, and defense/repair mechanisms. Where appropriate, the course includes some clinical correlations of disease states with signs, symptoms and lab findings. This course also is offered online in the spring.
Offered: Every year, Fall and Summer

NUR 514. Epidemiology and Population Health. 3 Credits.
This course introduces epidemiologic principles, methods and data used in advanced nursing practice. Population health concepts are coupled with risk analysis statistics to critique evidence for holistic public health approaches. The use of data to assess acute and chronic population health problems, to implement effective interventions addressing these problems, and to examine outcomes is emphasized.
Offered: Every year, Spring and Summer

NUR 516. Health Policy and Organizational Systems. 2 Credits.
This course provides an introduction to various social and political policy environments impacting advanced nursing practice and health care systems. Students examine issues that inform health care policy, organization and financing. Nursing's advocacy role in shaping policy in organizational, social and political venues is emphasized.
Offered: Every year, Fall and Summer

NUR 517. Anatomy for the Nurse Anesthetist. 2 Credits.
This course emphasizes the fundamentals of anatomy for the cardiac, respiratory and nervous system. Anatomy as it pertains to regional administration is stressed, as well as pain management. Throughout this course, students utilize dissections of specific organs and the use of computer and anatomic models. Airway anatomy is covered extensively through multiple modalities. Renal and hepatic anatomy are reviewed.
Offered: Every year, Summer

NUR 517L. Anatomy for the Nurse Anesthetist Lab. 1 Credit.
This course features dissections of specific organs and the use of computer and anatomic models. Course includes an extensive study of airway anatomy through multiple modalities. Anatomy lab is utilized.
Offered: Every year, Summer

NUR 520. Advanced Health Assessment. 3 Credits.
This course presents the principles of performing a comprehensive health assessment and reporting the findings in a professional format. Attention is given to assessment and physical examination across the lifespan within diverse communities. The processes underlying diagnostic decision making are introduced. A laboratory component enables the student to master the techniques of performing a holistic health assessment.
Corequisites: Take NUR 520L.
Offered: Every year, Fall

NUR 520L. Advanced Health Assessment Lab. 2 Credits.
This lab must be taken with NUR 520. (2 lab hrs.)
Corequisites: Take NUR 520.
Offered: Every year, Fall

NUR 600. Evaluation and Synthesis of Scientific Evidence for Practice. 2 Credits.
Students review selected processes to identify current best scientific evidence including formulation of asking an answerable question. Students also conduct a review of the literature, critically appraise individual studies, and synthesize the evidence collected. Various methods to evaluate statistical analyses and scientific rigor are emphasized. Discussions focus on strengths and limitations of existing evidence, and application to direct and indirect practice. Iterative writing is a major component of this course.
Offered: Every year, Fall Online

NUR 602. Principles of Ethical Theory in Nursing. 1 Credit.
This course facilitates the student's formulation of a theoretical basis for ethical judgment at an advanced level of practice. Students analyze ethical theory and debate responses to ethical problems in advanced nursing practice.
Offered: Every year, Fall and Summer Online

NUR 610. Clinical Scholarship and Inquiry in Nursing. 2 Credits.
This course focuses on improvement methods used to identify organizational systems’ process problems affecting practice (direct and indirect care). Building on prior knowledge of evidence-based practice, students learn how to critically appraise scientific evidence, evaluate additional relevant information, and consider cost implications to create sustainable innovations intended to improve systems.
Offered: Every year, Spring Online

NUR 610PBL. DNP Project I. 2 Credits.
This seminar provides an opportunity for students to identify a health organization or system's opportunity for process improvement based on available aggregate data. Students develop a substantial and meaningful scholarly DNP Project Proposal that is innovative and evidence-based, reflects the application of credible research findings, financially sound, feasible, sustainable and demonstrates value to the organization and population(s) served. There is a minimum of 120 fieldwork hours associated with this course. The course is graded on a pass/fail basis.
Corequisites: Take NUR 610.
Offered: Every year, Summer Online

NUR 612. Leadership and Collaboration for Change in Health Care. 2 Credits.
This course focuses on developing advanced practice nursing leaders who are able to generate pragmatic responses to health care policy, systems and practice inquiry problems through a collaborative approach.
Prerequisites: Take NUR 610.
Offered: Every year, Fall Online

NUR 612PBL. DNP Project II. 1-2 Credits.
Students continue experiential learning to create and sustain change through implementation of the approved, scholarly DNP Project Proposal using appropriate leadership concepts, interdisciplinary team collaboration, and change theory. Post-implementation and evaluation of Project outcomes are disseminated to applicable fieldwork site stakeholders, peers in a professional forum, and in a digital repository. There are 120 fieldwork hours associated with this course the first time it is taken. This course is graded on a pass/fail basis. The course may be repeated for one credit until the DNP Project is completed.
Prerequisites: Take NUR 610 NUR 610PBL.
Offered: Every year, Fall Online
NUR 670. Basic Principles of Anesthesia II. 3 Credits.  
The course continues the basic principles of anesthesia and covers a variety of basic concepts needed to begin to assess patients pre-operatively for an anesthetic, care for them intra-operatively, and safely deliver them to the post-operative care unit. This continuation of the basic principles introductory course is offered in conjunction with the beginning of the clinical practicum. Students discuss and cover topics in anesthesia that they will be exposed to in the clinical area during their introduction. Time in the simulation lab is included.  
Prerequisites: Take NUR 670.  
Offered: Every year, Spring  

NUR 670L. Basic Principles of Anesthesia II Lab. 2 Credits.  
This course teaches the student hands on administration of regional and pain pain blocks using simulation and cadaver models. The lab complements the lectures given in NUR 670.  
Prerequisites: Take NUR 696 NUR 672.  
Corequisites: Take NUR 670.  
Offered: Every year, Spring  

NUR 671. Clinical Practicum I. 2 Credits.  
Individual clinical practice arranged with clinical coordinator. All-day clinical practice, 4 days per week. The student follows the hours of CRNA practice at each clinical site.  
Prerequisites: Take NUR 670.  
Offered: Every year, Spring  

NUR 672. Advanced Pharmacology II. 3 Credits.  
This course is a continuation of Advanced Pharmacology and Basic Principles of Anesthesia I (NUR 696) and expands on the administration of many of the drugs used in the practice of anesthesia. Students practice the administration of blocks used in anesthesia using patient simulators before administration to patients in clinical practice. Students are introduced to the pharmacology and corresponding physiology pertinent to the delivery of anesthetic care for many adjuvant drugs. Drugs used in the treatment of many comorbid conditions and their effects on and with those used in anesthesia are covered. Additional adjunct drugs used for cardiopulmonary support and pain control also are covered.  
Prerequisites: Take NUR 696.  
Offered: Every year, Spring  

NUR 673. Clinical Practicum II. 2 Credits.  
Individual clinical practice is arranged with the clinical coordinator. All-day clinical practice continues four days per week. The student follows the hours of CRNA practice at each clinical site. A clinical conference is held once per week.  
Prerequisites: Take NUR 671.  
Offered: Every year, Summer  

NUR 674. Professional Aspects of Nurse Anesthesia Practice I. 1 Credit.  
This course covers practice issues that pertain to the nurse anesthetist. Topics include legal aspects and scope of practice, our national association and the structure and functions of the autonomous councils, quality assurance and the business of anesthesia. Students explore their role in the political arena, and have an opportunity in a seminar format to discuss the issues concerning health care policy and the role of the CRNA. Attendance at the AANA Midyear Assembly is required for the nurse anesthetist student to provide an opportunity to visit with legislators and lobby on Capitol Hill.  
Offered: Every year, Spring  

NUR 675. Clinical Practicum III. 2 Credits.  
Individual clinical practice is arranged with the clinical coordinators. Students participate in full-day clinical practice, and follow the hours of CRNA practice at each clinical site. A clinical conference is held once per week.  
Prerequisites: Take NUR 673.  
Offered: Every year, Fall  

NUR 676. Professional Aspects of Nurse Anesthesia Practice II. 1 Credit.  
The class covers the importance of personal wellness and stress management for the nurse anesthesia student and the practicing CRNA. Students become familiar with integrated therapies and behaviors used to create wellness and balance. Multiple factors related to chemical dependence and substance abuse are studied. Participants also discuss the importance of cultural sensitivity and diversity in health care.  
Offered: Every year, Fall  

NUR 677. Clinical Practicum IV. 2 Credits.  
Individual clinical practice is arranged with the clinical coordinator. All-day clinical practice continues four days per week. The student follows the hours of CRNA practice at each clinical site. A call component is included in the semester. A clinical conference is held once a week.  
Prerequisites: Take NUR 675.  
Offered: Every year, Spring  

NUR 678. Professional Aspects of Nurse Anesthesia Practice III. 1 Credit.  
This course discusses educational leadership as it pertains to the role of clinical preceptor and educator. Topics include curriculum development, evaluation and the role of the clinical educator. At the completion of this course, students present their scholarly projects at a final assembly.  
Offered: Every year, Spring  

NUR 679. Clinical Practicum V. 2 Credits.  
Individual clinical practice is arranged with the clinical coordinator. All-day clinical practice continues four days per week. The student follows the hours of CRNA practice at each clinical site. A call component is included in the semester. A clinical conference is held once a week.  
Prerequisites: Take NUR 677.  
Offered: Every year, Summer  

NUR 680. Physics, Chemistry, Equipment and Technology for Nurse Anesthetists. 4 Credits.  
This course includes an extensive study of key concepts pertaining to organic, biochemistry and physics as they relate to anesthesia. Topics include medical mathematics and conversion factors, the gas laws, biochemistry of fluids and electrolytes, acid-base and buffers systems, electrical circuits, reviews of organic chemistry including the functional groups and physical principles that are relevant. Equipment and technology used in anesthetic practice also are studied in this course. Students have an opportunity to utilize common anesthetic equipment in the laboratory setting.  
Offered: Every year, Fall  

NUR 681. Clinical Practicum VI. 2 Credits.  
This course is a continuation of the advanced clinical practicum. A clinical conference is held each week.  
Prerequisites: Take NUR 679.  
Offered: Every year, Fall
NUR 682. Advanced Principles of Anesthesia I. 3 Credits.
This course covers the administration and management of anesthesia to patients with special considerations. Anatomy and physiology that relate to the practice of anesthesia are discussed as well as other important areas requiring knowledge in the administration of anesthesia.

**Prerequisites:** Take NUR 696 NUR 670 NUR 672.

**Offered:** Every year, Summer

NUR 684. Advanced Principles of Anesthesia II. 3 Credits.
This course covers the fundamental concepts essential to clinical anesthesia practice in the obstetric and pediatric populations.

**Prerequisites:** Take NUR 682 or NUR 692.

**Offered:** Every year, Fall

NUR 686. Advanced Principles of Anesthesia III. 3 Credits.
The administration and management of cardiac anesthesia are covered in this course. Anatomy and physiology that relate to the practice of anesthesia for this specialty are studied as well as emergency events relating to cardiac anesthesia, its considerations and disease processes.

**Prerequisites:** Take NUR 682 NUR 684 NUR 670.

**Offered:** Every year, Spring

NUR 688. Human Factors and Patient Safety. 3 Credits.
This course examines issues related to human error and patient safety with an emphasis on crisis management. Students explore the theoretical basis of human error, patient safety and quality assurance in health care. This course introduces a systems approach to error investigation and analysis, and integrates concepts of teamwork, crisis management, simulation and monitoring systems in medical practice.

**Offered:** Every year, Fall and Spring

NUR 690. Advanced Principles of Anesthesia IV. 2 Credits.
This course covers more advanced practices in anesthesia and expands on previous advanced principles course work.

**Prerequisites:** Take NUR 686.

**Offered:** Every year, Summer

NUR 695. Anesthesia Seminar I. 2 Credits.
Anesthesia Seminar I and II prepare the student to take the National Certification Exam (NCE). Students begin an extensive review of Basic Principles, Equipment and Technology, Basic and Advanced Principles, Pharmacology and Physiology in this first seminar. Practice exams are administered periodically and clinical scenarios are used to assess and challenge student knowledge and critical thinking. Students take the SEE (Self Evaluation Examination) exam at the end of this semester.

**Prerequisites:** Completion of all anesthesia core courses.

**Offered:** Every year, Fall

NUR 696. Advanced Pharmacology and Basic Principles of Anesthesia I. 4 Credits.
The course precedes the anesthesia clinical practicum and covers a variety of basic concepts needed to begin to assess patients pre-operatively for an anesthetic, care for them intra-operatively and safely deliver them to the post-operative care unit. An introduction to the principles of advanced pharmacology and the primary classes of agents utilized in anesthetic practice is included.

**Offered:** Every year, Fall