

University of North Dakota
Nurse Anesthesia Program
Master of Science

STUDENT & FACULTY HANDBOOK
2018 – 2019



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UNIVERSITY OF NORTH DAKOTA
NURSE ANESTHESIA PROGRAM
 MASTER OF SCIENCE
 2018-2019 STUDENT & FACULTY HANDBOOK

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I. Nurse Anesthesia Program Overview

Forward

Welcome to the University of North Dakota Nurse Anesthesia Program. This Student & Faculty Handbook is intended to be used as a reference for questions regarding policy, procedure or any other matters related to the nurse anesthesia program. It should be referred to on an ongoing basis as questions arise. In addition to the policies in this handbook, students are expected to adhere to all policies in the University of North Dakota Graduate Student Handbook and Catalog and the College of Nursing and Professional Disciplines Master's Programs in Nursing Student Handbook. Students will be held accountable for all information within this student handbook.

Accreditation

The University of North Dakota Nurse Anesthesia Program is fully accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs (COA) until 2021, which is recognized by the US Department of Education and the Council for Higher Education Accreditation (CHEA). The address is Council on Accreditation of Nurse Anesthesia Educational Programs, 222 South Prospect Avenue, Park Ridge IL 60068-4001. Telephone (847) 655-1160. Fax (847) 692-7137. Email: accreditation@coa.us.com. COA Website: www.coacna.org. The Master of Science (M.S.) Program in Nursing is accredited by the Commission on Collegiate Nursing Education (CCNE) until 2020 and approved by the North Dakota Board of Nursing through 2021.

History

The University of North Dakota (UND) Nurse Anesthesia Program is housed in the College of Nursing and Professional Disciplines. The program was founded in 1986 at the Grand Forks campus, with the first students admitted to the twenty-four month program in August 1987. The length of the program was increased to twenty-eight months in August 2009. The Master of Science program has been accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs since its inception. As of December 2017, there have been over 300 graduates from the program.

Mission Statement

The Nurse Anesthesia Program ascribes to the College of Nursing and Professional Disciplines Mission Statement. The mission of the College of Nursing & Professional Disciplines (CNPD) is to prepare future leaders, to advance human well-being and improve quality of life for diverse populations, with an emphasis on rural communities in North Dakota, the region and beyond, through the provision of high-quality innovative inter-professional education, research and service.

Vision Statement

The UND Nurse Anesthesia Program ascribes to the CNPD Vision Statement. The CNPD will lead the state and nation, and influence the world through the impact of our research, educational programs and practice innovations on health and human services.

Philosophy of Nurse Anesthesia Program

The faculty and students of the Nurse Anesthesia Program believe that:

1. Students enrolled in the nurse anesthesia program must be provided education of such quality that they are able to excel in the practice of anesthesia.
2. Nurse anesthetists provide a valued and definitive role in the delivery of anesthesia care.
3. It is the right of all individuals to receive high quality anesthesia care conducted according to recognized tenets of patient safety and respect.

The educational program for the preparation of nurse anesthetists is conducted as a shared responsibility between student and faculty. Students must be intensely committed to achieving their goals through a consistent demonstration of purpose, motivation, responsibility to patients and colleagues, independence of thought, creativity and professional demeanor. Faculty are committed to the responsibilities of serving as resources, facilitators of learning and professional role models. The program is committed to each student through individualized instruction and counsel.

Our primary goal is to provide the graduate student with an advanced scientific knowledge base and a comprehensive array of clinical skills that hallmark the standard of care in anesthesia practice.

Our obligation to graduates is to prepare them for full participation in the delivery of anesthesia care in concert with other members of the health care team. Graduates will be competent in independent judgment as professional nurses practicing in the field of anesthesia.

Our responsibility to the community is expressed in the provision of an educational program that will prepare the nurse anesthetist to meet the health care needs of the public in a competent and ethical manner.

Our obligation to the profession is to prepare a nurse anesthetist who will serve as a valuable resource in support of the goals of the American Association of Nurse Anesthetists and the advancement of the profession of nurse anesthesia.

Disclaimer

The UND Nurse Anesthesia Program reserves the right to make policy changes as the needs of its administration, faculty, students, and conducting or affiliating institutions change. These changes may occur without prior notification.

Program Faculty and Staff Contact Information

Kevin Buettner, PhD, CRNA Program Director, Clinical Associate Professor

Nursing Building, Room 349, Phone: 777-4509, Email: kevin.buettner@ndus.edu

Courses Taught:

Anesthesia Seminar & Clinical Practicum I, II, & III

Anatomy for Anesthetists (Co-taught)

Foundations of Anesthesia Practice

Professional Role Development for Nurse Anesthetists

Advanced Clinical Practicum

Nurse Anesthesia Review Course

Amber Johnson, CRNA, MS, Clinical Instructor

Nursing Building, Room 343, Phone: 777-4742, Email: amber.johnson.5@ndus.edu

Courses Taught:

Anesthesia Seminar & Clinical Practicum I, II, & III

Anatomy for Anesthetists (Co-taught)

Foundations of Anesthesia Practice

Professional Role Development for Nurse Anesthetists

Advanced Clinical Practicum

Nurse Anesthesia Review Course

Jamie Sperle, CRNA, DNP, Clinical Assistant Professor

Nursing Building, Room 352, Phone: 777-4521, Email: james.sperle@ndus.edu

Courses Taught:

Anesthesia Seminar & Clinical Practicum I, II, & III

Anatomy for Anesthetists (Co-taught)

Foundations of Anesthesia Practice

Professional Role Development for Nurse Anesthetists

Advanced Clinical Practicum

Nurse Anesthesia Review Course

Kevin Kern, PharmD

Course Taught: *Advanced Pharmacology*

Altru Health System - Pharmacy Department

Phone: 780-5150, Email: kevin.kern@ndus.edu

Joanna Sikkema, DNP, ANP-BC, FAHA, FPCNA

Course Taught: *Advanced Physiology/Pathophysiology I & II*

Nursing Building

Phone: 777-4354, Email: joanna.sikkema@ndus.edu

Laurie Nelson, Administrative Assistant

Nursing Building, Room 358

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Terminal Behavioral Outcomes Criteria

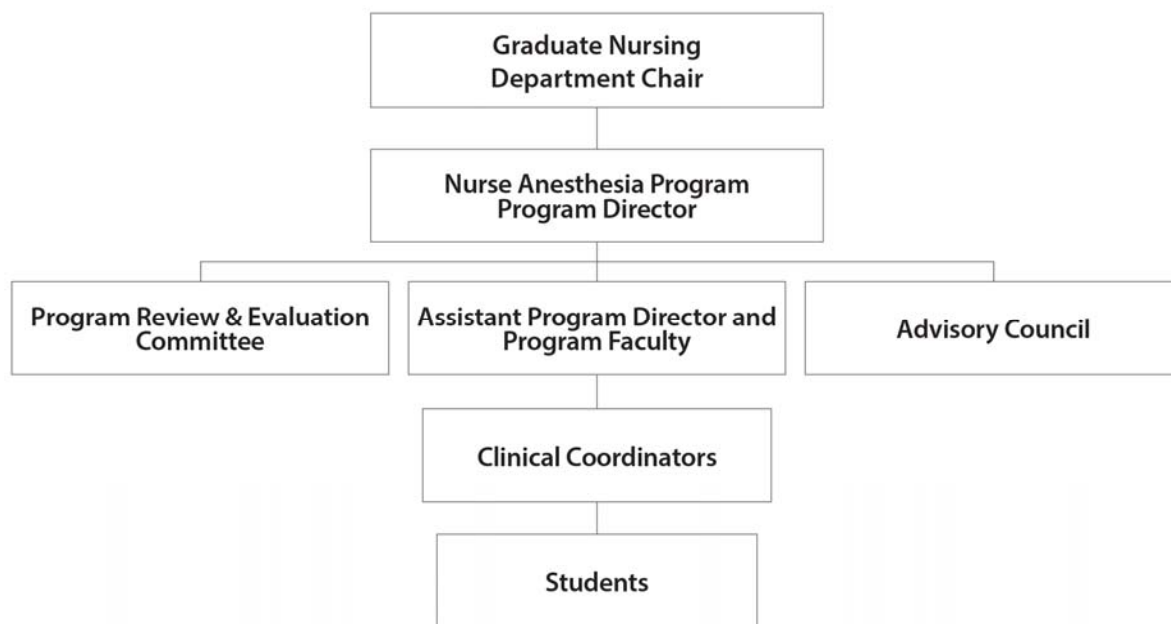
The broad-based objectives of the Nurse Anesthesia Program are to prepare nurses who are:

- Seekers of new knowledge by means of critical thinking, creative reasoning and scientific investigation in anesthesia nursing practice and theory;
- Decision-makers who utilize advanced knowledge in anesthesia and ethical principles in serving the needs of individuals and society;
- Clinical specialists with expertise and advanced knowledge in anesthesia nursing who function independently and collaboratively with other health care team members;
- Leaders capable of determining strategies which stimulate change in nursing practice, the profession and the health care delivery system, and
- Effective communicators of anesthesia nursing knowledge in both oral and written forms.

As such, graduates of the Program must be able to:

1. Perform a pre-anesthetic interview and physical assessment using patient history, physical examination, review of medical records and appropriate laboratory data.
2. Develop an appropriate anesthesia care plan consistent with the overall medical and nursing regimen and established guidelines, utilizing appropriate principles of basic and behavioral sciences in protecting patients from iatrogenic complications.
3. Administer physiologically sound anesthetics to patients of all ages and physical status categories, utilizing universal precautions and the principles of general and regional anesthesia as they apply to the diagnostic, operative and physiologic condition of the patient.
4. Perform comprehensive and appropriate equipment checks and position or supervise positioning of patients to assure optimal physiologic function and patient safety.
5. Recognize and evaluate physiologic responses to the anesthetic, implementing appropriate action that reflects the use of sound physiologic and pharmacologic principles, referring to a physician those responses beyond the nurse anesthetist's ability to manage consistent with practice standards and policies.
6. Use and interpret a broad variety of monitoring modalities including electronic monitors, taking appropriate action based on sound principle of anesthesia management.
7. Evaluate the post-anesthetic course of the patient and recommend a course of action directed toward correcting any anesthesia-related complications.
8. Serve as a resource person, team leader or team member, in the areas of acute care, cardiopulmonary resuscitation, respiratory therapy and fluid management and assist others to expand their knowledge in these areas.
9. Perform within appropriate medical, legal, and ethical standards of anesthesia practice, accepting responsibility and accountability for own practice, recognizing personal and professional strengths and limitations and taking appropriate actions consistent with valid self-awareness.
10. Demonstrate active professional commitment and involvement in the state organization for nurse anesthetists, and active commitment and involvement in quality management activities.

Program Organizational/Communication Chart



Program Organizational Communications

Questions regarding the subjects listed below should be directed to the indicated administrative faculty member.

Subject:	Refer Questions To:
General questions/advisement	Assigned student advisor
Clinical Instruction	Affiliate Clinical Coordinator Assistant Program Director Program Director
Clinical Scheduling	Assistant Program Director
Clinical matters (unresolved by clinical coordinator)	Assistant Program Director or Program Director
Didactic curriculum	Program Director
Research matters	Independent study advisor or Thesis chair, then thesis committee
Any clinical matter not listed, or if Assistant Director is unavailable	Program Director

Nurse Anesthesia Program Committee Structure

Various established committees within the College of Nursing and Professional Disciplines serve to provide structure and governance for graduate programs and are described in the College Bylaws. Other committees unique to the program are listed below. Committee membership unique to the anesthesia program will be renewable from year to year dependent upon a mutual agreement between individual and program needs. All committees will meet annually or more frequently if deemed necessary by the individual committee chairs.

Nurse Anesthesia Admissions Committee

The Graduate Admission Committee reviews applicants and recommends admission to the College of Nursing and Professional Disciplines. The Anesthesia Admissions Committee then interviews, evaluates, and recommends candidates for admission to the Nurse Anesthesia Program and to the School of Graduate Studies. Membership includes the Program Director, Assistant Director, a graduate faculty member and not less than two affiliate clinical coordinators (or their designee). This committee meets annually.

Nurse Anesthesia Advisory Committee

The Anesthesia Advisory Committee serves as a forum for College of Nursing and Professional Disciplines administrators, program faculty, affiliate clinical coordinators (or their designee), a public member, and student representatives to discuss relevant issues with the community of interest. This committee also monitors compliance with accreditation standards. This committee meets annually.

Program Review and Evaluation Committee (PREC)

The Program Review and Evaluation Committee (PREC) serves as a steering committee which reviews all aspects of the program, and whose responsibilities include: to bring, evaluate and recommend program policy changes to the Graduate Council; to process and evaluate the academic and clinical progress of students; to periodically review and evaluate the didactic and clinical curriculum. Other duties may be recommended by faculty or College administrative staff. Membership includes the Program Director and Assistant Program Director, and core anesthesia faculty members. Other individuals, including the Department Chair, students and clinical faculty, may be requested to participate. This committee meets monthly and as issues arise.

Records Retention

Academic records of currently enrolled students are retained in the College of Nursing and Professional Disciplines (CNPD) Office of Student Services. The Office of Student Services is responsible for the final disposition of all official records. The program will maintain accurate cumulative records. All student records will be retained for one year post-graduation or until the student passes their certification examination, whichever occurs last, except for records that should be kept indefinitely. Records that should be kept indefinitely include any records that may relate to litigation, final case records, summative student evaluations, National Board of Certification and Recertification for Nurse Anesthetists (NBCRNA) transcripts, and grievances.

Patient Rights and Responsibilities

Patients have a right to know who is administering their anesthesia, who will be supervising the administration of the anesthetic and the relationship between the two. No practice shall be engaged in which is intended to deceive the patient in this regard. Patients have a right to expect that those anesthesia services provided by students will be under the supervision of a CRNA and/or an anesthesiologist. This should be consistent with the anesthetic risk of the patient, the magnitude of the anesthesia and surgery, and the educational level of the student.

At all times a CRNA and/or anesthesiologist shall be immediately available in all anesthetizing areas where students are performing anesthesia. Patients have a right to expect that the student and supervisory personnel providing their services are mentally competent and not impaired by fatigue, drugs or other incapacitating conditions. The patient's surgeon, or responsible physician, shall be kept informed pertaining to the anesthetic management and any complications arising from that management. Nothing shall prevent any patient from requesting not to be a teaching patient, or prevent any member of the medical staff from designating any patient as a non-teaching patient.

Applicant Rights and Responsibilities

Applicants have a right to be treated in a respectful manner, be communicated with in a truthful and timely fashion, have their application considered with the same degree of consideration as any other applicant, be notified when their application is incomplete, and what items they need to submit for application completion. Applicants have a responsibility to inform the program of changes in contact information (address, email, and phone number), complete their application and send in all supporting documentation before the deadline, be truthful and complete on the application and in all aspects of their communication, provide the program the information necessary to make decisions about their qualifications for admission into the program.

Student Rights and Responsibilities

Students have a right to expect that upon acceptance into an accredited program of nurse anesthesia, they will be provided the quality of education necessary to fulfill the objectives of the program to prepare competent nurse anesthetists capable of:

- Integrating theory underlying the practice of anesthesia with the actual practice.
- Providing anesthesia management to all categories of patients for most or all varieties of diagnostic or therapeutic intervention utilizing consultation as required.
- Functioning with minimal supervision in all hospitals or agencies.
- Assuring patient comfort and safety within the confines of those aspects of care over which a student has control or can influence through consultation, advice or other actions.
- Incorporating sound ethical and moral practices into his/her own personal value system.

Students have a right to expect that they will not be exploited relative to time commitment for pay or profit of the conducting institution. Enrollment in a program of nurse anesthesia grants certain rights and responsibilities to both the student and the program. These rights and responsibilities of each party should be fully understood and complied with. A student's failure to achieve the goal within the time frame expected should be based on valid, reliable data and information from evaluations, viewed objectively and fairly and reviewed as may be required. Appeals mechanisms are available when decisions are contested. Fair and accurate evaluations of their progress in the educational program will be made and they will be kept informed of their progress.

Students will be held accountable for the quality of preparation, completion and performance of assignments; for complying with the policies and procedures pertaining to the program of nurse anesthesia and all affiliate sites and ethical and legal responsibilities for repayment of student loans from any source, public and private.

Conducting Institution Rights and Responsibilities

The UND Nurse Anesthesia Program, the University of North Dakota, and the affiliated clinical sites are responsible to provide the student with quality didactic and clinical instruction, to coordinate and carry out application and admission procedures, provide classroom and laboratory space as needed for didactic courses and to provide for academic counseling of nurse anesthesia students. Additionally, the UND Nurse Anesthesia Program is responsible to:

- Provide didactic instruction.
- Coordinate advertising and public relation efforts.
- Provide professional liability coverage which applies to nurse anesthesia students.
- Provide for the clinical instruction and evaluation of nurse anesthesia students.
- Provide orientation to the clinical area.
- Evaluate students in the clinical area.
- Provide support for clinical research and studies.
- Provide the resources needed for effective operation of an educational program of high quality.
- Continually evaluate the program to ensure that it meets student needs and that graduates attain the desired outcomes.
- Prevent department needs from superseding students' needs.
- Conduct the program in compliance with all legal and accreditation standards.

Additionally, the University of North Dakota as the conducting institution has the right to expect that:

- The Nurse Anesthesia faculty operate the program in accordance with the standards, policies and procedures of the accrediting agencies, University, affiliate clinical sites and the program.
- Accurate and comprehensive records will be maintained, and these will be made available to on site accreditation reviewers.
- The program will submit annual reports to the accrediting agency, and other submissions as may be required from time to time.
- The program represents itself with integrity and truthfulness in all communications.
- It will be kept informed of program changes, accrediting agency evaluations and standards, and trends affecting nurse anesthesia education.
- Applicants will be selected after review of their health and academic records, interview, and personal references.
- Students will be aware of and follow department and institutional policies relative to patient care, personal health care habits, and in all other matters addressed in relevant policies.
- Students will communicate with clinical instructors relative to their ability to perform procedures, throughout the perioperative period, and apply knowledge in their clinical internships.
- Students will arrive prepared for classes, seminars, conferences, and clinical internship.

Council on Accreditation Rights and Responsibilities

The Council on Accreditation of Nurse Anesthesia Educational Programs (COA) is responsible to publish any and all applicable standards necessary for accreditation and successful reaccreditation, and to evaluate programs in their ability to meet the published standards. Additionally, it is the responsibility of the COA to identify any areas of noncompliance and to inform the program accordingly. The COA reserves the right to conduct periodic announced and unannounced site reviews to assess for compliance to published standards.

It is the responsibility of the Program to assist the COA in all requirements necessary to conduct a thorough evaluation. The Program is responsible to provide any required supportive documentation to demonstrate compliance. The Program also has the duty to provide accurate and truthful statements and documents to the Council. The UND Nurse Anesthesia Program is required to follow all policies and procedures published by the Council on Accreditation.

Faculty Expectations of Students

Faculty expectations of students are carefully enumerated in course syllabi and clinical objectives; however, in addition to these, Program faculty has additional expectations. Faculty expect that students are intellectually curious and are sensitive of the need to study independently and in depth; to return to basic physiology and pharmacology, nursing science and other basic courses; to make inferences, draw upon past experience and integrate them with the present; develop concepts, think through processes and to ask questions of oneself and others. The faculty also expects that students will learn to adapt to new stresses and experiences and not give up. The volume of material is much greater than most students may be accustomed to and it isn't possible to succeed utilizing poor study patterns. Memorization of isolated facts is not enough. It is expected that each student's concern and respect for their classmates will be as great as their concern and respect for themselves. If a student comes unprepared for class or clinical assignments, they will require a disproportionate amount of the instructor's time and deprive them and other students of their rightful share of time for learning.

Graduates

Graduates may have access to transcripts of their academic and clinical achievements and upon request have verified copies furnished to institutions, agencies, other programs of nurse anesthesia or others as specified by the student or graduate. There is a fee for photocopying of all transcripts and records.

Records retained by the program after graduation may include grades, certification exam application, special awards or honors, licenses and certifications. Graduates have the right to expect that a complete, accurate, certified transcript of student educational experiences will be forwarded to the National Board of Certification and Recertification for Nurse Anesthetists (NBCRNA) upon graduation. It is the student's responsibility to make arrangements to take the Certification Examination at the specified site within the NBCRNA's specified time period. It is ultimately the student's responsibility to ensure that all guidelines and deadlines in the Candidate Handbook of the National Board of Certification and Recertification for Nurse Anesthetists are followed.

II. CURRICULUM

Design of the Nurse Anesthesia Program

The College of Nursing and Professional Disciplines academic standards are identical with those in the University of North Dakota (UND) Academic Catalog. Selected additional information that will help you progress through the Nurse Anesthesia Program follows:

Course Duration

The program, with a thesis or non-thesis option, consists of 76 credits. Cohorts in the Nurse Anesthesia program are full-time and begin in August of each year and continues for a consecutive 28 months. Upon completion of all academic and clinical requirements, students graduate with a Master of Science degree with a major in Nursing.

Students who are earning their first Master's Degree will be permitted to participate in the December campus graduation ceremony.

Time Commitment

Successful completion of the program requires a substantial time commitment. Student's time commitments are limited to that which is reasonable to ensure patient safety and promote effective student learning. This commitment averages 50-60 hours a week, year round, assuming that two hours of study are required for each class hour. This commitment figure includes time spent in the classroom, in clinical, and in study.

Curriculum Outline

Nurse Anesthesia Program – M.S. Curriculum	
FIRST YEAR - Semester I (Fall)	
N500 Theories and Concepts in Nursing**	3
N504 Advanced Pharmacology I	3
N510 Advanced Physiology/Pathophysiology I**	3
N521 Foundations of Anesthesia Practice	3
N585 Advanced Health Assessment**	3
	15
FIRST YEAR - Semester II (Spring)	
N506 Advanced Pharmacology II	3
N507 Anesthesia Seminar & Clinical Practicum I	4
N511 Advanced Physiology/Pathophysiology II**	3
BIMD510 Basic Biomedical Statistics	2
ANAT591 Anatomy for Anesthetists	1
	13
FIRST YEAR - Semester III (Summer)	
N517 Anesthesia Seminar & Clinical Practicum II	5
N520 Professional Role Development for Nurse Anesthesia	3
	8
SECOND YEAR - Semester IV (Fall)	
N502 Evidence for Practice**	3
N527 Anesthesia Seminar & Clinical Practicum III	5
N597 Advanced Clinical Practicum	2
	10
SECOND YEAR - Semester V (Spring)	
N597 Advanced Clinical Practicum	8
N997 Independent Study*	2
	10
SECOND YEAR - Semester VI (Summer)	
N597 Advanced Clinical Practicum	9
	9
THIRD YEAR – Semester VII (Fall)	
N508 Nurse Anesthesia Review Course	1
N597 Advanced Clinical Practicum	10
	11
Total Credits:	76

*A thesis option is also available

**Courses offered in online course format only.

Course Descriptions

NURS 500. Theories and Concepts in Nursing. 3 credits (Online Course)**

Analysis of current nursing and related theories and concepts which guide clinical practice, curriculum development, research, and nursing administration.

NURS 502. Evidence for Practice. 3 credits (Online Course)**

This course emphasizes the application of basic research concepts to the building of evidence-based practice in nursing. Advanced competencies are developed in searching and evaluating the literature, examining the merit of different types and levels of evidence, and analyzing the generalizability and implications for clinical practice.

NURS 504. Advanced Pharmacology I. 3 credits

Pharmacodynamic and pharmacokinetic principles with a focus on clinical anesthesia practice. Physiologic systems and drug classifications are used; emphasis on therapeutic use, side effects, drug interactions, and contraindications of drugs used for intravenous anesthesia induction, inhalation and balanced anesthesia maintenance. Pediatric and geriatric variations will be addressed.

NURS 506. Advanced Pharmacology II. 3 credits

Continuation of Advanced Pharmacology I (N504). Advanced pharmacology for clinical nurse anesthesia practice.

NURS 507. Anesthesia Seminar & Clinical Practicum. 4 credits

This course is designed to provide nurse anesthesia students an overview of the basic principles and skills needed to care for the routine surgical patient. Topics include difficult airway management, patient monitoring, patient preparation, positioning, patient safety, fluid and electrolyte management, documentation of anesthesia care, and an introduction to regional anesthesia. Analysis, integration, and utilization of research to improve practice are emphasized. The lecture content is reinforced through Clinical Simulation and laboratory experiences, allowing for immediate application of the lecture content and integration into the clinical setting. Students are introduced to the clinical setting through observational and hands-on experiences.

NURS 508. Nurse Anesthesia Review Course. 1 credit

This course is faculty guided and designed to assist students with their review of nurse anesthesia course and clinical material in preparation for the NBCRNA certification examination.

NURS 510. Advanced Physiology/Pathophysiology I. 3 credits (Online Course)**

Normal physiologic functions associated with cellular structure and environment. Physiologic and pathophysiologic functions of the human body and its organ systems, both separately and integrated in whole activities.

NURS 511. Advanced Physiology/Pathophysiology II. 3 credits (Online Course)**

The focus of this course is on pathophysiologic processes in altered health status.

NURS 517. Anesthesia Seminar & Clinical Practicum II. 5 credits

This course builds on the foundations learned in prerequisite courses. Advanced anesthesia principles are applied to various patient populations including the surgical patient with cardiovascular and respiratory diseases. Anesthesia care of other surgical populations including the trauma, orthopedic, urological, vascular, intra-abdominal and ENT patient will be explored. Important concepts include anatomical, physiological and pathophysiological, and pharmacological principles. Analysis, integration, and utilization of research to improve practice are emphasized. The lecture content is reinforced through simulated laboratory experiences, allowing for immediate application of the lecture content and integration into the clinical setting. A clinical rotation is included.

NURS 520. Professional Role Development for Nurse Anesthesia. 3 credits

The focus of this course is on the identification and analysis of the professional components of nurse anesthesia practice, emphasizing role development, management and leadership, medical, ethical and legal responsibilities, the provision of culturally competent care and scope of professional practice. Other areas that will be explored include quality improvement, the legislative process, credentialing, professional organizations, conflict resolution and self-care and stress management for the anesthetist. An in-depth analysis of current trends and issues affecting healthcare and the delivery of anesthesia services are included in the course content.

NURS 521. Foundations of Anesthesia Practice. 3 credits

This course provides the foundation for nurse anesthesia practice. Lecture and discussion begins with an analysis of the history of anesthesia nursing, professionalism and standards of care for the anesthetist. Safety in the nurse anesthesia environment will be emphasized. Additional content includes the applied chemical, physical, and biochemical concepts as they relate to anesthesia practice, including the mechanisms of anesthesia, medical mathematics, medical gas systems, laws governing gases, the anesthesia machine, monitoring principles and equipment, airway equipment and basic airway management and universal precautions.

NURS 527. Anesthesia Seminar and Clinical Practicum III. 5 credits

This course further builds on the foundations learned in prerequisite courses. Students will incorporate previously learned anatomy, physiology, pathophysiology and patient management into the care of subspecialty patients and patients with complex co-existing diseases. Advanced anesthesia principles are applied to the OB, Pediatric, geriatric and neuro patient. The pharmacology and anesthesia management of these subspecialty populations and patients with various disease states, such as kidney, musculoskeletal and endocrine disorders will be explored. Analysis, integration, and utilization of research to improve clinical practice are emphasized. The lecture content is reinforced with a clinical experience that emphasizes anesthesia care for subspecialty populations.

NURS 585. Advanced Health Assessment. 3 credits (Online Course)**

An evidence based on-line approach will be used to present methodologies for graduate student performance on health histories, developmental assessments and physical/psychosocial assessments of individuals. Communication and interviewing techniques for advanced nursing practice are applied. A clinical/laboratory component is included with variations for Family Nurse Practitioner, Psych/Mental Health, Gerontology, and Nurse Anesthesia students.

ANAT 591. Anatomy for Anesthetists. 1 credit

Review of anatomy as it relates to nurse anesthesia practice utilizing human cadavers. Topics include upper airway anatomy, anatomy for regional anesthesia and anatomy for central venous catheterization.

BIMD 510. Basic Biomedical Statistics. 2 credits

A series of lectures, demonstrations and exercises to provide students with the basic rationales for the use of statistics in the assessment of biomedical data and a selected set of the most common and useful statistical tests.

First Year Students Clinical & Didactic Format

Students are predominantly in the didactic phases of the curriculum during the Fall and Spring semesters and for a portion of the first summer session of their first year and for a portion of the Fall semester of their second year. Full-body patient simulation will be introduced during the Fall semester of the first year for the development of airway management skills, positioning, patient safety, medication administration and sequence development, among other skills. At the end of the Fall semester, first year students will participate in a clinical component where they will be able to begin to develop their clinical skills, become more familiar with the operating room environment, and begin to apply theory to practice. Following the final didactic phase of Fall 2, students will begin a full-time clinical schedule.

Clinical practicum during the Fall semester of the first year of instruction will be conducted at approved sites while the student continues the didactic courses. Clinical practicum during the first year may be assigned at one or two of the following institutions: Altru Health System – Grand Forks, ND; Essentia Health – Fargo, ND; Essentia Health/St. Mary's Medical Center – Duluth, MN; Sanford Health – Bismarck, ND; or Sanford Health – Fargo, ND.

Second and Third Year Students Clinical & Didactic Format

Students will complete their didactic work early in the Fall semester of their second year. The second and third year of the program focuses primarily on clinical practicum, including one day per week call beginning early in the Spring semester of year 2. Students typically begin to work on their independent or thesis project during the Fall semester of their second year. Following completion of a cardiac surgery learning module, students will begin a one-month-long cardiac anesthesia rotation, usually during the Spring or Summer semester of the second year. During the Spring and Summer semester, as well, students will work to complete their thesis or independent study project. Also during the second and third year of the program students will participate in a monthly online clinical correlation conferences.

Clinical Simulation/Laboratory Experience

Beginning in the Fall Semester of the student's first year, laboratory experiences and clinical simulation will be introduced. Students will work with faculty to introduce the specialty of nurse anesthesia. This experience will focus on developing basic skills to prepare students in anesthesia management of patients undergoing a variety of surgical and/or diagnostic procedures. This "hands-on" experience includes preparation of patients and equipment, pre/postoperative patient evaluation, planning and implementing individualized anesthesia care plans, non-invasive and invasive monitoring, patient positioning, pain and airway management. During this experience, faculty will utilize a variety of teaching methods, including simulation and discussion. Simulation will be used initially for physical assessment, evaluation/management of non-difficult airways, positioning, induction sequence, and monitoring. As students progress through the program, difficult airway and crisis management training will be included in the simulation experience. Students continue with simulation training at various times during their second year, as well.

Clinical Correlation Conferences

Students are required to participate in monthly clinical correlation conferences during the second and third years of the program as a component of the NURS 597 course. These online conferences are facilitated by a Nurse Anesthesia faculty member and are generally held on Thursday afternoons. Each student will be assigned to develop a presentation on interesting and/or unique cases. A template for the presentation will be available on the NURS 597 BlackBoard site. In addition, each student will be assigned a certification review topic that they will develop into a presentation. These presentations should be between 20-30 minutes in duration and include 10 board review type questions.

SEE Exam

Students are required to complete the Self Evaluation Examination (SEE) offered by the National Board of Certification and Recertification for Nurse Anesthetists (NBCRNA) during their program. The SEE is an evaluation of the student's progress in the nurse anesthesia program and is meant to provide the program with feedback as to how well students are prepared with the knowledge that is needed for nurse anesthesia practice. In addition, the SEE helps to prepare the student to take the NCE as it has specifications that are similar to the NCE. A new version of the SEE Exam became available on September 1, 2016.

Beginning with the Class of 2018 (December 2018 graduates), students will take the SEE exam in Year 3, Semester 7 (Fall). The SEE will need to be completed by the end of Semester 7. Students will be registered for the SEE by the Program Director during the prior semester. It is the student's responsibility to schedule a testing date and time with the testing center. Test center information will be provided to the students by the NBCRNA. Students will be expected to assure they are prepared to take the SEE. As with all examinations, this would include studying and ensuring they are well rested.

Independent Study/Case Report

Students are required to develop and complete an Independent Study/Case Report as partial fulfillment of the requirements for graduation and the Master's degree. Students will be required to produce a written clinical case report based on an anesthetic case in which the students significantly participated in the conduct of the anesthetic. The student will develop a journal manuscript for possible publication from this independent study. Students are encouraged to meet with their advisor in formulating topics. Further information on this project will be discussed during the students program. A thesis option is available to meet this requirement. Students should direct further questions regarding the thesis option to the Program Director.

Oral Comprehensive Examination

Students will be required to successfully pass an oral comprehensive examination prior to graduation. The oral comprehensive exam will be based upon the students' written clinical case report (independent study). The purpose of the oral comprehensive examination is to assess the student's ability to articulate graduate level advanced practice nursing knowledge and to evaluate their readiness to begin practice as an advanced practice nurse. A minimum of two nurse anesthesia faculty (one being their advisor) will conduct the comprehensive examination and participate in the grading and pass/fail decision.

To be eligible for the oral comprehensive examination, the student must successfully pass all coursework with a grade of B, maintain a GPA of 3.0 or higher and successfully pass the Independent Study/Case Report with a grade of B or higher. Students may take the oral comprehensive examination only two times. If the student is unsuccessful the second time, the student will be dismissed from the program. The oral examination is designed to be completed during the last two semesters of the student's program of study. More information about the examination process will be discussed during the students program.

Graduation Criteria

To be eligible for graduation, all students must meet didactic and clinical requirements including completion and submission of all required elements of their thesis or independent project. Specific criteria and performance objectives for the clinical curriculum, which cover affective, ethical, and behavioral aspects, are located in this Handbook. Expectations for didactic courses are published in their respective syllabi. All of the above must be met prior to graduation.

Program requirements that must be completed include:

- Library/CRSC materials returned (books, journals, etc.).
- Forwarding address left with the program.
- All terminal objectives met (See Objectives).
- Petition to graduate filed with Registrar's office at UND.
- Current American Heart Association (AHA) Basic Life Support (BLS), Advanced Cardiac Life Support (ACLS) and Pediatric Advanced Life Support (PALS) certification.
- Current RN licensure.
- Exit interview completed.
- Final case record totals submitted, which show completion of all requirements of the National Board of Certification and Recertification for Nurse Anesthetists (NBCRNA).

- All final evaluations completed.
- All care plans and daily evaluations submitted.
- Copy of SEE exam results on file in the Program office.
- Successful completion of oral comprehensive examination.
- Final transcripts verified and signed.
- Application to sit for the certification exam completed.

Deferral of Graduation

The University of North Dakota Nurse Anesthesia Program reserves the right to defer a student's graduation until all requirements, including attendance make-up days, have been met. Students who have not fulfilled their graduation requirements will not be allowed to participate in the graduation ceremony with their classmates.

III. Graduate Program Policies

For policies and procedures related to academic progression through the program, graduation policies and procedures, academic grievance, disciplinary actions, due process, petitions and appeals, dismissal or withdrawal from the university, and student ethics, the student is referred to appropriate sections as outlined in the UND Academic Catalog, College of Nursing and Professional Disciplines (CNPD) Master's Programs in Nursing Student Handbook or the Code of Student Life. Academic grading policies and procedures are outlined in the UND Academic Catalog and the College of Nursing and Professional Disciplines Master's Programs in Nursing Student Handbook, as well as contained in individual course syllabi.

Course and Faculty Evaluations

Students will evaluate each course and faculty member at the end of each semester didactic course. This information will be used to ensure that faculty provide high quality instruction, student learning needs are being met and for the future development of courses within the curriculum. The results of these evaluations will be shared with the Chair of Graduate Nursing Programs in the CNPD Department of Nursing.

Faculty Self-Evaluations

Program faculty are required to complete a thoughtful and comprehensive performance self-evaluation on an annual basis and the results shared and acknowledged by the Chair of Graduate Nursing Programs in the CNPD Department of Nursing. This information along with evaluations from students will be used to ensure that faculty provides high quality instruction and guidance to students, as a source of feedback regarding teaching styles, course content preparation, organization and delivery, and to ensure that course objectives are consistent with the Programs terminal objectives and stated mission and goals of the College of Nursing and Professional Disciplines. Additionally, faculty will evaluate program effectiveness annually utilizing the *Didactic Faculty Evaluation of the Program* form.

IV. Nurse Anesthesia Program Policies

Attendance Policy

Attendance for lectures and exams is mandatory. Due to the large volume of classroom material, it is very difficult for students to make up missed class lectures and labs. Due to the nature of the courses, it is expected that professional courtesy be extended to each other as well as faculty. The instructor must be notified by the student if the student is unable to attend class on a given day. The Program Director must also be notified by the student of any absences. Special assignments may be used in place of missed classes. This is at the discretion of the Program Director. During the first year of the program, attendance at all clinical experiences is mandatory and any missed clinicals must be made up. In the event that a student must miss a clinical day, both the clinical site and the Program or Assistant Program Director must be notified and a make-up date scheduled. Personal leave days may be used during the second and third year of instruction.

Testing

Fair and accurate measurement of students cognitive and critical thinking skills obtained through didactic, assigned readings and lab experiences will include the administration of examinations. Test questions are predominantly multiple choice. Short answer and essay questions may be included for assessment of critical thinking ability. Computerized item analyses of questions are employed to ensure that student responses accurately reflect assimilation of course content. Written course examinations are utilized in concert with other evaluation tools such as written case scenarios, patient simulation experiences, the completion of clinical care plans, daily instructor clinical evaluations as well as formative and summative clinical evaluations. Student presentations of selected topics and contributions to classroom and case study discussions also provide valuable feedback to program and clinical faculty in assessing student acquisition of cognitive, integrative and critical thinking skills.

Challenging Test Questions

Challenges to test questions must be made within 3 working days after the date of the test. Challenges received after 3 working days will not be considered. All challenges will be evaluated individually and must be made on the "Challenge of Test Question" form. The completed form can be submitted in person or electronically via email and it should be directed the Program Director or Assistant Program Director. Challenges concerning appropriateness or relevancy of the question are not within the prevue of the student and will not be considered. The Program Director or Assistant Program Director will make the final decision concerning the challenge and notify the student and/or class.

Cheating and Plagiarism

A student who is determined to have plagiarized, fabricated documentation, submitted unoriginal work or cheated on any assignment or examination is considered in violation of ethical standards deemed essential to the integrity of the UND Nurse Anesthesia Program. Such violations of ethical conduct are grounds for disciplinary action, which can include dismissal from the program.

As members of an academic community engaged in the pursuit of truth and with a special concern for values, students are expected to conform to a high standard of honesty and integrity in their academic work. The fundamental assumption under which the University operates is that work submitted by a student is a product of his/her own efforts.

Among the most serious academic offenses is plagiarism, submitting the style of another author or source without acknowledgment or formal documentation. Plagiarism occurs when specific phrases or entire passages, whether a sentence, paragraph or longer excerpt, are incorporated into one's own writing without quotation marks or documentation. One also plagiarizes by paraphrasing the work of another, that is, retaining another writer's ideas and structure without documentation.

Students are advised always to set off another writer's exact words by quotation marks, with appropriate references. Students avoid plagiarism by concentrating on their own words and ideas and by fully crediting others' words and ideas when they find their way into the writing. Whenever in doubt, cite the source.

Students who purchase essays from other students or agencies, or who copy from one another or from prohibited sources, commit the most serious type of academic dishonesty. The consequences of plagiarism, or any act of academic dishonesty, may range from failure in a course to dismissal from the University.

The University of North Dakota *Code of Student Life* outlines the rights and responsibilities enjoyed by student, faculty and staff who make up the University Community. You may access the *Code of Student Life* online at <http://und.edu/student-affairs/code-of-student-life/>. Members of the University community are expected to be familiar with the rules and regulations contained within the *Code* and to act in compliance with them at all times.

Late Coursework

Assignments turned in late may be decreased 5% for each day the assignment is late.

Fraternization

Personal or business relationships between faculty and students are discouraged. Faculty, clinical or didactic, who have personal or business relationships with students beyond the normal faculty role will not directly supervise these students in classroom or clinical. These faculty members will disclose outside relationships to the Program Director, who will determine whether or not to excuse them from deliberations on that student's academic progress. Faculty/student professional boundaries are expected, respected and must be maintained.

V. CLINICAL STUDENT CONCERNS & PROCEDURES

Professionalism and Integrity

Patient rounds, case preparation, reading, meeting attendance and other types of inquiry often have to be performed on the student's own time. Students shall also conduct themselves in a professional and respectable manner during class time, clinical time and during professional meetings and seminars. All students should be dressed neatly and appropriately when on hospital property (no shorts, sweat suits, etc.) See the various hospitals' dress code policy.

Professional Decorum

The Student Registered Nurse Anesthetist (SRNA) is a representative of the specialty, the profession, the University and the clinical affiliates. The maintenance of a professional appearance and demeanor facilitates the acceptance of the profession and the individual by patients and other health professionals. It is expected that students will assume responsibility for observing the following guidelines on professional attire and demeanor. While attending classes or laboratory sessions on the University of North Dakota campus, students may express their personal choice in dress. Choices should be tasteful and neat.

While participating in any Program activity outside of the University of North Dakota campus, such as the clinical sites, students should present a professional appearance. Lab coats, program identification/name tags **MUST** be worn while on the hospital grounds and at all clinical training sites. The hospital or university issued identification badge must also be worn at all times while on those sites. All SRNAs must be clearly and continuously identified as students during clinical experiences. No other credentials will be displayed on the student I.D. badge.

Professional attire should be observed whenever students are on hospital or institutional sites. This includes visits to study in the hospital library, didactic examinations administered in the hospital facility, major group meetings etc. Jeans, sweat pants and shirts, sandals and casual accessories are not considered appropriate in these settings. During clinical experiences, students are expected to follow policies and procedures put forth by each clinical site. Students may not wear artificial nails or dangly jewelry in the operating room or while caring for patients.

Guidelines for Clinical Conduct

As the program offers new clinical challenges, the developing professional bears the responsibility of representing the profession to patients, the public, clinical preceptors and other members of the health care team. The following guidelines should be observed in representing the profession:

- Consistently demonstrate your concern for the welfare of the patient.
- Be thoughtful and professional when obtaining the history and performing the physical exam.
- Treat patients with respect and dignity, both in your interactions with them, and in your patient related discussions with other professionals.
- Demonstrate your concern not only for the medical problem but also for the total patient.
- Conscientiously respect the rights of your colleagues.

- Characterize all of your professional encounters with cooperation and consideration.
- Strive to assume an appropriate and equitable share of patient care duties.
- Approach your responsibilities with dedication.
- Be truthful in all professional communications.
- When meeting multiple demands, establish patient-centered priorities to guide you in completion of such work.

Title and Identification

Role and title confusion are common problems encountered in dealing with patients (e.g., some patients identify all those wearing white coats as physicians). Students should be aware of this problem and avoid misrepresentation by politely explaining their role and position. In professional interactions with patients and others, a student should introduce himself or herself as a "Student Registered Nurse Anesthetist." Students should use the designation, SRNA, following all notations in charts, records, and other medical forms. In all professional communications, including paging or beepers, a student should introduce him or herself as a "Student Registered Nurse Anesthetist". No student should casually accept the "page" of doctor. Students may be subject to sanctions within the Program for failure to observe any of these ethical guidelines. Photo identification badges must be worn by students at all times while in the clinical setting.

Practice and Professional Ethics

The program expects students to adopt and observe the American Association of Nurse Anesthetists (AANA) Code of Ethics, which can be found at: [https://www.aana.com/docs/default-source/practice-aana-com-web-documents-\(all\)/code-of-ethics-for-the-crna.pdf](https://www.aana.com/docs/default-source/practice-aana-com-web-documents-(all)/code-of-ethics-for-the-crna.pdf) . Violations of this ethical conduct standard will be regarded as professional and academic misconduct and failure to meeting term objectives and be subject to review as such.

Clinical Tardiness

Students are expected to report promptly for all clinical assignments. If unavoidably detained, the student must notify the clinical coordinator or the clinical instructor that he or she is assigned with for that day. Three instances of tardiness subject the student to clinical removal.

Student Responsibilities for Case Management

A student must comply with directions regarding case assignment and case management given by the clinical instructor and/or clinical coordinator. If a student is unable or unwilling to follow directions, the case management should be immediately turned over to the CRNA clinical instructor. Following the incident, the situation should be discussed in detail with the clinical coordinator. If the student or instructor remains dissatisfied, the situation should be brought to the attention of the Assistant Program Director or Program Director.

Clinical Objectives

Objectives for each year and semester are as follows:

YEAR 1, SEMESTER 2

At the completion of the second semester, the student registered nurse anesthetist will be able to meet the following objectives:

I. READINESS/PREPARATION FOR CLINICAL

1. Pre-anesthesia assessment
 - Demonstrates an ability to make pre-op visits on each assigned case
 - Thoroughly reviews the chart including laboratory values, X-rays, EKGs, consults, H&Ps, vital sign sheet and nurses notes
 - Reviews old charts from previous anesthetics
 - Participates in patient interviews
 - Assigns the appropriate ASA classification in care plan
2. Anesthesia Plan
 - Recognizes the need for independent research prior to discussing the anesthetic management plan for each individual patient with the CRNA
 - Recognizes the importance of this consultation and remains adaptable to changes in plans before and during administration of anesthesia
 - Prepares a written anesthesia care plan for each patient including a fluid management data.
 - Considers an alternate plan
3. Preparation of Equipment and Drug/Pharmacology
 - Prior to starting each case, assembles the necessary equipment and drugs to manage anesthetic procedure
 - Completes a through pre-anesthesia machine and equipment check according to acceptable protocol
 - Demonstrates the ability to operate the routine anesthesia equipment including anesthesia machine, vaporizers, EKG, O₂ analyzer, automatic BP cuff, pulse oximeter, blood warmer, nerve simulator, ventilator, BIS monitor, etc
 - Exhibits a satisfactory knowledge of the most commonly used drugs in anesthesia, including the concentration, the average dose, absolute contraindications, and how to calculate the required dose for a particular patient

II. INDUCTION

1. Demonstrates the ability to follow the routine steps of induction with assistance in an organized and accurate manner
2. Exhibits knowledge of patients safety during anesthesia

III. MAINTENANCE

1. Demonstrates an awareness of the importance of utilizing all senses in gaining a complete assessment of the patient's condition
 - Monitors BP, EKG, ETCO₂, breath sounds, and temperature routinely on each patient

2. Begins to demonstrate a working knowledge of intra-anesthetic management with the following agents/techniques, utilizing instructor for assistance.
 - Inhalation Agents
 - Balanced Anesthesia technique
 - Monitored Anesthesia care
 - Regional Anesthesia
3. Utilizes the written fluid management plan and considers urine output and blood loss
4. Provides an accurate and legible chart for the patient's hospital record

IV. EMERGENCE

1. Follows the routine steps of emergence with assistance
 - Appropriate sequencing
 - Extubates with proper technique and assistance
 - Transports the patient to the designated recovery area (i.e. PACU, SDS) safely
2. Includes all pertinent data in report to the designated recovery area nurse
3. Makes post-op visit on patients

V. COMMUNICATION AND PROFESSIONALISM

1. Shows an awareness of the responsibilities of the anesthetist in the clinical area and his/her position as a member of the OR team
2. Demonstrates sincere willingness to cooperate and communicate with instructors, MDA's, surgeons and OR team
3. Accepts instructor's constructive critiques, if any, in a professional manner
4. Works effectively under the stern of the new operating room environment, maintaining an ability to be adaptable

YEAR 1, SEMESTER 3

At the completion of the third semester, the student registered nurse anesthetist will be able to meet the following objectives:

I. READINESS/PREPARATION FOR CLINICAL

1. Makes a pre-anesthesia visit on each assigned case
 - Evaluates each patient through the use of personal interview, patient history, physical examination, psychological assessment and review of current chart and previous records
 - Evaluates laboratory results, EKG's, CXR's, and medical consultations, recognizing pertinent abnormalities related to the anesthetic management
 - Obtains informed consent, written if required by the institution's protocol
 - Determines the appropriate ASA classification
 - Records a pre-anesthetic note on care plan
 - Discusses care plan with CRNA and orders appropriate pre-anesthetic medications
2. Utilizing pre-anesthetic assessment, prepares a written anesthesia plan for each patient, including choice of anesthetic and technique, fluid requirements or/and type of airway management

3. Formulates an anesthetic plan based on didactic knowledge and independent research, correlating theory to clinical practice
 - Researches the information obtained during pre-anesthetic assessment, and the anesthetic considerations of the proposed surgical procedure
 - Develops an alternative plan
 - Considers the position of the patient and the anesthetist during anesthetic management
4. Discusses plan with instructor in an organized and knowledgeable fashion
5. Assembles routine and special equipment and appropriate drugs prior to starting each anesthetic
 - Cart is clean, organized and stocked
 - Has suction available and functioning for each anesthetic
6. Checks all equipment for proper function and is familiar with its use
7. Exhibits a knowledge of the most commonly used drugs in anesthesia

II. INDUCTION

1. Prepares the patient for induction with minimal assistance
 - Positions the patients on the operating room table
 - Applies appropriate monitors
2. Assists in placement of regional anesthetic utilizing appropriate sterile technique
3. Follows the routine steps of inductions with assistance
4. Initiates an organized, time efficient, and accurate induction
5. Determines the proper time for intubation
6. Positions patients for optimum safety and surgical accessibility

III. MAINTENANCE

1. Monitors the BP, pulse, EKG, respiratory rate, breath sounds, ETCO₂, temperature and general appearance of each patient, utilizing all senses to gain a complete assessment of the patient's condition
 - Monitors systolic, diastolic, pulse pressure, and mean pressure
 - Monitors the rate, quality and rhythm of the pulse utilizing precordial or esophageal stethoscopes
 - Monitors and interprets EKG rhythms
 - Monitors the ETCO₂ pattern and value
 - Monitors the temperature by the appropriate method (oral, nasal, rectal axillary or skin)
 - Monitors the bispectral index (BIS) and understands its application to the anesthetic process
2. Recognizes changes in the monitored parameters
3. Correlates the information obtained through monitoring to the depth of anesthesia, the surgical procedure, the effects of the various anesthetic agents the principles of physiology, and pathophysiology
4. Calculates the fluid requirements based on a sound didactic knowledge of fluid replacement therapy, for the surgical patient
 - Monitors urine output and correlates it with the amount of fluid infused, state of hydration and type of surgery to maintain fluid and electrolyte balance
 - Monitors blood loss and recognized the need for replacement when indicated
5. Tailors replacement therapy to the individual patient

6. Maintains an appropriate level of anesthesia for general, regional or monitored anesthesia care utilizing inhalational agents, narcotics, local anesthetic, muscle relaxants, and accessory anesthetic agents, alone or in combination
 - Correlates degree of neuromuscular block with twitch, tetanus, fade and post-tetanic facilitation
7. Recognizes significant events during intra operative management and discusses these with instructor
8. Completes the total anesthetic record by the end of the case
 - Emphasizes legibility, accuracy and completeness in charting

IV. EMERGENCY

1. Follows the routine steps of emergence in the appropriate sequence
 - Times emergence to correlate with the completion of the surgical procedures
2. Assesses the level of consciousness and respiratory adequacy with assistance
3. Administers neuromuscular and narcotic reversal drugs with assistance
4. Extubates with proper technique
5. Recognizes and initiates treatment of emergence complications
6. Determines proper and safe time for transport of patient to the designated recovery area (i.e. PACU, SDS)
7. Gives accurate and concise report to the designated recovery area nurse
8. Conducts a post-anesthesia visit on each patient
 - Notes the post-anesthesia course in the chart including anesthetic complications not evident at the termination of the anesthetic
 - Communicates the progress of the patient to the CRNA and/or MDA for follow up if necessary

V. COMMUNICATION AND PROFESSIONALISM

1. Demonstrates the ability to work as a member of the surgical team
 - Communicates effectively with peers, physicians, OR personnel, faculty and patients
 - Displays appropriate confidence level
2. Considers the patient's comfort, safety, and emotional needs
3. Gives an accurate verbal report to the instructor
 - Asks appropriate questions
 - Seeks help as needed
4. Cooperates and accepts constructive critiques with a positive and professional attitude
5. Can adapt to changes in routines and functions effectively under stress
6. Makes decisions based on theoretical knowledge and clinical experience
7. Demonstrates a professional commitment by good attendance and punctuality

YEAR 2, SEMESTER 4

At the completion of the fourth semester, the student registered nurse anesthetist will be able to meet the following objectives:

I. READINESS/PREPARATION FOR CLINICAL

1. Takes a pertinent health history, does a thorough chart review, and a relevant pre-anesthetic physical examination during the pre-anesthetic visit

2. Analyzes the information obtained and confers with CRNA
3. Develops an anesthetic plan taking into consideration the pre-anesthesia finding and the type of surgical procedure
 - Identifies particular areas important to anesthetic management
 - Applies theoretical knowledge to the plan
 - Considers regional anesthesia
4. Chooses an appropriate anesthetic technique and agent for the individual patient based on theoretical knowledge of anesthesia and knowledge of the particular surgical procedure
 - Chooses a variety of anesthetic methods and techniques
5. Applies a theoretical knowledge of the various types of intubations in determining the appropriate techniques for the individual patient
6. Demonstrates a beginning skill in managing increasingly complex cases and is aware of the specific needs of each type of case
7. Begins to identify potential problems and hazards for a particular case
8. Develops a plan for emergence and post anesthesia management of the individual patient
9. Selects the appropriate equipment and is familiar with its use
 - Organizes the cart and equipment set-up
 - Checks the equipment for proper functioning
10. Prepares the necessary anesthetic and accessory drugs
 - Exhibits a working knowledge of all the common anesthetic agents

II. INDUCTION

1. Organizes the induction of anesthesia and initiates a smooth anesthesia with speed, accuracy and minimal assistance on ASA I and II patients
 - Recognizes the relative priorities for the various aspects of induction
 - Asks for assistance during induction if indicated
2. Individualize drug dosages in accordance with patient requirements
3. Assists with placement of arterial catheter for continuous blood pressure monitoring
4. Demonstrates the ability to safely place regional anesthetic with assistance from clinical instructor

III. MAINTENANCE

1. Provides an appropriate level of anesthesia throughout the procedure
2. Skillfully monitors routine parameters of the patient requirements
3. Utilizes various types of anesthetic agents
4. Recognizes and responds to the physiological effects of anesthesia
 - Recognizes and responds quickly to adverse patient responses to anesthesia
 - Seeks assistance when indicated
5. Determines when accessory drugs are indicated and employs these agents based on theoretical knowledge
6. Applies a knowledge of drug interactions in utilizing drug combinations
7. Demonstrates an understanding of fluid and electrolyte management in anesthesia based on the needs of the individual patients
 - Calculates fluid replacement and correlates IV's, UO, and blood loss
 - Alters fluid management plan to correspond with individualized patient requirements and surgical events
8. Demonstrates an understanding of charting principles by accurate and complete documentation on

the anesthetic record

9. Handles maintenance of ASA I and II patients with little assistance

IV. EMERGENCY

1. Utilizes appropriate sequence and timing of emergence to correspond with completion of the surgical procedure
2. Accurately assesses the level of consciousness or level of sensory block based on response to verbal and painful stimuli
3. Accurately assess respiratory adequacy based on respiratory rate, tidal volume, chest movement and the effects of the anesthetic agents
4. Recognizes and treats emergence complications
5. Safely transports patients to the designated recovery area (i.e. PACU, SDS)
6. Assesses patient's needs in the designated recovery area including mechanical ventilation, respiratory adequacy, need for pain medication and laboratory tests
7. Makes a post-anesthesia evaluation on each patient and completes accurate documentation.
 - Recognizes and reports post-anesthesia complications appropriately

V. COMMUNICATION AND PROFESSIONALISM

1. Demonstrates the ability to work as a team member by displaying a mature and professional attitude, effective communication skill, appropriate confidence and sincere willingness to cooperate and accept instruction
2. Recognizes capabilities and limitations and asks for assistance appropriately
3. Makes appropriate decisions that are based on sound anesthetic principles
4. Works effectively under stress
5. Demonstrates a professional commitment by good attendance and punctuality

YEAR 2, SEMESTER 5

At the completion of the fifth semester, the student registered nurse anesthetist will be able to meet the following objectives:

I. READINESS/PREPARATION FOR CLINICAL

1. Takes a pertinent health history, does a thorough chart review, and a relevant pre-anesthetic physical examination during the pre-anesthetic visit
2. Analyzes the information obtained and confers with CRNA
3. Develops an anesthetic plan taking into consideration the pre-anesthetic findings and the type of surgical procedure
 - Identifies particular areas important to anesthetic management
 - Applies theoretical knowledge to the plan
4. Chooses an appropriate anesthetic agent for the individual patient based on theoretical knowledge of anesthesia and knowledge of the particular surgical procedure.
 - Chooses a variety of anesthetic methods and techniques
5. Applies a theoretical knowledge of the various types of intubations in determining the appropriate techniques for the individual patient

6. Demonstrates the ability to manage increasingly complex cases and is aware of the specific needs of each type of case
7. Identifies potential problems and hazards for a particular patient/case
8. Develops a plan for emergence and post anesthesia management of the individual patient and follows through with that plan in an organized and smooth method
9. Selects the appropriate equipment and is familiar with its use
 - Organizes the cart and equipment set-up
 - Checks the equipment for proper functioning
10. Prepares the necessary anesthetic and accessory drugs
 - Exhibits a working knowledge of all the common anesthetic agents

II. INDUCTION

1. Organizes the induction of anesthesia and initiates a smooth anesthesia with speed, accuracy and minimal assistance on ASA I, II, and III routine and emergent patients
 - Recognizes the relative priorities for the various aspects of induction
 - Requires little or no assistance during induction though seeks it as necessary
2. Individualized drug dosages in accordance with patient requirements
3. Places intra-arterial monitoring lines with minimal assistance
4. Places CVP lines with assistance from clinical instructor

III. MAINTENANCE

1. Provides an appropriate level of anesthesia throughout the procedure
2. Skillfully monitors routine parameters of the patient requirements
3. Monitors and understands ABP and CVP monitoring as it relates to surgical case type and patient ASA status and underlying pre-existing conditions
4. Utilizes various types of anesthetic agents
5. Recognizes and responds to the physiological effects of anesthesia
 - Recognizes and responds quickly to adverse patient responses to anesthesia
 - Seeks assistance when indicated
6. Determines when accessory drugs are indicated and employ these agents based on theoretical knowledge
7. Applies a knowledge of drug interactions in utilizing drug combinations
8. Demonstrates an understanding of fluid and electrolyte management in anesthesia based on the needs of the individual patients
 - Calculates fluid replacement and correlates IV's, UO, and blood loss
 - Alters fluid management plan to correspond with individualized patient

IV. EMERGENCE

1. Utilizes appropriate sequence and timing of emergence to correspond with completion of the surgical procedure
2. Accurately assesses the level of consciousness or level or sensory block based on response to verbal and painful stimuli
3. Accurately assess respiratory adequacy based on respiratory rate, tidal volume, chest movement and the effects of the anesthetic agents
4. Recognizes and treats emergence complications

5. Safely transports patients to the designated recovery area (i.e. PACU, SDS)
6. Assesses patient's needs in the designated recovery area including mechanical ventilation, respiratory adequacy, need for pain medication and laboratory tests
7. Makes a post-anesthesia evaluation on each patient and completes accurate documentation.
 - Recognizes and reports post-anesthesia complications appropriately

V. COMMUNICATION AND PROFESSIONALISM

1. Demonstrates the ability to work as a team member by displaying a mature and professional attitude, effective communication skill, appropriate confidence and sincere willingness to cooperate and accept instruction
2. Recognizes capabilities and limitations and asks for assistance appropriately
3. Makes appropriate decisions that are based on sound anesthetic principles
4. Works effectively under stress
5. Demonstrates a professional commitment by good attendance and punctuality

YEAR 2, SEMESTER 6

At the completion of the sixth semester, the student registered nurse anesthetist will be able to meet the following objectives:

I. READINESS/PREPARATION FOR CLINICAL

1. Takes a complete and pertinent health history, does a thorough chart review, and a relevant pre-anesthetic physical examination during the pre-anesthetic visit
2. Analyzes the information obtained and confers with CRNA
3. Develops an anesthetic plan taking into consideration the pre-anesthesia finding and the type of surgical procedure
 - Identifies particular areas important to anesthetic management
 - Applies theoretical knowledge to the plan
4. Chooses an appropriate anesthetic agent for the individual patient based on theoretical knowledge of anesthesia and knowledge of the particular surgical procedure
 - Chooses a variety of anesthetic methods and techniques
5. Applies a theoretical knowledge of the various types of intubations in determining the appropriate techniques for the individual patient
6. Demonstrates an ability to manage increasingly complex cases and is aware of the specific needs of each type of case
7. Identifies potential problems and hazards for a particular patient/case
8. Develops a plan for emergence and post anesthesia management of the individual patient and follows through with that plan in an organized and smooth method
9. Selects the appropriate equipment and is familiar with its use
 - Organizes the cart and equipment set-up
 - Checks the equipment for proper functioning
10. Prepares the necessary anesthetic and accessory drugs
 - Exhibits a working knowledge of all the common anesthetic agents

II. INDUCTION

1. Organizes the induction of anesthesia and initiates a smooth anesthesia with speed, accuracy and minimal assistance on ASA I, II, III, and IV patients and with special emphasis on the patient undergoing cardiac surgery
 - Recognizes the relative priorities for the various aspects of induction
 - Requires little or no assistance during induction or placement of regional block
2. Individualized drug dosages in accordance with patient requirements
3. Places intra-arterial lines with minimal assistance
4. Places CVP catheters with assistance from clinical instructor

III. MAINTENANCE

1. Provides an appropriate level of anesthesia throughout the procedure
2. Skillfully monitors routine parameters of the patient requirements
3. Monitors and understands ABP, CVP, PA, LVEDP, and other invasive monitoring techniques, particularly as they relate to the cardiac patient
4. Utilizes various types of anesthetic agents
5. Recognizes and responds to the physiological effects of anesthesia
 - Recognizes and responds quickly to adverse patient responses to anesthesia
 - Seeks assistance when indicated
6. Determines when accessory drugs are indicated and employ these agents based on theoretical knowledge
7. Applies a knowledge of drug interactions in utilizing drug combinations
8. Demonstrates an understanding of fluid and electrolyte management in anesthesia based on the needs of the individual patients
 - Calculates fluid replacement and correlates IV's, UO, and blood loss
 - Alters fluid management plan to correspond with individualized patient requirements and surgical events
9. Demonstrates an understanding of charting principles by accurate and complete documentation on the anesthetic record
10. Handles maintenance of ASA I, II, III, and IV patients for routine and emergent cases with little assistance

IV. EMERGENCY

1. Utilizes appropriate sequence and timing of emergence to correspond to completion of the surgical procedure
2. Accurately assesses the level of consciousness based on response to verbal and painful stimuli
3. Accurately assess respiratory adequacy based on respiratory rate, tidal volume, chest movement and the effects of the anesthetic agents
4. Recognizes and treats emergence complications
5. Safely transports patients to the designated recovery area (i.e. PACU, SDS, critical care unit)
6. Assesses patients needs in the designated recovery area including mechanical ventilation, respiratory adequacy, need for pain medication and laboratory tests
7. Makes a post-anesthesia evaluation on each patient and completes accurate documentation.
 - Recognizes and reports post-anesthesia complications appropriately

V. COMMUNICATION AND PROFESSIONALISM

1. Demonstrates the ability to work as a team member by displaying a mature and professional attitude, effective communication skill, appropriate confidence and sincere willingness to cooperate and accept instruction
2. Recognizes capabilities and limitations and asks for assistance appropriately
3. Makes appropriate decisions that are based on sound anesthetic principles
4. Works effectively under stress
5. Demonstrates a professional commitment by good attendance and punctuality

YEAR 3, SEMESTER 7

At the completion of the final semester of clinical experience, the student registered nurse anesthetist will be able to meet the following objectives of the program:

1. Perform a pre-anesthetic interview and physical assessment using patient history, physical examination, review of medical records, and appropriate laboratory data.
2. Develop an appropriate anesthesia care plan consistent with the overall medical and nursing regimen and established guidelines, utilizing appropriate principles of basic and behavioral sciences in protecting patients from iatrogenic complications.
3. Administer physiologically sound anesthetics to patients of all ages and physical status categories utilizing the principles of general and regional anesthesia as they apply to the diagnostic, operative and physiologic condition of the patient.
4. Perform comprehensive and appropriate equipment checks and position or supervise positioning of patients to assure optimal physiologic function and patient safety.
5. Recognize and evaluate physiologic responses to the anesthetic, implementing appropriate action that reflects the use of sound physiologic and pharmacologic principles, referring to a physician those responses beyond the nurse anesthetist's ability to manage consistent with practice standards and policies.
6. Place, use and interpret a broad variety of monitoring modalities including electronic and invasive monitors, taking appropriate action based on sound principle of anesthesia management.
7. Evaluate the post-anesthetic course of the patient and recommend a course of action directed toward correcting any anesthesia-related complications.
8. Serve as a resource person, team leader or team member, in the areas of acute care, cardiopulmonary resuscitation, respiratory therapy and fluid management and assist others to expand their knowledge in these areas.
9. Perform within appropriate medical, legal, and ethical standards of anesthesia practice, accepting responsibility and accountability for own practice, recognizing personal and professional strengths and limitations, and taking appropriate actions consistent with valid self-awareness.
10. Demonstrate active professional commitment and involvement in the state organization for nurse anesthetists, and, active commitment and involvement in quality management activities.

Clinical Affiliations

Students rotate to various hospitals throughout the program. Affiliations are designed to provide a variety of clinical experiences and to increase the breadth and depth of the clinical learning experience. Clinical affiliates include:

- Altru Health System, Grand Forks, ND
- Altru Specialty Center, Grand Forks, ND
- CHI St. Francis Health Care Campus, Breckenridge, MN
- Essentia Health West, Fargo, ND
- Essentia Health – St. Mary's Regional Medical Center, Detroit Lakes, MN
- Essentia Health East/St. Mary's Medical Center, Duluth, MN
- Jamestown Regional Medical Center, Jamestown, ND
- RiverView Hospital, Crookston, MN
- Sanford Bemidji Medical Center, Bemidji, MN
- Sanford Health, Bismarck, ND
- Sanford Medical Center Fargo, Fargo, ND
- Sanford Medical Center Broadway, Fargo, ND
- Sanford Thief River Falls Medical Center, Thief River Falls, MN
- Trinity Health, Minot, ND
- Veteran's Administration Medical Center – Fargo, Fargo, ND

Clinical Supervision of Students

The College and University maintain written agreements with all clinical agencies with regard to scheduling students to obtain clinical experience. These contracts are reviewed on a regular basis, their currency being the responsibility of the Dean of the College of Nursing and Professional Disciplines. In the clinical environment, students are supervised, mentored and directed by individuals as established in the agency agreement. Individuals that may be utilized to meet the educational objectives of the program may include anesthesiologists, certified registered nurse anesthetists and other credentialed professionals.

While practicing in anesthetizing areas, clinical supervision of SRNAs is restricted to CRNA's and/or anesthesiologists with institutional staff privileges who are immediately available in all clinical areas. Graduate Registered Nurse Anesthetists (GRNA's) who are not yet certified and physician residents may participate in the training of Nurse Anesthesia Students, but those individuals may not supervise a SRNA.

The clinical supervision ratio of students to instructors is 1:1 at all clinical sites affiliated with the UND Nurse Anesthesia Program. A CRNA clinical coordinator is assigned at each clinical affiliation to serve as the primary student contact person and student resource. A *UND Clinical Preceptor Handbook* is provided to each clinical coordinator at each affiliate clinical site. Clinical coordinators have several responsibilities, which include but are not limited to:

- Serve as a liaison between the affiliate site and the UND Nurse Anesthesia Program.
- Convey suggestions from their clinical site for program improvement or enrichment.
- Sit on the Nurse Anesthesia Admissions Sub-Committee.
- Provide on-going communication, guidelines and feedback to students assigned to clinical site.
- Sit on the Nurse Anesthesia Program Advisory Committee.

- Provide case assignments to students.
- Monitor student professionalism, attendance, and clinical performance.
- Inform program faculty of any student performance that is below average, unsatisfactory, or unprofessional.
- Function as second-line problem resolution if dispute arises between student and clinical faculty.

Student Supervision Outside Anesthetizing Areas

Students may participate in educational activities involving the non-anesthetizing duties of a Nurse Anesthetist. These activities may include, but are not limited to, postoperative rounds, IV starts and resuscitative services. Students working in non-anesthetizing areas may be supervised by credentialed experts who are authorized by their institution to assume responsibility for the SRNA. Students responding to cardiac or respiratory arrests are required to do so under the direct supervision of a credentialed expert who is physically present. Individual clinical affiliate policies/procedures will dictate appropriate supervision of students for other activities, such as IV starts, etc.

Clinical Site Review

To ensure high quality clinical experiences for students, annual visits by Program faculty, Assistant Program Director and/or Program Director will be made to evaluate clinical sites. Written evaluation tools will be utilized and results shared with the site clinical coordinator. Both the program faculty evaluator and clinical coordinator are required to acknowledge reviewing the results of the site evaluation by their signatures. Documentation of these visits will be maintained in the Program office.

Clinical Assignments & Rotations

Students gain anesthesia experiences in a variety of surgical, obstetrical, radiological and outpatient services. Students are generally scheduled to at least one clinical sites during their first year in the program. Students receive approximately four days of clinical experience during the summer session beginning in later June or early July and during the Fall semester beginning in September following the didactic portion of that semester.

During the second and third years of the program, the student will rotate through not less than two, and usually not more than five clinical sites. Individual clinical rotations are determined by the Program faculty, with assignments made to maximize the student's opportunity to experience as wide a range of surgical cases and anesthesia techniques as possible. A semester clinical assignment may be split, which entails a student being assigned at two clinical sites for the semester. Students are responsible for obtaining suitable housing at each clinical assignment.

Preoperative Consultation by CRNA or Physician

A thorough pre-operative evaluation is required prior to any anesthetic administration. With the exception of pre-induction administration of drugs (as may be accepted protocol), students are not permitted to begin the conduct of anesthesia, general or regional anesthesia, without a preoperative consult with a qualified CRNA or physician anesthesiologist.

Postoperative Patient Assessments

Students are required to complete a postoperative assessment on all patients that the student anesthetizes except for ambulatory care patients and early discharges. Whenever possible, ambulatory care and early discharge patients should also be seen and assessed postoperatively by students. Individualized, problem-oriented patient assessment are important to ensure optimal postoperative recovery and offers the student valuable feedback on their delivery of anesthesia services. The postoperative assessment is to be noted on the anesthesia care plan when appropriate, shared with the clinical preceptor, and documented in the student's Typhon Group NAST clinical case tracking record.

Reporting Complications

During the course of anesthesia conduct, or during other various activities in which the student may engage during the course of his/her program, events may arise which place the patient or members of the health care team at risk. In the event that any such untoward events arise, during or irrespective of the conduct of the anesthetic, which are an imminent or potential threat to the well-being of the patient or any health care team member, the student is required to inform his/her assigned preceptor immediately.

Any patient death or major complication involving a student, or any injury incurred by a student requires an initial verbal notification to the Program Director of the Nurse Anesthesia Program. When asked to do so, students will promptly and properly document occurrences, which may include the completion of incident reports or other documents that may be required by the University and the clinical affiliate.

Safe Learning Environment

The UND Nurse Anesthesia Program is committed to providing a safe, supportive, and respectful learning environment for students. The environment will be free of belittlement, humiliation and/or hostility.

Examples of student mistreatment may include (but not limited to) being:

- Verbally abusing, belittling, or humiliating a student.
- Intentionally singling out a student for arbitrary treatment that could be perceived as punitive.
- Unwanted exclusion from reasonable learning opportunities.

Students should report concerns about perceived mistreatment within their learning environment to their clinical site coordinator and Assistant Program Director or Program Director.

Call Experience

As part of clinical practicum, students are assigned to call experiences during their second and third year in the program. The purpose of such assignments is to provide students with opportunities to gain experience in the management of emergency surgical cases, to further develop critical thinking and decision making skills, and to participate as an anesthesia team member in a surgical setting unique from day to day practice.

Assignment to call generally begins early in the spring semester of the student's second year in the program and is assigned by the clinical coordinator in conjunction with program faculty. Call is assigned as one shift per week. Students will need to complete a total of six Saturday call shifts during semesters 5-7. One Saturday shift needs to be during the rural clinical rotation. Sunday is considered the day off after a

Saturday call shift. Sunday call is not assigned. Students are assigned on call with a CRNA or anesthesiologist who is responsible for determining the level of independent practice allowed the student. At no time are students allowed to be the sole anesthesia care-giver, meaning that a CRNA or anesthesiologist preceptor must be immediately available in the operating area for consultation.

Based on varied department policies regarding CRNA call, students may stay in-house, be provided with a beeper, or called in from home. If a student is on call, they will be provided the day off after call. This reflects a safety concern for students working late in the evening or night and then performing clinical activities the following morning.

Students are limited to a maximum of 24 hours for a scheduled on-call shift. In addition, at no time may a student provide direct patient care for a period longer than 16 continuous hours.

Out of concern for patient safety and respect for student welfare, if at any time the student or clinical preceptor questions the student's ability to provide safe and effective anesthesia care to patients due to an extended time commitment or due to fatigue, the student will be immediately removed from patient care and released from the clinical experience for the day.

There will be no call shifts assigned during clinical weeks that are 3 days or less. The exception would be if the student chooses to take call on the Saturday of a short week. Considerations unique to anesthesia department call that may impact the student's role and responsibility during the call experience are clarified through discussions between the clinical coordinator and the Director or Assistant Director of the program.

Clinical Evaluation Procedure

Students receive their first summative clinical performance evaluation at the completion of their first Summer semester. Thereafter, as clinical participation increases students receive formative clinical evaluations at mid-term, followed by a summative clinical evaluation at the end of the semester.

Student self-evaluations are required each time a formative and summative clinical evaluation is completed by clinical faculty. Mid-term and end of semester clinical performance evaluations are based on clinical objectives consistent with the student's level in the program and are prepared by members of the clinical faculty through review of daily formative evaluations and personal interactions with the student. Daily performance evaluation records are completed by CRNA preceptors and are kept on file in the clinical areas of all clinical affiliates. Students receive daily feedback on their clinical performance (i.e., written and/or oral).

Evaluations are forwarded by each student to the Assistant Director's office at the end of each semester for review and filing. In order to program student's clinical progress, photo copies of each mid-term and end-of-term evaluation from all clinical experiences must be retained in individual 3-ring binders. The evaluations should be made available by students to each clinical coordinator as students move from clinical site to clinical site. Students sign a consent form titled *Intersite Communication Release* permitting the sharing of student clinical evaluative information amongst clinical coordinators.

The original copy of these evaluations is forwarded to the Assistant Program Director from each clinical site for review and placement in the student's permanent file. Information on the evaluations is reviewed by the clinical coordinator only and is used for assessment and planning purposes should the need for focusing on specific clinical concerns exist.

Students are provided with self-evaluation forms for completion prior to the mid-term formative and end-of-semester summative evaluation conferences and are intended to reflect the student's perception of his/her progress. A photocopy of these evaluations must also be placed in the student's three-ring binder. The original will be forwarded to the Assistant Program Director along with the original clinical coordinator evaluation form.

The self-evaluation and faculty evaluation are discussed simultaneously at the evaluation conference. Specific examples of clinical performance are cited in each evaluation, along with strengths, weaknesses, and suggestions and goals for improvement during the next evaluation period. Students are required to sign their evaluations after reading them, and are free to make written comments. These evaluations become a permanent part of the student's record.

Clinical Non-Progression

Clinical faculty may suggest/request that a student receives a clinical performance evaluation at any time, if they feel it is indicated. If a student is experiencing difficulty, he/she should be observed by the clinical coordinator and selected preceptors to evaluate the student's performance individually and make recommendations to the clinical coordinator.

The Assistant Program Director and/or Program Director are informed of, and involved in this process from the onset. They work cooperatively with the clinical coordinator and CRNA faculty to identify and articulate perceived problems, participate during meetings with the student to formulate a Student Success plan, which includes the development of objectives and strategies to accomplish specific goals and establish a time frame for resolving deficiencies.

Early identification of concerns (deficiencies) is important, as is immediate attention to developing strategies to confront such matters. Corrective processes, including appropriate documentation, are initiated whenever necessary and students are afforded adequate time to correct identified deficiencies. If such processes are initiated prior to the student receiving his/her mid-term formative evaluation, and if the student has not satisfactorily met criteria established to overcome the clinical deficiencies by mid-term, then a mid-term deficiency is reported for the course. The student then has the remainder of the semester to meet established objectives and perform in a satisfactory manner. In the event that the student does not correct the deficiencies by the end of the semester, then he/she will receive a grade of "U" in the clinical course, and will not be allowed to progress in anesthesia course work.

The student will be placed on clinical probation, but may be allowed to repeat the clinical rotation. If a repeat of the clinical rotation is unsuccessful, the student is dismissed from the program. If the student is successful in his/her repeat of a clinical rotation, then a grade of "S" is awarded and the student is counseled by the Director regarding a required extension of the program. All aspects of this process are documented, with all documentation becoming part of the student's file. While on clinical probation, a student's clinical performance will be formally evaluated at agreed upon intervals, usually weekly or every two weeks, so that the student is afforded regular opportunities to review documentation and discuss his/her progress or lack thereof.

Clinical faculty should complete daily formative evaluations, including specific notes regarding performance on each case. Specific areas of concern, as established at the onset of the process, should be indicated in these records. Daily records will be thorough, accurate, and concise so that counseling of the student is clear. The clinical coordinator and program faculty will meet with the student at the predetermined intervals providing feedback and counsel. During the probationary period, the student is also responsible for completing self-evaluations as requested by Program Director.

Immediate dismissal from the program may occur for the following reasons: unethical or unprofessional conduct associated with clinical assignments including dishonesty; behaviors that threaten patient safety and well-being; violation of professional standards; any violation of the substance abuse policy; reporting for duty under the influence of any substance which impairs the student's ability to perform his/her clinical tasks; violation of policies, rules and regulations of the hospital or anesthesia department to which the student is assigned for clinical practice; falsification of documents; or unexplained absences or tardiness.

Care Plans & Daily Clinical Evaluations

Each student, during his or her first year and until the Fall semester of their second year, will complete a comprehensive anesthesia plan of care for the largest assigned case of the day. The student's clinical preceptor will be provided a copy of it and the plan of care will be discussed with the preceptor prior to the administration of anesthesia.

Clinical care plans will be completed as follows:

- Summer Year 1 and Fall Year 2: Required daily
- Spring Year 2: 20 required throughout semester
- Summer Year 2: 15 required throughout semester
- Fall Year 3: 10 required throughout semester

These care plans should be completed on complex and unusual cases. The student is required to complete 5 of their semester clinical care plans during their heart rotation. A daily evaluation is required for each and every clinical day on the weekly evaluation form. Daily Care Plan, Weekly Clinical Evaluation, and Evaluation of Student Clinical Performance forms are all available on the website.

Care plans are to be developed utilizing appropriate references and information, including patient pre-anesthetic assessment and interview (when possible). It is required that the plan will include the application of basic/advanced principles of anesthesia commensurate with the student's level of knowledge and clinical experience, as set forth in clinical objectives. Students who do not provide a written plan of care may be removed from the clinical setting until requirements are met.

When the student is assigned to an operating room in which the full complement of cases for the day is known, and for which the student has access to the patient (for interview/assessment, etc.), then the student is expected to develop and discuss a plan for each case with the preceptor. In situations, such as same-day-surgery environment, emergency cases, added cases, change of operating room, etc, where the student may have neither time nor access to the patient to complete written care plans, then, at the least, the student will discuss the plan of care with the preceptor before the commencement of anesthesia and the preceptor will so note on the daily evaluation that such anesthesia plans were discussed. The student anesthetist assumes the responsibility of providing the clinical preceptor with the evaluation form to complete and turning in care plans and weekly evaluation forms to the Assistant Director upon completion of each semester.

Student Clinical Case Records

As required by the National Board of Certification and Recertification for Nurse Anesthetists, the graduating student is required to have fulfilled specific clinical requirements, including, but not limited to, a minimum number of anesthetics administered. Each student is therefore required to track their daily cases using the Typhon Group NAST. Students are encouraged to input their case data on a daily basis to ensure accuracy. At a minimum, case data needs to be entered every 2 weeks. If a student does not enter their data every 2 weeks, the student may be removed from clinicals until the data is entered. Case types and clinical information will be reviewed frequently by program faculty.

Students will be oriented to this tracking system at the beginning of their program and will be afforded ongoing technical support from Typhon Group. There is a small monthly cost associated with this tracking system that the student will be responsible for. More information will be provided to the students regarding Typhon Group.

In-Service Conferences

Clinical case conferences, quality assurance meetings and/or continuing education programs are held regularly at most affiliate institutions. Students are required to attend if clinical obligations permit.

NDANA State Educational Meetings: Students are required to attend both the Fall and Spring NDANA state educational meetings while enrolled in the nurse anesthesia program. Professional behavior and attendance at all educational sessions during these meetings are mandatory. The state association (NDANA) provides some financial assistance for students to attend meetings.

Special permission for an excused absence from these meetings must be requested prior to the required commitment from the Program Director or designee. Students absent from any of the above meetings will be required to complete additional assigned readings and/or other written work as determined by the Program Director.

AANA Educational Meetings: Students are allowed and encouraged to attend the Spring AANA Mid-Year Assembly meeting that is held in Washington DC each year. Some financial assistance may be available from the NDANA and from the Nurse Anesthesia Program. Students are also allowed to attend the AANA Annual Congress held at various locations in August or September of each year. Financial support may be available through the AANA for this meeting. Students are excused from clinical and class for the scheduled meeting days plus one travel day prior to and following the meeting. Professional behavior and attendance at the educational sessions is mandatory.

Absence from Clinical

Excused Absence: Students are required to be in attendance at their assigned clinical site at all times, Monday-Friday, except following a call experience and/or during determined breaks and holidays. These determined breaks and holidays will be indicated to students on a calendar provided by the Program Administrators at the beginning of each semester. In addition, students will be granted 12 clinical release days to be used during the second and third year of clinicals. These clinical release days are to be used for thesis or independent project work, review course attendance, sick days, or personal days that the student may use at their discretion. Students may not “bank” clinical time and need to use their clinical release

days when absent from clinical experiences. Clinical release days may not be used in the last 3 weeks of the program without prior approval of the Assistant Program Director or Program Director.

Students are required to complete a Clinical Release request form prior to a planned absence from clinicals and must obtain approval for their planned absence from their clinical coordinator. In the event of an illness, the form may be completed after the student returns to the clinical site. All signed clinical request forms must be turned in to the Assistant Program Director or Program Director by the clinical coordinator. Any further absences, above and beyond the original twelve, may not be approved by the clinical coordinator and must be approved by Assistant Program Director or Program Director. Failure to follow this process may result in an unexcused absence.

Unexcused Absence: One unexcused or unapproved absence will result in a formal warning and will be counted as one of the students clinical release days. If the student's clinical release days have already been used, a program extension may be necessary. Two unexcused absences will result in failure of the course and subject the student to dismissal from the program. This may result in a program extension.

Maternity/Paternity Leave: Students must use clinical release days for maternity/paternity leave. Once clinical release days become depleted, the student must petition for a leave of absence. Due to the rigorous nature of anesthesia school, students may wish to consider postponing child bearing until after graduation.

Leave of Absence: In the case of an illness that depletes the student's clinical release days, or for other reasons, a personal leave of absence may be granted at the discretion of the Program Director. A leave of absence is designed to cover a short and unexpected illness or emergency. Due to the cumulative nature of the curriculum, in the case of longer illnesses or elective procedures it may be necessary for the student to resign and reapply to the program. Criteria for returning to the program after a leave of absence will be determined by the Program Director and the student's treating physician. However, the leave of absence shall extend no longer than a single calendar year. A student will normally be readmitted to the Program at the end of his/her leave of absence if the faculty believes the purpose of the leave of absence has been achieved. The student may be required to do preparatory work before reentry after a prolonged leave, or demonstrate current knowledge through examination or through other means upon re-entry. A leave of absence will require additional class and clinical days to meet graduation requirements. Therefore, the student does not graduate on time or participate in the Program graduation ceremony. The student must deplete their clinical release days prior to beginning a leave of absence. All missed time will be made up at the end of the program.

Clinical Removal Policy

Reference CNPD Department of Nursing Policies #234 and 234a. The primary responsibility of nursing students in clinical settings is the welfare of clients. For the purposes of this policy "removal from the clinical" shall mean the immediate removal of a student from direct client contact for that clinical day only.

A student exhibiting behaviors in the clinical setting which are deemed by the responsible clinical faculty member to be unprofessional or unsafe to the mental, emotional, or physical welfare of clients, staff, self, or others shall be subject to immediate removal from the clinical for that day. After one removal from the clinical setting, the clinical faculty member, together with the clinical coordinator and program administration must make a professional decision whether the behavior of the student is such that the student should be permanently removed from patient contact.

If a second removal from the clinical setting occurs, the student shall be permanently removed from patient contact in that course. Such removal shall result in immediate failure of the clinical course.

Within three class days after the second removal, a meeting with the supervising clinical faculty member, together with the clinical coordinator and program administration and a person of the student's choosing shall be held to review the removal decision. Following the meeting, a program faculty member shall place all appropriate documentation in the student's academic file (under clinical evaluations) and the department chair shall inform the Graduate Nursing Chair, Director of the Office of Student Services, Associate Dean, and the Dean of the removal.

An agency shall have the right to request of the faculty that a student be removed from the clinical agency because of performance, which is deemed unprofessional or unsafe to the mental, emotional, or physical welfare of clients, staff, self, or others. The agency may remove the student from client contact and notify the program administration.

Clinical Site Injuries/Exposures

Any industrial accident or accident on hospital grounds must be reported immediately to the proper CRNA or physician supervisor, as well as program administration, including completion of a Variance Report in accordance with CNPD Policy. If required, the student should seek immediate medical attention from the hospital in which the event occurred. Students must report any exposure to tuberculosis, meningitis, hepatitis, or other infectious/communicable diseases to the Assistant Program Director and clinical affiliate, as follow-up may be required.

It is mandatory that students report all needle stick injuries to both clinical affiliate and program administration immediately, and follow through with appropriate medical treatment. Written documentation will be required following any injuries or exposures during clinical experiences. Any documentation required by the clinical affiliate or university must be completed promptly. All required paperwork will be placed in the students program file.

VI. NON-CLINICAL STUDENT CONCERNS & PROCEDURES

Financial Aid Options

(See also [UND Academic Catalog](#) and [College of Nursing and Professional Disciplines Master's Programs in Nursing Student Handbook](#)) Currently the federal government is supporting the education of nurse anesthetists through the Nurse Anesthesia Traineeship Grant. Funds from this federal grant are available for use by anesthesia students only. Students are directed to the Program Director for the Nurse Anesthesia Program for eligibility and application information. Information relating to the availability of other federal aid programs, as well as sources of funding which are available from the university, is available in the Financial Aid Office (<https://und.edu/one-stop/financial-aid/index.html>).

Tuition and Fees

(See also [UND Academic Catalog](#)) In addition to Graduate School tuition and fees, all students enrolled in graduate studies in the College of Nursing and Professional Disciplines are assessed program fees, which are designated to support a variety of costs unique to clinical programs. Current university tuition and fees information (including current program fees) can be found at: <https://und.edu/one-stop/tuition-fees/index.html>.

Educational Resources

The university offers a wide range of support for both undergraduate and graduate students. Within the College of Nursing and Professional Disciplines (CNPD), the Office of Student Services is available to students for assistance with registration, progression, and student programs. In addition to computer labs located at various sites across campus, state-of-the-art computers are housed in the CNPD. Student Health and Counseling Services, the UND Health Sciences Library and the university's Chester Fritz Library are accessible to students. The Health Sciences Library has branches at the VA Hospital in Fargo, ND and the Q&R Clinic in Bismarck, ND, both cities in which the program has primary clinical sites. The Clinical Resource and Simulation Center (CRSC) houses a wide variety of models, audio-visual resource materials, and reserve texts, which are available for student use. All anesthesia-related equipment, models, resource texts, and audio-visual learning resources are indexed and cataloged, with a copy of the information provided to anesthesia students. The CRSC Manager and staff are readily available to assist faculty and students.

Student Employment Policy for Work Outside the Program

Students are highly discouraged from working while enrolled in the Program. Under no circumstances are SRNAs permitted to work as nurse anesthetists, by title or function, during enrollment in the Nurse Anesthesia Program as this is expressly forbidden by the North Dakota Nurse Practice Act. Violation of this policy will subject the SRNA to discipline, which may include dismissal from the Nurse Anesthesia Program and reporting of the incident to the North Dakota Board of Nursing.

Associate Membership in the AANA

Students are required to become associate members in the American Association of Nurse Anesthetists (AANA) and to maintain membership throughout their educational program. Associate membership in the AANA entitles a student to receive the [AANA Journal](#), [AANA NewsBulletin](#), and to attend national meetings at discounted costs. Application for membership in the AANA is processed during the Fall semester of the first year. The fee for this membership is paid by the student.

Professional Activities

Student attendance at meetings of the North Dakota Association of Nurse Anesthetists (NDANA) is viewed as an essential component of professionalism and is required of all students unless previous arrangements have been made with Program Administration. Students are encouraged to attend national meetings of the American Association of Nurse Anesthetists (AANA). Funds may be made available from a variety of sources to defray expenses. Students are also encouraged to consider membership in the North Dakota Nurses Association (NDNA) and specialty nursing organizations.

Professional Liability Insurance

The University of North Dakota College of Nursing and Professional Disciplines provides liability insurance for all students, on or off campus, each semester they are attending the College of Nursing and Professional Disciplines and involved in the clinical setting. Each student is covered up to \$1,000,000 for any one incident, and up to \$3,000,000 as a total of all claims within one calendar year period. Students are not covered by this liability insurance during personal volunteer work, working for pay or during self-employment. Students may, at their discretion, purchase individual liability insurance coverage.

Registered Nurse Licensure

Prior to acceptance into the program students are required to provide the College of Nursing and Professional Disciplines with evidence of a current and unencumbered licensure as a registered nurse in any state. Verification of this licensure is the responsibility of the CNPD Office of the Student Services and may include the use of a third party vendor. After entry into the program, students are required to provide evidence of on-going current licensure. Students enrolled in an approved, nationally accredited educational program within the state of North Dakota are exempt from the requirement for North Dakota licensure, but must maintain a current RN licensure from any state. Students are responsible for obtaining Minnesota licensure when appropriate and for maintaining current licensure within their state and will not be allowed to attend clinical experiences without the appropriate current RN license. Expiration dates for RN licensure are tracked through the Office of Student Services and may include the use of a third party vendor. Students are required to enter their expiration date into the Typhon Group NAST tracking system.

Verifications and Immunizations

All students admitted to the Nursing program, which includes Nurse Anesthesia, are required to provide documentation of current immunizations, verifications, and health insurance to the CNPD Department of Nursing approved vendor prior to beginning the program. Annual or periodic updates or re-certifications are required of all admitted students and must be completed prior to starting classes each semester and may

not expire during the semester. If verifications and immunizations are not completed by the beginning of classes (including clinical experiences), the student will not be allowed to attend classes until they are complete.

Specific to the Nurse Anesthesia program, students must have received the TDAP (Tetanus, Diphtheria, and Pertussis) booster within the past 10 years. Additionally, students must hold (and maintain) active American Heart Association certifications in Basic Life Support (BLS), Advanced Cardiac Life Support (ACLS) and Pediatric Advanced Life Support throughout the duration of their program. This is a requirement of the National Board of Certification and Recertification of Nurse Anesthetists (NBCRNA). While enrolled in the program, students will be given time off to attend classes in order to maintain these certifications. The AHA does offer online versions of these courses. Please see their website for further information (<http://www.onlineaha.org>).

Current immunization and verification requirements can be found through the CNPD Office of Student Services (<http://www.nursing.und.edu/student-services/>).

Clinical agencies may have requirements which include verifications other than those required by the College of Nursing & Professional Disciplines. Many clinical agencies ask that these verifications be completed in advance of the students' clinical placement and may result in additional costs to students. To avoid any delays in beginning clinical experiences, students should inquire what needs to be completed and then complete these verifications at least 6-8 weeks in advance of their clinical experience.

Program Calendar

A program calendar will be provided to students and clinical coordinators each semester to allow for professional and personal scheduling. The UND academic calendar is followed during the first year of the program. However during the second and third years of the program, the calendar will vary from the UND academic calendar.

During the second and third year in the program, students are allowed a predetermined number of clinical release days to be used at their discretion as described under Excused Absences. Students are encouraged to use these days to complete their independent project/case reports (or thesis if applicable) in a timely manner.

Tracking Student Committed Time

The Typhon Group NAST student tracking system will be used to monitor case information and student committed time while enrolled in the Nurse Anesthesia Program. Using these data, adjustments may be made to student workload to ensure that patient safety is never compromised and that student learning is optimized.

Information contained in this handbook undergoes periodic review and revision. Program faculty and students will be informed in a timely fashion of any amendments or changes.

VII. Student-Faculty Handbook Acknowledgement

University of North Dakota - College of Nursing and Professional Disciplines
Nurse Anesthesia Program
Reviewed August 2018

I have read the **2018-2019 UND Nurse Anesthesia Program (Master of Science) Student & Faculty Handbook** and agree to abide by the Policies and Procedures contained therein.

I understand that policies and procedures may change throughout the duration of my program of study and that I will be made aware of these changes by Program Faculty and held accountable to these policy and procedural changes.

Signature

Date

Printed Name