Master of Science in Nursing Advanced Practice Online Program

Degree Offered

- Master of Science in Nursing

Nature of the Program

DESCRIPTION

The West Virginia University School of Nursing offers a 46 credit hour Master of Science in Nursing (MSN) degree that provides the skills necessary to sit for advanced practice certification. The major areas of study are Family Nurse Practitioner (FNP) and Pediatric Nurse Practitioner (PNP). Courses are offered via web-based modalities using synchronous and asynchronous meeting patterns. The MSN program offers a curriculum that allows students to enroll on a part-time or full-time basis. It is a strong recommendation by the University and the School of Nursing that Graduate students limit their credit load if they are also involved in full-time work. Full-time work and studies may negatively affect the student’s ability to succeed academically.

The master's program offers a curriculum that allows students to enroll on a part-time or full-time basis. Throughout the curriculum, students are guided in the process of self-development aimed at pursuing excellence in scholarly and professional endeavors. The program allows flexibility within the basic curricular structure through the individualization of learning experiences. The pattern and duration of the student’s study plan is determined in consultation with a faculty advisor and is based upon the student’s background and goals. The forty-six credit program can be completed in five semesters (including a summer session) of full-time study. The average full-time load is nine to twelve credit hours per semester. A part-time option is also available.

Graduates meet all requirements to sit for the national certification examination in their major area of family nurse practitioner or pediatric nurse practitioner. They are prepared to offer care at the advanced practice level to select populations and are able to perform all activities encompassed in the traditional scope of practice.

Admissions

CRITERIA

1. Satisfy WVU requirements for admission to graduate study.
2. Students must meet the following minimum qualifications for admission consideration: must have a minimum WVU institutional GPA of a 3.0, a minimum cumulative GPA of a 3.0 from all college work ever attempted, and a minimum nursing GPA of a 3.0.
3. Have a current, unrestricted RN license in at least one state.
4. Hold a bachelor of science degree in nursing from a nationally accredited program.
5. Completion of 3 credits of undergraduate statistics equivalent to WVU Stats 211 and 3 credits of health assessment with a grade of C or better.
7. Submit a professional goals statement following the guidelines posted on our website.

Note: Admission criteria are subject to change. Please see the School of Nursing website for the most up-to-date criteria at https://nursing.hsc.wvu.edu.

APPLICATION PROCESS

The application process should be completed by January 1. The beginning sequence of courses in the MSN program starts in the fall semester only. Class size and progression plans may be limited based on available faculty resources and space. Applicants to the MSN program need to complete the following steps in order to be considered for admission:

1. Application for Admission to Graduate Studies (available at: https://app.applyyourself.com/AYApplicantLogin/Fl_ApplicantConnectLogin.asp?id=wvugrad)
2. Request an official transcript of records from each college or university attended. Transcripts should be sent directly to WVU Office of Admissions, P.O. Box 6009, Morgantown, WV 26506-6009.
3. Three letters of reference should address the applicant’s likelihood for success in graduate work. One letter should be from a former professor of the applicant.
4. Submit a current curriculum vitae.
5. Submit a professional writing sample using the instructions provided on our website.

For more information, visit the website at https://nursing.hsc.wvu.edu, write to West Virginia University School of Nursing, P.O. Box 9600, Morgantown, WV 26506-9600; or call (304) 293-1386.
Note: Application criteria are subject to change. Please see the School of Nursing website for the most up-to-date criteria at https://nursing.hsc.wvu.edu.

Note: Any student who has been dismissed from the West Virginia University School of Nursing will not be readmitted to the program.

Master's of Science in Nursing Requirements

A minimum cumulative GPA of 3.0 is required
A minimum grade of C- is required in all courses

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Hours</th>
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<tbody>
<tr>
<td>NSG 626</td>
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<tr>
<td>Lifespan and Health Promotion</td>
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<td>NSG 622</td>
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<tr>
<td>Theory and Disciplined Reasoning</td>
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<td>NSG 628</td>
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<td>Leadership/Policy/Ethics</td>
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<td>NSG 706</td>
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<td>Advanced Pathophysiology</td>
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<td>NSG 627</td>
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<td>Evidence Based Practice</td>
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<td>NSG 623</td>
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<td>Advanced Practice Role/Interprofessional Collaboration</td>
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<td>NSG 709</td>
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<td>Health Care Informatics</td>
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<td>NSG 625</td>
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<tr>
<td>Statistics</td>
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<tr>
<td>Required Area of Emphasis</td>
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Total Hours: 46

Suggested Plan of Study for Family Nurse Practitioner Area of Emphasis

First Year

<table>
<thead>
<tr>
<th></th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Summer Hours</th>
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<td></td>
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<td>3 NSG 701</td>
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<td>NSG 706</td>
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<td>3 NSG 705</td>
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<td>NSG 623</td>
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<td>NSG 622</td>
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Second Year

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<tr>
<td>NSG 720</td>
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<td>NSG 709</td>
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Total credit hours: 46

A minimum of 10 credits of Family Practicum (including Practicum 1 and 2) is required for graduation. This equates to a total of 600 hours of supervised clinical experience.

Suggested Plan of Study for Pediatric Nurse Practitioner

First Year

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<thead>
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<th></th>
<th>Fall Hours</th>
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<tr>
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<td>NSG 623</td>
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<td>3 NSG 768</td>
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<td>NSG 622</td>
<td>3 NSG 627</td>
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<td>NSG 625</td>
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Total: 9 12 6

Second Year

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<tr>
<td>NSG 771</td>
<td>3 NSG 628</td>
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<tr>
<td>NSG 772</td>
<td>5 NSG 773</td>
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</table>
A minimum of 10 credits of Pediatric Practicum (including Practicum 1 and 2) is required for graduation. This equates to a total of 600 hours of supervised clinical experience. Cancel

**Progression Standards**

_in order to progress in the MSN Advanced Practice or Post-Graduate Certificate curriculum, a student must meet the following performance standards:_

1. Achieve and maintain an overall academic Grade Point Average of at least:
   a. 3.0 in all work attempted in the MSN Advanced Practice program. A student who falls below 3.0 on nine or more credit hours will be placed on academic probation and has only one semester to bring up the GPA to the 3.0 requirement. Failure to raise the cumulative GPA to 3.0 in one semester will result in dismissal from the program.
   b. Post-Graduate Certificate students are required to take fewer credits than those in the degree programs. Therefore, a GPA lower than 3.0 will not be grounds for probation or dismissal. However, students earning two C grades, a D or an F will be dismissed from the Post-Graduate Certificate Program.
2. Carry forward only one C grade in a nursing course. A second C in a nursing course will result in dismissal from the program.
3. Repeat only one nursing course and only one time.
4. Earn a letter grade (A, B, C) on all required courses. A grade of D or F in any course results in dismissal from the program.
5. If a student needs to withdraw from all courses in a semester, the student must meet with his or her advisor to request a Leave of Absence if he/she plans to return to course work.
6. Students at all times are expected to demonstrate professionalism, and respect for faculty, staff, preceptors, and student colleagues. If a student is dismissed from his or her clinical placement site for lack of professionalism or if the student's behavior compromises the school's relationship with the agency, the student is subject to failure in the course and subject to dismissal from the program.

**Major Learning Outcomes**

**MASTER OF SCIENCE IN NURSING**

At the completion of the program, the graduate will be able to:

1. Use disciplined reasoning from sciences and the humanities to:
   a. Integrate nursing and related sciences into the delivery of advanced nursing care to diverse populations.
   b. Design nursing care for a clinical or community focused population based on biopsychosocial, public health, nursing, and organizational sciences.
   c. Apply ethical analysis and clinical reasoning to assess, intervene, and evaluate advanced nursing care delivery.
   d. Analyze nursing history to expand thinking and provide a sense of professional heritage and identity.

2. Incorporate current and emerging genetic/genomic evidence in providing advanced nursing care to individuals, families, and communities while accounting for patient values and clinical judgment through:
   a. Synthesizing broad ecological, global and social determinants of health; principles of genetics and genomics; and epidemiologic data to design and deliver evidence based, culturally relevant clinical prevention interventions and strategies.
   b. Designing patient-centered and culturally responsive strategies in the delivery of clinical prevention and health promotion interventions and/or services to individuals, families, communities, and aggregates/clinical populations.
   c. Integrating clinical prevention and population health concepts in the development of culturally relevant and linguistically appropriate health education, communication strategies, and interventions.

3. Support quality improvement and patient safety by:
   a. Promoting a professional environment that includes accountability, peer review, advocacy for patients and families, reporting of errors, and professional writing.
   b. Contributing to the integration of healthcare services to affect safety and quality of care to improve patient outcomes and reduce fragmentation of care.
c. Participating in, and leading when appropriate, in quality initiatives that integrate socio-cultural factors affecting the delivery of nursing and healthcare services.

4. Demonstrate organizational and systems leadership that:
   a. Emphasizes clinical practice.
   b. Continually improves health outcomes.
   c. Ensures patient safety.

5. Analyze and evaluate evidence to integrate scholarship into practice through:
   a. Integrating theory, evidence, clinical judgment, and interprofessional perspectives to improve practice and health outcomes for patient aggregates.
      b. Articulating to a variety of audiences the evidence base for practice decisions, including the credibility of sources of information and the relevance to the practice problem.
   c. Applying practice guidelines to improve practice.
   d. Participating, and leading when appropriate, in collaborative teams to improve care outcomes and support policy changes through knowledge generation, dissemination, and implementation.

6. Demonstrate proficiency in the analysis and use of information systems and technology to sustain improvements and promote transparency using high reliability and just culture principles through:
   a. Analyzing current emerging technologies to support safe practice environments, and to optimize patient safety, cost-effectiveness, and health outcomes.
   b. Using information and communication technologies, resources, and principles of learning to teach patients and others.
   c. The use of current and emerging technologies in the care environment to support lifelong learning for self and others.

7. Assume an advocacy role in healthcare policy by:
   a. The analysis of the influence of policy on the structure and financing of health care practice and health outcomes.
   b. Participation in the development and implementation of institutional, local, state, and federal policy.
   c. The examination of the effect of legal and regulatory processes on nursing practice, health care delivery, and outcomes.
   d. Interpreting research and bringing the nursing perspective for policy makers and stakeholders.
   e. Advocating for policies that improve the health of the public and the nursing profession.

8. Collaborate with other professions to improve patient and population health outcomes by:
   a. Advocating for the value of the professional nurse as members, and leaders when indicated, of interprofessional healthcare teams.
   b. Using collaboration in the design, coordination, and evaluation of patient-centered care.
   c. Mentoring and coaching new and experienced nurses and other members of the healthcare team.
   d. Understanding other health professions scopes of practice to maximize contributions within the healthcare team.

9. Plan, manage, and evaluate evidence-based clinical prevention and population care by:
   a. Evaluating the effectiveness of clinical prevention interventions that affect individual and population-based health outcomes.
   b. Delivering patient-centered and culturally responsive strategies in prevention and health promotion to individuals, families, communities, and aggregates/clinical populations.

10. Ensure accountability for advanced practice based on refined assessment skills; advanced communication skills; and biophysical, genetic, genomic, psychosocial, sociopolitical, economic, ethical, and cultural principles through:
    a. Delivering safe, quality care to diverse populations in a variety of settings and roles.
    b. Conducting a comprehensive and systematic assessment as a foundation for decision making.
c. Applying the best available evidence from nursing and other sciences as the foundation for practice.

d. Using knowledge of illness and disease management to provide evidence-based care to populations, perform risk assessments, and design plans or programs of care.

e. Incorporating core scientific and ethical principles in identifying potential and actual ethical issues arising from practice, in assisting patients and other healthcare providers to address such issues.

Post Graduate Certificate Program

The program prepares master’s prepared nurses to sit for the national certification examination in the selected area of focus. To be considered for admission, the applicant must have a master’s degree in nursing from a program accredited by NLNAC or CCNE with a minimum cumulative GPA of 3.0 or better and an unrestricted RN license in at least one state. Students in the post-master’s certificate program must maintain a 3.0 GPA and receive satisfactory clinical ratings to progress. Each student’s program will be individualized based on educational and experiential background. For those interested in a Nurse Practitioner Post-MSN certificate, prerequisites to registration for the required clinical courses in the program are evidence of competence in advanced pathophysiology, advanced pharmacotherapeutics, and advanced assessment.

Note: Admission criteria are subject to change. Please see the School of Nursing website for the most up-to-date criteria at https://nursing.hsc.wvu.edu.

The required courses for post-master’s certification are as follows:

Post Master's Family Nurse Practitioner Requirements

CERTIFICATE CODE - CG21

Minimum 3.0 GPA

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Total Hours</th>
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<tbody>
<tr>
<td>NSG 701 Advanced Pharmacotherapeutics</td>
<td>3</td>
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<tr>
<td>NSG 705 Advanced Lifespan Assessment: FNP Focus</td>
<td>3</td>
</tr>
<tr>
<td>NSG 706 Advanced Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>NSG 712 Primary Care of Families 1</td>
<td>3</td>
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<tr>
<td>NSG 714 Primary Care of Families 2</td>
<td>3</td>
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<tr>
<td>NSG 720 Family Practicum 1</td>
<td>5</td>
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<tr>
<td>NSG 721 Family Practicum 2</td>
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</table>

Complete a minimum of 600 supervised clinical hours.

Total Hours 25

Post Master's Neonatal Nurse Practitioner Requirements

CERTIFICATE CODE - CG25

Minimum 3.0 GPA

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Total Hours</th>
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<tbody>
<tr>
<td>NSG 654 Neonatal Pathophysiology</td>
<td>4</td>
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<tr>
<td>NSG 655 Neonatal health Promotion</td>
<td>2</td>
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<tr>
<td>NSG 663 Neonatal Assessment/Care 1</td>
<td>5</td>
</tr>
<tr>
<td>NSG 664 Neonatal Care 2</td>
<td>4</td>
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<tr>
<td>NSG 665 Neonatal Practicum 1</td>
<td>5</td>
</tr>
<tr>
<td>NSG 666 Neonatal Practicum 2</td>
<td>5</td>
</tr>
<tr>
<td>NSG 701 Advanced Pharmacotherapeutics</td>
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Complete a minimum of 600 supervised clinical hours.

Total Hours 28

Post Master's Pediatric Nurse Practitioner Requirements

CERTIFICATE CODE - CG24

Minimum 3.0 GPA

<table>
<thead>
<tr>
<th>Required Courses</th>
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<tr>
<td>NSG 626 Lifespan Health Promotion</td>
<td>2</td>
</tr>
<tr>
<td>NSG 701 Advanced Pharmacotherapeutics</td>
<td>3</td>
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</tbody>
</table>
COURSES

NSG 501. Advanced Practice Role Seminar. 2 Hours.
PR: Senior status or enrolled in RN to BSN/MSN program. Exploration, analysis, and evaluation of the role of the advanced practice nurse as guided by concepts, theories, and research.

NSG 522. Culture and Health. 3 Hours.
Healthcare is encountering increasing cultural diversity. By identifying cultural behaviors, beliefs, and meaning of health in diverse cultural contexts, students will become more culturally proficient in delivering care.

NSG 593A-L. Special Topics. 1-6 Hours.
A study of contemporary topics selected from recent developments in the field.

NSG 610. Leadership in Health Care. 3 Hours.
PR or CONC: NSG 622 and NSG 623. Critical analysis of leadership frameworks, values and beliefs, and application of skills in the practice setting.

NSG 611. System Based Decision Making. 2 Hours.
PR: NSG 616. Decision making grounded in an understanding of the organization as an open living system.

NSG 612. Leading Health System Change. 4 Hours.
PR: NSG 610 and NSG 611. Developing system-based change management critical to advanced nursing in various settings, including selection training, and support of effective teams and workgroups.

NSG 613. Managing Health Care Resources. 3 Hours.
PR: NSG 622 and NSG 623. Management of financial and human resources to promote professional practice and organizational growth within organizational financial constraints.

NSG 614. Health Care Informatics. 3 Hours.
PR: NSG 627. Explore technologies to improve health care practices and learn to utilize technology for outcomes management.

NSG 615. Program Planning/Evaluation. 3 Hours.
PR: NSG 613. Health care program planning, strategies for program implementation, and program evaluation techniques.

NSG 616. Role Seminar for Leadership MSN. 2 Hours.
Exploration, analysis, and evaluation of the role of the master’s prepared nurse in leadership positions as guided by concepts, theories, and research.

NSG 617. Leadership Practicum 1. 3 Hours.
Supervised practicum designed to apply healthcare leadership principles to practice. Students participate in nursing leadership and administrative activities in a selected healthcare setting.

NSG 618. Leadership Practicum 2. 3 Hours.
PR: NSG 617. Supervised practicum designed to build on initial application of healthcare leadership principles. Students participate in leadership and administrative activities in a selected health care setting.

NSG 622. Theory and Disciplined Reasoning. 3 Hours.
Introduction to the theoretical foundations of the discipline of nursing as a basis for applying critical thinking skills to the development of a conceptual framework for nursing.

NSG 623. Concepts of Advanced Nursing. 2 Hours.
PR or Conc: NSG 622. Exploration, analysis, and evaluation of concepts, theories, and research guiding the advanced practice of nursing. Learning activities emphasize advanced practice role.

NSG 626. Lifespan Health Promotion. 2 Hours.
An in-depth study of theoretical foundations, epidemiological principles, and advance practice strategies for the promotion of health and prevention of disease across the life-span.

NSG 627. Research and Systematic Analysis. 5 Hours.
PR: NSG 622. An overview of research methods, evidence and epidemiological and statistical measures used in advanced practice nursing.

NSG 628. Health Policy, Finance, Ethics. 3 Hours.
PR: NSG 622. Study of how health policy, the organization and financing of health care, and ethical principles shape professional practice.
NSG 629. Advanced Practice/Families. 2 Hours.
PR: NSG 622 and NSG 623 and NSG 626 and NSG 627. Exploration and analysis of family theories, assessments, and interventions applicable to the advanced practice of nursing.

NSG 654. Neonatal Pathophysiology. 4 Hours.
An introduction to the scientific foundations underlying processes contributing to health/illness states in neonates. Principles from genetics, embryology, and developmental physiology lay the foundation for subsequent courses in assessment, diagnosis and management.

NSG 655. Neonatal health Promotion. 2 Hours.
PR: NSG 622. Review of practices and services that contribute to healthy outcomes for sick and well neonates with focus on health promotion, disease prevention, and maintenance of function in the context of critical care and primary care.

NSG 656. Current Issues in Aging. 2 Hours.
An overview of contemporary gerontology that offers a multidisciplinary approach to providing services to older people in the United States.

NSG 657. Advanced Assessment of Older Adults. 2 Hours.
PR: NSG 624. Preparation for the conduct of advanced health assessment of older adults. Diagnostic reasoning is emphasized as the student collects and analyzes data obtained from the patient history, physical examination, and diagnostic procedures.

NSG 658. Geriatric Primary Care 1. 2.3 Hours.
PR: NSG 631 and NSG 657. Study of constellation of symptoms in the older adult that may be manifestations of other health problems.

NSG 659. Geriatric Primary Care 2. 4 Hours.
PR: NSG 657 and NSG 658. Study of common diseases and disorders seen in the older adult. An integration of advanced practice skills and role competencies in the care of older individuals and their families is emphasized.

NSG 660. Women's Reproductive Health. 2 Hours.
PR: Graduate status or permission. This course focuses on fertility control, reproductive health, menopause, and health promotion activities for women.

NSG 663. Neonatal Assessment/Care 1. 5 Hours.
PR: NSG 622 and NSG 623 and NSG 654 and PR or CONC: NSG 655. Preparation for conducting advanced assessment of neonates/young infants. Diagnostic reasoning is emphasized through collecting and analyzing data obtained from patient history, physical examination, and diagnostic procedures.

NSG 664. Neonatal Care 2. 4 Hours.
PR: NSG 663 and NSG 631. This course focuses on the management of common problems and conditions in neonates.

NSG 665. Neonatal Practicum 1. 5 Hours.
PR: NSG 631 and PR or CONC: NSG 664. This supervised practicum is designed to facilitate the student's competency in the delivery of care to infant populations.

NSG 666. Neonatal Practicum 2. 5 Hours.
PR: NSG 665. This supervised practicum is designed to facilitate the student's competency in the delivery of care to infant populations.

NSG 670. Curriculum in Nursing. 3 Hours.
A review of contemporary theory-based determinants of curriculum development in nursing, including analysis and evaluation of curricula for nursing education.

NSG 671. Clinical Practicum-Educators. 2 Hours.
PR: NSG 635. Implementation of theory-based advanced nursing practice in an area of student's clinical interest/expertise. Student develops the advanced practice role with a select population of clients and families.

NSG 672. Education Practicum. 3 Hours.
PR: NSG 674. Guided teaching experience under the supervision of an experienced faculty member that allows the student to function in the role of nurse educator in classroom and clinical settings.

NSG 674. Teaching in Nursing. 3 Hours.
PR: NSG 670. A general methods course involving the principles of instruction in didactic and clinical nursing education including analysis of course planning, teaching methods, and evaluation of student outcomes.

NSG 675. Geriatric Practicum 1. 2-5 Hours.

NSG 676. Geriatric Practicum 2. 4-5 Hours.
PR: NSG 675. Supervised practicum that focuses on evidence-based advanced practice in a variety of settings. The students, with supervision, will manage health care of geriatric clients and their families and participate on interdisciplinary teams.

NSG 683. Primary Care: Women and Girls 1. 3 Hours.
PR: NSG 622, NSG 623, NSG 624, NSG 626, NSG 631 and NSG 632. Introduction to the domains and competencies of the advanced practice nursing role that are fundamental to primary health care of women and girls.
NSG 684. Primary Care: Women and Girls 2. 4 Hours.
PR: NSG 683. Further development of the domains and competencies of the advanced practice nursing role introduced in NSG 683 that are fundamental to primary health care of the rural family unit.

NSG 685. Clinical Scholarship. 1 Hour.
Co-Req: NSG 635 (For FNP track) or NSG 645 (For PNP track). Knowledge dissemination within the advanced practice role using disciplined reasoning and systematic inquiry to examine and incorporate evidence-based strategies in the caring/healing process.

NSG 686. WHNP Practicum 1. 2-5 Hours.
PR or CONC: NSG 684. Supervised practicum designed to apply theory- and evidence- based advanced practice nursing. Students develop the advanced practice role as they manage health care and participate in service learning.

NSG 687. WHNP Practicum 2. 4-5 Hours.

NSG 691A-Z. Advanced Topics. 1-6 Hours.
PR: Consent. Investigation of advanced topics not covered in regularly scheduled courses.

NSG 693A-Z. Special Topics. 1-6 Hours.
A study of contemporary topics selected from recent developments in the field.

NSG 695. Independent Study. 1-6 Hours.
Faculty supervised study of topics not available through regular course offerings.

NSG 697. Research. 1-15 Hours.
PR: Consent. Research activities leading to thesis, problem report, research paper, or equivalent scholarly project, or a dissertation guided by a student-graduate faculty contact based on the course objectives and culminating in a written product. (Grading will be S/U.).

NSG 701. Advanced Pharmacotherapeutics. 3 Hours.
PR: NSG 706. Examination of the relationship between pharmacologic principles and the selection of pharmacologic agents in altered health states across the lifespan. This course lays the foundation of subsequent courses in diagnosis, management, and therapeutic interventions.

NSG 702. Population Health Promotion. 3 Hours.
In-depth study and analysis of clinical prevention and population health for individuals, aggregates, and populations utilizing advanced nursing practice strategies for the promotion of health and prevention of disease across the lifespan.

NSG 703. Theoretical Foundations of Nursing Practice. 3 Hours.
Elaboration and integration of theories from nursing, the sciences, and the humanities to build a foundation for the highest level of nursing practice.

NSG 704. Health Care Leadership. 3 Hours.
Critical analysis of leadership in an organizational setting, with development of skills needed to enact the leadership role.

NSG 705. Advanced Lifespan Assessment: FNP Focus. 3 Hours.
PR: NSG 706. The focus of this course is the advanced health assessment of individuals across the lifespan. Skilled interviewing and clinical reasoning are emphasized as students collect and analyze data from the patient history, physical examination, and diagnostic procedures.

NSG 706. Advanced Pathophysiology. 3 Hours.
Theoretical basis of pathophysiological changes in acute and chronic illnesses confronted in primary care across the lifespan is presented. The course serves as the foundation for clinical assessment, decision making, and management.

NSG 707. Evidence Based Practice Methods. 3 Hours.
PR: NSG 724. This course provides an overview of research methods, evidence, and epidemiologic measures for understanding the translation of research into practice and the design of interventions to promote change in a variety of settings.

NSG 708. Role Seminar for Advanced Practice. 2 Hours.
Exploration, analysis, and evaluation of the role of the advanced practice nurse as guided by concepts, theories, and research.

NSG 709. Health Care Informatics. 3 Hours.
Explore information technologies used in acute and outpatient health settings and describe methods of utilization of technology for practice improvement and patient outcomes management.

NSG 710. Health Care Issues, Policy, and Ethics. 3 Hours.
A foundation for leadership in health policy development, implementation, and evaluation, with a focus on advocacy for nursing, leadership, ethics, finance, and policy/program implementation.

NSG 711. Health Care Focus. 3 Hours.
Provides for the development of knowledge and skills relative to the state of the science in a particular area of clinical practice.

NSG 712. Primary Care of Families 1. 3 Hours.
PR: NSG 701 and NSG 702 and NSG 705 and NSG 707 and NSG 708. An introduction to the knowledge and skills basic to the health maintenance, diagnosis, treatment, evaluation, and revision of care of individuals as members of family units in the primary care setting.
NSG 713. Doctor of Nursing Practice Role Application. 1 Hour.
PR or CONC: NSG 742. Integration of Doctor of Nursing practice role competencies at the highest level of nursing practice.

NSG 714. Primary Care of Families 2. 3 Hours.
PR: NSG 712. Further acquisition of knowledge and skills basic to the health maintenance, diagnosis, treatment, evaluation, and revision of care of individuals as members of family units in the primary care setting. The change in course hours reflects change in content.

NSG 717. Organization and Leadership. 3 Hours.
Provides a foundation for developing organizational and systems leadership skills critical to clinical care and health outcomes. Knowledge will help students to promote patient safety and excellence in health care organizations.

NSG 719. Health Care Policy. 3 Hours.
Provides a foundation for influencing, developing, implementing, and evaluating health care policies and legislation pertinent to issues in health care such as ethics, safety, costs, access, and quality.

NSG 720. Family Practicum 1. 5 Hours.
PR: NSG 712 and NSG 714. Supervised practicum designed to facilitate the student's competency at the advanced practice level in the delivery of primary health care across the lifespan.

NSG 721. Family Practicum 2. 5 Hours.
PR: NSG 720. Supervised practicum that builds upon Family Practicum 1 and applies theory and evidence to the advanced practice of nursing. Further role and competency development at the advanced practice level of lifespan primary health care.

NSG 722. Topics in Global Health: Honduras. 2 Hours.
PR or CONC: NSG 721. Students are introduced to global health concepts through immersion in the culture of Honduras and utilize disciplined reasoning in the application of therapeutics and evidence-based advanced nursing practice in service learning experiences.

NSG 724. Health Research Statistics 1. 3 Hours.
This course provides development of statistical knowledge and skills needed for quantitative health research. Topics include descriptive statistics, probability, hypothesis testing, analysis of variance, chi square and regression techniques.

NSG 725. Health Research Statistics 2. 3 Hours.
This course continues the development of statistical knowledge and skills needed for quantitative health research using SPSS, including nonparametric testing, advanced regression topics and diagnostics, ANCOVA, SPSS syntax, classification, and factor, survival and power analyses.

NSG 727. Contemporary Nursing Science. 3 Hours.
PR: NSG 728 and PR or CONC: NSG 729. Focus is on an analysis of the state of the science for a phenomenon for study. Emphasis is placed on the application of the particular phenomenon to a population of interest.

NSG 728. Nursing Science Theory/Philosophy. 4 Hours.
An exploration of the philosophical foundation and methods of qualitative inquiry. Research designs, ethical issues, rigor, integrity, data collection, interpretation, and representation are studied in depth.

NSG 729. Quantitative Methods. 3 Hours.
PR: (NSG 724 and NSG 725) with a minimum grade of B-. Quantitative methods and measurement relevant to conducting research in nursing are studied.

NSG 730. Principles of Measurement. 3 Hours.
PR: NSG 727 and NSG 728. The role of measurement in nursing research is studied. Measurement in the areas of attitudes, personality, competence, development, and group qualities is emphasized. Instrument development and reliability/validity issues are also discussed.

NSG 731. Qualitative Research Methods. 3 Hours.
PR: NSG 728. An exploration of the philosophical foundation and methods of qualitative inquiry. Research designs, ethical issues, rigor, integrity, data collection, interpretation, and representation are studied in depth.

NSG 732. Seminar in Nursing Scholarship. 2 Hours.
PR: Admission to the PhD program. Exploration of the dimensions of scholarship in preparation for future roles as nurse scholars/scientists.

NSG 733. Research Grant Development. 2 Hours.
PR: NSG 781. Analysis of the grant-writing process, including current federal application formats, provides students with the background to complete a submittable grant proposal in their own area of research.

NSG 734. Use of Data. 3 Hours.
PR: NSG 729. This course focuses on use of the following data bases: clinical, financial, health services, nursing, local, state, and national. The uses of existing data in clinical and policy decisions and in research will be explored.

NSG 735. Principles: Nursing Education. 3 Hours.
This course examines the research base of educational strategies in nursing education in classroom and clinical settings. The course also examines external determinants on nursing curriculum, accreditation issues, and evaluation of nursing programs.

NSG 736. Advanced Health Policy and Ethics. 3 Hours.
PR: NSG 704, NSG 724, NSG 725, NSG 728, NSG 732, and NSG 735. Examination of ethical issues of research and current health policy.
NSG 737. Leadership. 3 Hours.
PR: NSG 734. Through exploration of contemporary leadership theory and application to self, an authentic personal leadership style will be developed to enable the student to enact a leadership role in health care and/or education.

NSG 738. Issues in Nursing Scholarship. 3 Hours.
PR: NSG 729, NSG 731, and NSG 737. Seminar focused on broad issues of ethics in the conduct of research and role acquisition of nurse scientist in academic, clinical, and health policy settings.

NSG 740A. Standards of Practice, Professionalism, and Overview of the Nurse Anesthesia Role. 2 Hours.
This course provides information and perspectives on the Doctor of Nursing Practice (DNP) Essentials, history of the nurse anesthesia profession, professional roles, curricular standards, scope of practice, and regulatory authorities pertinent to nurse anesthetists.

NSG 740B. Professional Issues in Nurse Anesthesia. 2 Hours.
PR: NSG 740A with a minimum grade of B-. This course builds upon themes related to the role of the nurse anesthetist, which were presented in NSG 740A. Topics include safety, professional interactions, added value of a nurse anesthetist in a variety of arenas, legal issues, and future trends as related to the role of the CRNA.

NSG 741. Genetics, Chemistry, and Physics of Anesthesia. 3 Hours.
PR: NSG 706 with a minimum grade of C-. The student will examine science-based principles of genetics, chemistry, and physics that relate to the mechanisms and effects of anesthesia. Mathematics concepts such as converting systems of measurement and calculating drug infusion rates will be explored. Components and functions of the anesthesia gas machine will be introduced.

NSG 742A. Foundations of Anesthesia 1: Basic Principles of Safe Anesthesia Care. 3 Hours.
PR: NSG 741 and PR or CONC: NSG 743 and NSG 752A with a minimum grade of B- in each. Core anesthesia principles of preoperative assessment, monitoring, positioning, basic airway and fluid management, and administration and documentation of basic and safe anesthetics for adults are discussed in this course. Students will have the knowledge to prepare for workshops associated with NSG 743 and for clinical practicum, NSG 752A.

NSG 742B. Foundations of Anesthesia 2: Regional Anesthesia and Considerations for Common Procedures. 2 Hours.
PR: NSG 742A with a minimum grade of B-. This course addresses basic anesthesia principles for safe administration of regional anesthesia. Students are introduced to anesthesia considerations for patients across the lifespan, including pediatric and geriatric patients, and will examine management fundamentals for common surgical subspecialty procedures.

NSG 743. Foundations of Anesthesia Lab. 1 Hour.
PR or CONC: NSG 742A and NSG 752A with a minimum grade of B- in each. This course develops the necessary psychomotor and critical thinking skills to provide safe anesthesia care in clinical settings. Workshops include conducting a preanesthetic assessment, preparing the anesthesia workspace and gas machine, managing the airway, obtaining vascular access, monitoring, positioning, preparing anesthetic medications, and managing complications that arise during anesthetic inductions.

NSG 744A. Advanced Anatomy, Physiology, and Pathophysiology 1: Cardiac, Pulmonary, and CNS. 3 Hours.
PR: NSG 742A with a minimum grade of B-. The focus of this course is to address advanced concepts in anatomy, physiology, and pathophysiology, incorporating the effects of anesthesia, and discussing management principles for disorders associated with the cardiovascular, pulmonary, and central nervous systems.

NSG 744B. Advanced Anatomy, Physiology, and Pathophysiology 2: Hepatic, Renal, and Related Systems. 2 Hours.
NSG 744B. Advanced Anatomy, Physiology, and Pathophysiology 2: Hepatic, Renal, and Related Systems. 2 Hr PR: NSG 744A with a minimum grade of B-. The focus of this course is to continue addressing advanced concepts presented in NSG 744A. Anatomy, physiology, and pathophysiology are presented, incorporating the effects of anesthesia, and discussing management principles for disorders associated with the hepatic, renal, endocrine, gastrointestinal, immune and related systems.

NSG 745. Clinical Immersion. 1-8 Hours.
PR: NSG 711. Provides for the mastery of clinical skills relative to the state of the science in a particular area of clinical practice.

NSG 746. Advanced Pharmacology for Nurse Anesthetists. 3 Hours.
PR: NSG 701 with a minimum grade of C- and NSG 742A with a minimum grade of B-. This course applies principles of pharmacology to anesthesia practice. Pharmacologic properties of anesthetic agents and common adjunctive drugs are discussed to enable the student to develop advanced plans for anesthetic management.

NSG 747. Perioperative Assessment and Care. 1 Hour.
PR: NSG 705 with a minimum grade of C- and NSG 742B with a minimum grade of B-. Students in this lab course apply principles of advanced assessment to nurse anesthesia practice. Comprehensive health history, in-depth physical exam techniques, and evidence-based diagnostic skills are expanded to emphasize critical thinking and decision-making in the perioperative environment. Students will demonstrate use of advanced airway devices and ultrasound to improve patient care.

NSG 748A. Advanced Principles of Anesthesia 1: Cardiothoracic, Vascular, and Neuroanesthesia. 3 Hours.
PR: NSG 742B and NSG 744A with a minimum grade of B- in each. Advanced principles of anesthesia management for cardiac, thoracic, vascular, and neurosurgical procedures are presented in this course. Students examine techniques to administer anesthesia to patients undergoing procedures including coronary bypass grafting, lung resections, endovascular aortic repairs, and intracranial tumor resections.
NSG 748B. Advanced Principles of Anesthesia 2: Management Across the Lifespan. 3 Hours.
PR: NSG 748A with a minimum grade of B-. Advanced principles of anesthesia including obstetric and pediatric specialties are presented. Students examine anatomy, physiology, pathophysiology, and anesthetic management unique to the obstetric and pediatric populations. Simulations of induction and management for pediatric patients, aged from neonate to 18 years, and all levels of acuity will be conducted to reinforce didactic concepts.

NSG 748C. Advanced Principles of Anesthesia 3: Management of Special Populations. 2 Hours.
PR: NSG 748B with a minimum grade of B-. Advanced principles of anesthetic management including patients of trauma, abdominal transplant, burns, and pain management populations are presented in this course. Students will examine and apply techniques of difficult airway management, blood volume resuscitation, hemodynamic control, and acute and chronic pain management in this course.

NSG 749. Business, Management, and Finance in Nurse Anesthesia Practice. 3 Hours.
PR: NSG 704 with a minimum grade of C- and NSG 740B with a minimum grade of B-. Principles of business, management, and finance are applied to nurse anesthesia in this course. Students will analyze reimbursement and billing models, develop plans for business, and evaluate contracts for independent and hospital employment. Management relationships with staff, human resources, and other departments in a health organization will be evaluated. Health care and personal finance will be discussed.

NSG 751. Evidence-Based Anesthesia Review. 2 Hours.
PR: NSG 749 and NSG 810 with a minimum grade of B- in each. Evidence-based update and review of the body of knowledge necessary to enter nurse anesthesia practice is the focus of this course. Students will revisit basic sciences, basic and advanced principles of anesthesia, pharmacology, and age and procedure-related management concepts. Students will sit for a threshold Comprehensive Exam based on the entire curriculum of the West Virginia University Nurse Anesthesia Program.

NSG 752A. Foundations Clinical Practicum 1. 1 Hour.
PR or CONC: NSG 742A and NSG 743 with a minimum grade of B- in each. This initial clinical practicum course is designed to integrate basic anesthesia principles into practice. The student will be introduced to anesthesia monitoring, procedures, technology, equipment, medications, and the perioperative clinical environment.

NSG 752B. Foundations Clinical Practicum 2. 2 Hours.
PR: NSG 752A and PR or CONC: NSG 742B with a minimum grade of B- in each. This second clinical practicum course is designed to increase the integration of basic anesthesia principles into clinical practice. The student will continue to develop skill with anesthesia monitoring, use of equipment, administration of medications, and gain greater experience in anesthesia management of uncomplicated surgical procedures and regional anesthesia in the perioperative clinical environment.

NSG 753A. Advanced Clinical Practicum 1. 2 Hours.
PR: NSG 752B and PR or CONC: NSG 742A and NSG 743 with a minimum grade of B- in each. This third clinical practicum integrates advanced anesthesia principles into clinical practice. The student will continue to develop competency with monitoring, use of equipment, administration of medications, and gain greater experience in anesthesia management of increasingly complex cardiac, thoracic, vascular, and neurosurgical procedures.

NSG 753B. Advanced Clinical Practicum 2. 2 Hours.
PR: NSG 753A and PR or CONC: NSG 742B with a minimum grade of B- in each. This fourth clinical practicum continues the integration of advanced anesthesia principles into practice. The student will continue to develop competency with monitoring, use of equipment, administration of medications, and gain experience in anesthesia management including obstetric and pediatric patients.

NSG 753C. Advanced Clinical Practicum 3. 2 Hours.
PR: NSG 753B and PR or CONC: NSG 742A and NSG 743 with a minimum grade of B- in each. This fifth clinical practicum is designed to integrate advanced anesthesia principles with preparation for clinical immersion. The student will continue to manage general and specialty anesthetic techniques for patients with complex comorbidities and broaden experience in care of special populations.

NSG 760. DNP Project Proposal. 3 Hours.
PR: NSG 721 or NSG 773. Develop a scholarly initiative to improve practice system, or patient outcomes.

NSG 761. Clinical Project 1. 1 Hour.
PR: NSG 715 and NSG 716. Identifies a practice problem and connects the problem to existing knowledge and science.

NSG 762. Clinical Project 2. 1 Hour.
PR: NSG 761 and NSG 717 and NSG 718. Students design an initiative to address the practice problem identified in NSG 761 using the appropriate research methods and a variety of scientific principles.

NSG 763. DNP Project. 1-6 Hours.
PR or CONC: NSG 760. Implementation of a capstone project using leadership skills to create and evaluate change relative to a practice problem. Analysis of the relationship of the project to practice and policy.

NSG 767. Advanced Lifespan Assessment: PNP Focus. 3 Hours.
PR: NSG 706. Advanced health assessment of individuals across the lifespan with focus on pediatric populations. Skilled interviewing and clinical reasoning are emphasized as students collect and analyze data from the patient history, physical examination and diagnostic procedures.

NSG 768. Prospectus Development. 1-6 Hours.
Supervised experiences in planning the dissertation research project, developing the chapters for the prospectus, and preparing the proposal document for review by committee members.
NSG 769. Faculty Career Development. 1 Hour.
Supervised experiences in searching for available positions, preparing and submitting application materials, participating in campus interviews, and planning a successful future career.

NSG 770. Pediatric Primary Care 1. 3 Hours.
PR: NSG 701 and NSG 702 and NSG 705 and NSG 707 and NSG 708. An introduction to the knowledge and skills basic to the health maintenance, diagnosis, treatment, evaluation and revision of care of children in the primary care setting.

NSG 771. Pediatric Primary Care 2. 3 Hours.
PR: NSG 770. Further acquisition of knowledge and skills central to the assessment of health status, diagnosis, treatment and evaluation of children in the primary care setting.

NSG 772. Pediatric Practicum 1. 5 Hours.
PR or CONC: NSG 771. Supervised practicum designed to facilitate the student's competency in the delivery of primary health care to children.

NSG 773. Pediatric Practicum 2. 5 Hours.
PR: NSG 772. Supervised practicum that builds on NSG 772 [Pediatric Practicum 1] and applies theory and evidence to the advanced practice of nursing. Further role and competency development at the advanced practice level for the delivery of primary health care to pediatric populations.

NSG 781. Research Mentorship. 1-3 Hours.
PR: NSG 729 and NSG 731. In this guided practicum, the student's research skills are developed and cultivated through participation in the mentorship process with an experienced researcher (the chairperson or his/her designee).

NSG 783. Dissertation Seminar. 1 Hour.
PR: NSG 729 and NSG 731. This seminar provides an opportunity for continued knowledge synthesis related to the selected topic of research. Students will participate in proposal presentation and critique. The expectation is a National Research Service Award Predoctoral Fellowship Application.

NSG 791A-Z. Advanced Topics. 1-6 Hours.
PR: Consent. Investigation of advanced topics not covered in regularly scheduled courses.

NSG 792. Directed Study. 1-6 Hours.
Directed study, reading, and/or research.

NSG 793A-Z. Special Topics. 1-6 Hours.
A study of contemporary topics selected from recent developments in the field.

NSG 794. Seminar. 1-6 Hours.
Special seminars arranged for advanced graduate students.

NSG 795. Independent Study. 1-9 Hours.
Faculty supervised study of topics not available through regular course offerings.

NSG 796. Graduate Seminar. 1 Hour.
PR: Consent. Each graduate student will present at least one seminar to the assembled faculty and graduate student body of his or her program.

NSG 797. Research. 1-15 Hours.
PR: Consent. Research activities leading to thesis, problem report, research paper, or equivalent scholarly project, or a dissertation. (Grading will be S/U).

NSG 798. Thesis or Dissertation. 1-6 Hours.
PR: Consent. This is an optional course for programs that wish to provide formal supervision during the writing of student reports (698), or dissertations (798). Grading is normal.

NSG 799. Graduate Colloquium. 1-6 Hours.
PR: Consent. For graduate students not seeking coursework credit but who wish to meet residency requirements, use the University's facilities, and participate in its academic and cultural programs. Note: Graduate students who are not actively involved in coursework or research are entitled, through enrollment in their department's 699/799 Graduate Colloquium to consult with graduate faculty, participate in both formal and informal academic activities sponsored by their program, and retain all of the rights and privileges of duly enrolled students. Grading is P/F; colloquium credit may not be counted against credit requirements for masters programs. Registration for one credit of 699/799 graduate colloquium satisfies the University requirement of registration in the semester in which graduation occurs.

NSG 810. Nurse Anesthesia Clinical Immersion 1. 3 Hours.
PR: NSG 753C with a minimum grade of B-. This sixth clinical practicum is designed to immerse the student in advanced professional practice as a nurse anesthetist. Students develop clinical leadership skills in experiences ranging from a team-oriented academic trauma center to a community hospital with nurse anesthetists in independent practice.

NSG 812. Nurse Anesthesia Clinical Immersion 2. 3 Hours.
PR: NSG 810 with a minimum grade of B-. This seventh clinical practicum is designed to conclude the student’s clinical immersion and marks the transition from student to advanced professional practice as a nurse anesthetist. Clinical experiences range from team-oriented, academic trauma centers to community hospitals with independent CRNA practitioners.
NSG 830. Nurse Anesthesia DNP Project. 1-2 Hours.
PR: NSG 724. This course provides the student nurse anesthetist with a framework for developing, implementing, and evaluating the outcomes of a Doctor of Nursing Practice (DNP) project.

NSG 832. Nurse Anesthesia DNP Project Presentation. 2 Hours.
PR: NSG 707 and NSG 830. This course requires the student nurse anesthetist to present the Doctor of Nursing Practice (DNP) project. The student will demonstrate mastery of the DNP Essentials, BSN-DNP program outcomes, and Nurse Anesthesia major outcomes through a portfolio, a presentation of the project, a manuscript prepared for publication, and critique of other students' scholarly work.