

University of Puerto Rico Medical Sciences Campus School of Nursing



Nurse Anesthesia Program

Policies and Procedures Manual

Doctor of Nursing Practice with Specialty in Anesthesia

Table of Contents

INTRODUCTION	4
POLICIES AND PROCEDURES CHANGES	4
INSTITUTIONAL OVERVIEW	5
ORGANIZATIONAL STRUCTURE.....	5
LEVELS OF DECISION-MAKING.....	5
ACCREDITATION	5
SCHOOL OF NURSING	6
SON ACCREDITATION	6
MISSION.....	6
VISION.....	6
PHILOSOPHY.....	6
SON GOALS.....	8
SON VALUES.....	8
SON GOVERNANCE STRUCTURE.....	8
ORGANIZATIONAL CHART.....	9
NURSE ANESTHESIA PROGRAM	10
DESCRIPTION.....	10
MISSION.....	10
GRADUATE PROFILE.....	10
GENERAL DESCRIPTION OF THE CURRICULUM.....	12
CONCEPTUAL MODEL – DOCTOR OF NURSING PRACTICE WITH SPECIALTY IN ANESTHESIA.....	13
CONTENTS ACCORDING TO AREAS ESTABLISHED BY NBCRNA.....	13
CURRICULAR SEQUENCE	14
COURSE DESCRIPTIONS.....	15
DNP LOCK STEP PROGRAM.....	18
PROGRAM-STUDENT COMMUNICATIONS.....	18
RIGHTS AND RESPONSIBILITIES	19
APPLICANTS.....	19
PATIENTS	19
FACULTY.....	19
STUDENTS.....	19
CONDUCTING AND AFFILIATING INSTITUTIONS.....	20
COUNCIL ON ACCREDITATION	21
NURSE ANESTHESIA PROGRAM POLICIES AND PROCEDURES	22
1. EQUAL OPPORTUNITY / NONDISCRIMINATORY POLICY.....	22
2. ADMISSIONS	22
3. REASONABLE ACCOMMODATION	25
4. ATTENDANCE AND AUTHORIZED LEAVE.....	25
5. DRESS CODE	28
6. EMPLOYMENT.....	28
7. WELLNESS.....	28
8. HANDLING OF CONTROLLED SUBSTANCES.....	28
9. ACCEPTABLE USE OF SOCIAL MEDIA	28
10. PROMOTION/PROGRESSION AND RETENTION CRITERIA	29
11. REPEATING COURSES AND PROGRAM COMPLETION.....	29
12. WITHDRAWAL/RESIGNATION.....	29
13. RE-ENTRY	30
14. TRANSFER	30
15. DISCIPLINARY ACTIONS	30

16. ACADEMIC PROBATION	32
17. ACADEMIC DISMISSAL.....	33
18. STUDENT EVALUATION AND PROMOTION COMMITTEE (SEPC).....	33
19. CLINICAL SUPERVISION.....	33
20. CLINICAL SUPERVISION RATIO.....	34
21. REQUIRED ANESTHESIA CASES	34
22. SCHEDULE CALL EXPERIENCE.....	34
23. EXPOSURE TO BLOOD OR BODY FLUIDS IN THE CLINICAL SETTING.....	34
24. TRAVEL REQUIREMENTS	34
25. SKILLS DEVELOPMENT LABORATORY	34
26. EXAMS.....	34
27. COMPREHENSIVE NURSE ANESTHESIA EXAMINATION (CE).....	36
28. AANA MEMBERSHIP	37
29. SELF-EVALUATION EXAMINATION (SEE)	37
30. NATIONAL CERTIFICATION EXAMINATION (NCE).....	38
31. GRADUATION POLICY.....	39
32. TECHNICAL STANDARDS.....	39
FACULTY	42
NURSE ANESTHESIA CLINICAL FACULTY RESPONSIBILITIES	42
NURSE ANESTHESIA CLINICAL COORDINATOR RESPONSIBILITIES	42
ANESTHESIA CLINICAL SUPERVISOR RESPONSIBILITIES	43
STUDENTS.....	44
EVALUATION.....	44
ACADEMIC CALENDAR	44
ADVISING.....	44
DEANSHIP FOR STUDENT AFFAIRS.....	44
STUDENT HEALTH SERVICES	45
SOCIAL AND CULTURAL ACTIVITIES.....	45
ATHLETIC ACTIVITIES.....	45
STUDENT HOUSING.....	46
FOOD SERVICES	46
CAMPUS GOVERNMENT AND STUDENT REPRESENTATION	46
LIABILITY INSURANCE.....	46
ANESTHESIA CASES RECORDS	46
CONFIDENTIALITY OF MEDICAL RECORDS AND HEALTH HISTORY INFORMATION (HIPAA).....	46
GRADUATES' EVALUATION OF THE NURSE ANESTHESIA PROGRAM	47
ALUMNI SELF-EVALUATION.....	47
EMPLOYERS' EVALUATION.....	47
CLINICAL TRAINING	48
CLINICAL CONFERENCES (INTEGRATED IN CLINICAL PRACTICE II, ANESTHESIA RESIDENCY I AND ANESTHESIA RESIDENCY II)	48
CLINICAL SITES	48
STUDENT DOCUMENTATION.....	49
CLINICAL ATTIRE AND UNIFORMS.....	49
CLINICAL EVALUATION.....	49
COUNTING CLINICAL EXPERIENCES	50
CLINICAL TRAINING DOCUMENTS	50
APPENDIX- DOCUMENTS FOR CLINICAL TRAINING	52
<i>Clinical Training Master Schedule</i>	<i>53</i>
<i>Criteria for Evaluation of Clinical Courses</i>	<i>54</i>
<i>Clinical Performance Evaluation Tool</i>	<i>56</i>
<i>Student's Daily Self Evaluation</i>	<i>58</i>
<i>Compliance Commitment with Policies and Procedures of the Nurse Anesthesia Program</i>	<i>59</i>

Introduction

The Policies and Procedures Manual of the Nurse Anesthesia Program at the University of Puerto Rico has been created with the intention to provide guidance and establish policies and procedures that govern any activity related to the program, its students and faculty. The policies and procedures have been established in accordance with the standards of the Council on Accreditation of Nurse Anesthesia Educational Programs (COA), scope with standards for nurse anesthesia practice and code of ethics, as well as the rules and regulations of the University of Puerto Rico, the parent institution, and applicable federal and local laws. The policies and procedures contained in this manual will be published in the Nurse Anesthesia Program's website.

Policies and Procedures Changes

The Nurse Anesthesia Program reserves the right to review and make policies and procedures changes according to the needs of its administration, faculty, students, University of Puerto Rico system, affiliating institutions, and COA standards. This manual is subject to review and change during its annual revision at the end of each academic year and at any given time during the academic year as necessary. Substantive changes are made through faculty approval process. Any change or modification will be notified to the academic community and its students immediately, prior to the implementation. The revised version will be made available in the program's website prior to the beginning of each academic year. The Nurse Anesthesia Program encourages its students and faculty to check this manual periodically to review policies and procedures. Please contact the program offices to assure that you have the updated information.

Institutional Overview

Organizational Structure

The Medical Sciences Campus (MSC) is part of the University of Puerto Rico (UPR) System, a multi-campus, state supported institution of higher education licensed by the Puerto Rico Post-Secondary Institutions Board (**JIPS**). The **President** is the Chief Executive Officer of the UPR System. He/she presides over the **University Board**, which is composed of the eleven campus chancellors, faculty representatives of each campus academic senate, student representatives, and the Central Administration Vice President for Academic Affairs and the directors of the Finance, Planning and Development, and Budget Offices. Law 1 of 1966, as amended, and the 2002 *UPR General Bylaws*, as amended, establish the structure of the University and its units.

Each campus is headed by a **chancellor**, who presides over the Administrative Board and Academic Senate. The MSC **Administrative Board** is composed of nine deans, one student representative, and two faculty representatives. The Directors of the Human Resources, Budget, and Legal Affairs Offices attend the meetings as regular guests. The MSC **Academic Senate** is the official deliberative forum of the academic community. It is composed of 36 senators elected by the faculty, 9 student senators, and 13 ex officio members (UPR President, MSC Chancellor, deans, the Director of the Library, and the Director of the Campus Counseling Office), as well as two regular guests (Faculty and Student Ombudspersons).

The Medical Sciences Campus is composed of the Schools of Medicine, Dental Medicine, Public Health, Pharmacy, Nursing, and Health Professions, along with the Deanship of Administration, Deanship for Student Affairs, and the Deanship for Academic Affairs. A dean, who represents the school in the Administrative Board and is an ex officio member of the Academic Senate, heads each campus school. All **schools** have at least one Associate Dean for Academic Affairs and an Associate or Assistant Dean for Student Affairs. Committee structure at each school varies, but all schools and all departments must have Personnel and Curriculum Committee.

Levels of Decision-Making

There are six basic levels of decision making at the institution, i.e., department, school, campus, presidency, University Board, and Board of Trustees, with several bodies intervening at each level depending on the issue at hand. At the school level, possible forums of discussion and decision-making are the various standing committees (personnel, curriculum, and administration, among others). At the campus level, the two main bodies are the Academic Senate and the Administrative Board. Academic matters such as the creation of new programs must go through channels up to the Board of Trustees, while other matters such as the campus *Assessment Plan* are developed by a campus standing committee and implemented without further referral outside the campus. Administrative matters are mostly decided at the school level once budgets have been assigned, but personnel actions such as promotions in rank, tenure, sabbaticals, and leaves of absence must be submitted to the Administrative Board for approval. The university budget is approved by the Board of Trustees. Once assigned, campus officials have authority as to how discretionary monies are spent. The Board of Trustees also decides on tuition, employee salaries and benefits, academic distinctions, and amendments to the *UPR General Bylaws*, among other issues. Levels of approval for most matters are stated in the *Bylaws*, certifications issued by the various bodies, or the president's executive orders.

Accreditation

The MSC is accredited by the Middle States Commission on Higher Education (**MSCHE**) and licensed to operate by the Puerto Rico Post-Secondary Institutions Board (**JIPS**). Its professional schools and programs and hospital-based residencies are currently accredited by the following: Liaison Committee on Medical Education (**LCME**), Accreditation Council for Graduate Medical Education (**ACGME**), Commission on Dental Accreditation of the American Dental Association (**CODA-ADA**), Council on Education for Public Health (**CEPH**), Accreditation Council for Pharmacy Education (**ACPE**), and Commission on Collegiate Nursing Education (**CCNE**). Programs in the School of Health Professions are individually accredited by the applicable agencies.

School of Nursing

The University of Puerto Rico, Medical Sciences Campus (MSC) School of Nursing (SON) is one of the six schools of the MSC that provides education for specific health professions and professional degrees. Founded in 1940, the SON is the oldest nursing education unit in the University of Puerto Rico system. The school promotes the provision of quality nursing services with an interdisciplinary focus, in order to meet the present and emerging health needs of the people in Puerto Rico. The SON began as one of the programs of the School of Tropical Medicine, later became part of the Department of Preventive Medicine of the School of Public Health. In 1975, the Medical Sciences Campus was reorganized, and the SON became a unit of the College of Health-Related Professions, under the direction of an Associate Dean. On July 1, 1995, it became an autonomous school within the Medical Sciences Campus.

SON Accreditation

The Commission on Collegiate Nursing Education (CCNE) accredits the academic programs at the School of Nursing (SON).

Commission on Collegiate Nursing Education
One Dupont Circle NW, Suite 530
Washington DC, 20036
202-887-6791
<https://www.aacnursing.org/>

The Council on Accreditation of Nurse Anesthesia Educational Programs (COA) accredits the Nurse Anesthesia Program.

Council on Accreditation of Nurse Anesthesia Educational Programs (COA)
10275 W. Higgins Rd., Suite 906
Rosemont, IL 60018-5603
224-275-9130
<https://www.coacna.org>

Mission

Prepare highly qualified nursing professionals, leaders in service, education, and research to work in an interdisciplinary manner within a changing and culturally diverse society.

Vision

State-of-the-art institution with local, national, and international prestige in the training of nursing professionals of excellence capable of transforming the nursing profession, the provision of services and public health policy.

Philosophy

Human Being

It is multidimensional, the wholeness of human beings includes, their genetic composition, physiological dynamics, the interpersonal forces that impinge upon them their behavior and personality patterns, as well as their intellectual, emotional and spiritual components. All these components make them a set of interrelated parts, which mutually react with one another by environment in a unique manner. Each human being shares characteristics with others throughout the life process. Humans communicate and seek intellectual activity, truth, and reason. They possess inherent dignity and worth.

Society

Society is a complex system, which provides the foundation for the acquisition of values, beliefs, perceptions, knowledge, and motivations, which influence individual's behavior. Thus, social changes influence the quality of life and the state of wellness of individuals, families, groups, and communities, within a variety of racial, cultural and social backgrounds. Social changes evolve from its member's needs and goals in response to cultural, technological, socioeconomic, political, and environmental conditions and values. Furthermore, society provides the means through which human beings attain their health goals.

Health

Health is a dynamic state of being. Individuals and society's values, way of living, and the process of being and becoming determine the perception of health. A person's or society's state of health influences the potential for the realization of its unique development. Optimum level of wellness is the highest achievable state of health and as such is a major individual and collective goal.

Nursing

Nursing is a dynamic, humanistic, and scientific discipline. Its unique way of caring serves as means to assist human beings throughout their process of growth and development to achieve their optimum level of wellness. As an essential component of all levels of the health care delivery system it intervenes within a multicultural environment to maintain positive health behaviors or to interrupt a behavioral pattern that is linked to increased risks for illness, disability, or death. Nursing independent and interdependent functions emerge from research and are applied in the ministering of nursing care. Nursing goals are achieved through the nursing process and integrate the creative and critical thinking skills with a clear understanding of a holistic approach to care of human beings.

Teaching-Learning

The teaching-learning process is viewed as a cycle of inquiry, which involves the teacher as a facilitator and the students in a dynamic relationship. This relationship is maintained in a process of continuous discovery of knowledge and a development of increasingly broader theoretical framework to meet the real need of the society. A flexible organization of learning activities based on the needs and interests of the learner provides the means for significant and permanent learning. The learner assumes personal responsibility for the fulfillment of individual goals, knowledge, and skills, required for quality practice. Through the learning process students are involved in the lives of those with whom they interact. Learning is a life-long process, and the nursing professionals are responsible for continued learning and for carrying out autodidactic activities. The Baccalaureate and Doctoral Nursing Programs of the School share the common philosophy previously presented. Based on this philosophy, the faculty developed philosophical postulates and objectives, which are particular to each program's educational level of studies and functional areas. Graduate education is based upon the foundation developed through baccalaureate studies.

Nursing Education

Nursing education is the foundation for nursing practice. Knowledge of human beings and their environment is required for the achievement of this goal. This knowledge is obtained through the nursing program, which provides general and professional education. Therefore, the practice of professional nursing requires practitioners prepared at the baccalaureate, master's, and doctoral levels. Education at the baccalaureate level includes substantial knowledge derived from the biological, physical, behavioral sciences, and the humanities, as well as nursing sciences for the development of psychomotor, cognitive, and affective skills. Baccalaureate nursing education prepares practitioners with basic leadership skills, which enable them to function as nurse generalists. They participate in the implementation of change in direct patient care and within the nursing and health teams. This level develops initial research skills.

Doctoral level education promotes the development of leadership roles in nursing such as educators in nursing, administrators of nursing services, and advanced practice nurse anesthetists. This level requires advanced education to attain depth of knowledge in clinical nursing, research, and leadership roles. Leadership at the doctoral level is directed to the development of a creative and autonomous professional who can innovate, initiate, and implement changes in the health care system.

Doctoral level education aims to develop a sophisticated nursing care provider and professionally oriented scholar capable of developing nursing knowledge. Also, it is geared to the development of researchers who apply and generate nursing knowledge.

SON Goals

- Prepare nurse generalists at the baccalaureate level with the knowledge, ethical decision making, critical thinking, technical and technological skills, and attitudes necessary to practice as professional nurses, and to assume a leadership role when offering direct competent care that is evidence-based, collaborative, interdisciplinary and culturally congruent with individuals, groups and populations in a variety of settings, including primary, secondary, and tertiary health care levels.
- Prepare master's level nurses with knowledge and skills in evidence-based and research to improve health care and advance education, administration, and practice that may assume leadership roles as teachers in nursing education programs, administrators of nursing services, and specialists.
- Prepare advanced-practice nurse anesthesia professionals at the doctoral level with the knowledge, skills, and attitudes required for safe anesthesia delivery with a solid foundation in evidence-based practice, critical thinking, quality improvement, systems leadership, and interprofessional skills.
- Prepare nurse scientists at a doctorate level to conduct research in nursing and contribute to the advancement of nursing science and improvement of practice.
- Provide continuing education activities to enhance knowledge and lifelong learning among professional nurses and other health professionals.
- Contribute to the development of nursing professionals for the improvement of health care at the national and international levels.

SON Values

- Respect for Human Dignity
- Honesty
- Authenticity
- Responsibility
- Justice
- Integrity
- Commitment
- Equality
- Loyalty

SON Governance Structure

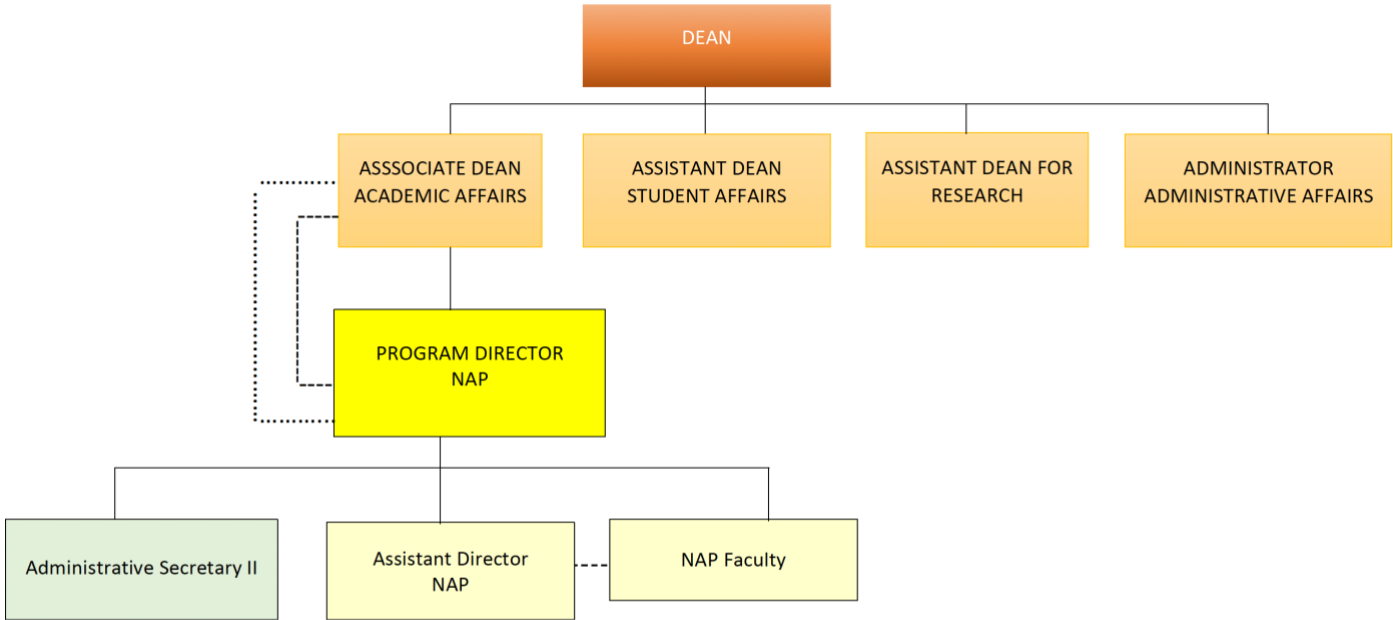
The SON is headed by a Dean. The administrative team of the Dean includes an Associate Dean for Academic Affairs, an Assistant Dean for Student Affairs, two Department Directors and three Program Directors. The Nurse Anesthesia Program (NAP) Director responds to the Director of the Graduate Department. The NAP director is supported by a CRNA Program Director Assistant and by an Administrative Assistant.

The following diagram represents the hierarchy and administrative role of key personnel of the Nurse Anesthesia Program. The thicker lines indicate lines of authority and communication within the program. The finer lines represent additional communication channels available to students, faculty, and the Nurse Anesthesia Program Director.

Organizational Chart

UNIVERSITY OF PUERTO RICO
MEDICAL SCIENCES CAMPUS
SCHOOL OF NURSING

ORGANIZATIONAL CHART ANESTHESIA PROGRAM



Responsibility and authority _____
Relationship of collaboration
Academic authority -----

Revised: January 2024

Nurse Anesthesia Program

Description

Advanced Practice in Nursing (APN) includes four advanced direct care roles: clinical nurse specialist, nurse midwife, nurse practitioner, and nurse anesthetist. The APN requires a formal graduate academic preparation. The American Association of Colleges of Nursing (AACN) called for a transition of the current level of graduate preparation for advanced nursing practice from the master's degree to the doctorate terminal level.¹ Doctoral programs in nursing discipline can be categorized into two distinct types: research-focused and practice-focused. The research-focused doctoral programs are principally focused on scientific content and research methodology. The practice-focused doctoral programs (DNP) curricula prepare experts in specialized advanced nursing practice; focus on innovative and evidence-based practice, quality improvement, and systems leadership, among other key areas.

The **Doctor of Nursing Practice with specialty in Anesthesia (DNP- SA)** contributes to the preparation of a cadre of expert practitioners in advanced nurse anesthetist role at the doctoral level, needed in Puerto Rico.

The transition of the MSN-SA program to DNP-SA responds to an accreditation requirement. The nurse anesthesia programs within the United States and the program at the School of Nursing of the University of Puerto Rico, Medical Sciences Campus, are professionally accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs (COA). Also, it responds to the AACN call for action to transform nursing education based on the nation's complex healthcare environments, complexity of patient care, concerns about the quality of care, patient safety and the need of higher academic preparation for nursing professionals.

The DNP-SA program is focused in providing appropriate didactic and clinical experiences, that meet and exceed COA accreditation standards while preparing its graduates to approve the national certification board on their first attempt. Thus, the program terminal objective is to prepare Certified Registered Nurse Anesthetists (CRNA's). The program is built on current master's bases to provide knowledge, skills, and attitudes required for safe anesthesia delivery through a variety of methods and other anesthesia-related care as defined in the AANA Scope and Standards for Anesthesia Practice. Evidence-based practice, quality improvement, and systems leadership/organizational roles are part of the graduates' competencies.

The curriculum includes diverse courses, classified in five areas: basic sciences, evidence-based practice (EBP), DNP core courses, anesthesia specialty didactic courses, and clinical courses. It provides one thousand seventy-one (1,071) didactic hours and two thousand five hundred and forty-four (2,544) clinical hours. The clinical courses prepare graduates to perform effectively in a variety of anesthesia techniques, full range of procedures and highly technological equipment. The intensive clinical immersion experience is an essential program component by the accreditation agency.

Mission

To prepare highly qualified, advanced nurse anesthesia professionals at the doctoral level with a solid foundation in evidence-based practice, critical thinking skills, quality improvement, and systems leadership; that lead and foster collaborative efforts while educating and providing the best quality of anesthesia care to a culturally diverse society.

Graduate Profile

The profile of the DNP-SA graduates was delineated according to the COA Standards for Accreditation of Nurse Anesthesia Programs, Practice Doctorate (revised in January 29, 2022). It is composed of six domains (patient safety, perianesthesia, critical thinking, communication, leadership, and professional role). At the completion of the program, the graduate will possess the following qualifications and capabilities to perform as a competent advanced practitioner with the ability to:

Patient Safety

1. Be vigilant in the delivery of patient care.
2. Refrain from engaging in extraneous activities that abandon or minimize vigilance while providing direct patient care (e.g., texting, reading, emailing, etc.).
3. Conduct a comprehensive equipment check.
4. Protect patients from iatrogenic complications.

Perianesthesia

1. Provide individualized care throughout the perianesthesia continuum.
2. Deliver culturally competent perianesthesia care.
3. Provide anesthesia services to all patients across the lifespan.
4. Perform a comprehensive history and physical assessment.
5. Administer general anesthesia to patients with a variety of physical conditions.
6. Administer general anesthesia for a variety of surgical and medically related procedures.
7. Administer and manage a variety of regional anesthetics.
8. Maintain current certification in ACLS and PALS.

Critical Thinking

1. Apply knowledge to practice in decision making and problem solving.
2. Provide nurse anesthesia services based on evidence-based principles.
3. Perform a preanesthetic assessment before providing anesthesia services.
4. Assume responsibility and accountability for diagnosis.
5. Formulate an anesthesia plan of care before providing anesthesia services
6. Identify and take appropriate action when confronted with anesthetic equipment-related malfunctions.
7. Interpret and utilize data obtained from noninvasive and invasive monitoring modalities.
8. Calculate, initiate, and manage fluid and blood component therapy.
9. Recognize, evaluate, and manage the physiological responses coincident to the provision of anesthesia services.
10. Recognize and appropriately manage complications that occur during the provision of anesthesia services.
11. Use science-based theories and concepts to analyze new practice approaches.
12. Pass the National Certification Examination (NCE) administered by the NBCRNA.

Communication

1. Utilize interpersonal and communication skills that result in the effective exchange of information and collaboration with patients and their families.
2. Utilize interpersonal and communication skills that result in the effective interprofessional exchange of information and collaboration with other healthcare professionals.
3. Respect the dignity and privacy of patients while maintaining confidentiality in the delivery of interprofessional care.
4. Maintain comprehensive, timely, accurate, and legible healthcare records.
5. Transfer the responsibility for care of the patient to other qualified providers in a manner that assures continuity of care and patient safety.
6. Teach others.

Leadership

1. Integrate critical and reflective thinking in his or her leadership approach.
2. Provide leadership that facilitates intraprofessional and interprofessional collaboration.

Professional Role

1. Adhere to the Code of Ethics for the Certified Registered Nurse Anesthetist.
2. Interact on a professional level with integrity.
3. Apply ethically sound decision-making processes.
4. Function within legal and regulatory requirements.
5. Accept responsibility and accountability for his or her practice.
6. Provide anesthesia services to patients in a cost-effective manner.
7. Demonstrate knowledge of wellness and substance use disorder in the anesthesia profession through completion of content in wellness and substance use disorder (see Glossary, "Wellness and substance use disorder").
8. Inform the public of the role and practice of the CRNA.
9. Evaluate how public policy making strategies impact the financing and delivery of healthcare.

10. Advocate for health policy change to improve patient care.
11. Advocate for health policy change to advance the specialty of nurse anesthesia.
12. Analyze strategies to improve patient outcomes and quality of care.

General Description of the Curriculum

The DNP-SA curriculum is designed to be completed in a 36 consecutive months period that is expected to begin with a summer session each June. There are no options to complete the DNP-SA on a part time basis.

The curricular design is structured following simple to complex logic in which students acquire the knowledge needed to be successful through the curriculum within a convenient timeframe. During their first academic session (summer), students take an Applied Biostatistics course, a course in Chemistry, Biochemistry and Physics, and a course in Evidence-Based Practice Principles (EBP). These courses provide the foundation to be successful in subsequent courses in Advanced Anatomy, Physiology, Pharmacology, and Pathophysiology. Also, students can apply knowledge acquired during the EBP course in future assignments, anesthesia care plans, and clinical practice.

Anesthesia content is introduced during their first year in the Basics of Anesthesia course I and II. Thus, students are provided with the necessary knowledge and skills to transition safely into clinical practice during the second semester of their first year. The course makes use of simulated laboratory experiences to achieve attainment of psychomotor skills necessary to actively participate in the anesthesia management of a surgical patient. Students are always supervised and accompanied by a qualified anesthesia preceptor or instructor during clinical practices.

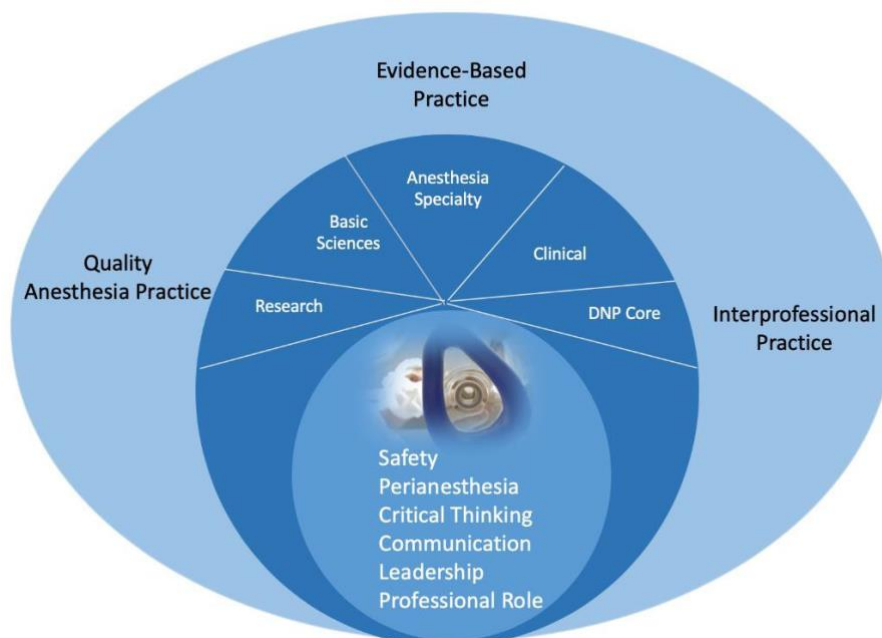
As the student progresses, advanced content in anesthesia is incorporated in the Advanced Principles of Anesthesia I, II, and III, and the Anesthesia for Special Populations courses. The Advanced Principles of Anesthesia and the Anesthesia for Special Populations courses are accompanied by clinical practice courses where students put their knowledge into practice and develop the corresponding level of clinical competencies.

Towards the end of their second year, students are involved in the design, implementation, and dissemination of a Doctor in Nursing Practice (DNP) Project. At this time, students have acquired the necessary knowledge and skills to develop a DNP project that can positively impact the quality of anesthesia care and education or related health policies. Apart from anesthesia courses, students have gained knowledge in health policies, informatics, statistics, leadership, and professional and legal aspects. Thus, the student can effectively appraise current scientific evidence and understand issues relevant to anesthesia care.

Students are required to approve the Comprehensive Nurse Anesthesia Examination course to be promoted into the first semester of their third year and enroll in the Anesthesia Residency I course. During their third year, students enrolled in the Anesthesia Residency I and II courses will be able to complete a thousand one hundred and fifty-two (1,152) clinical hours out of the total two thousand five hundred and forty-four (2,544) clinical hours. The residency I and II courses allow the student to consolidate knowledge and refine the psychomotor skills necessary for entry into nurse anesthesia practice.

Conceptual Model – Doctor of Nursing Practice with Specialty in Anesthesia

The conceptual model is represented by a figure that incorporates the relationship between the DNP-SA program mission, course areas and the graduate profile, and evidence the structure of the program. The external ovals include concepts that emanate from the program mission and portrait an advanced nurse anesthesia practitioner that works in an interprofessional environment, has a strong foundation in *evidence-based practice and provides quality anesthesia care*. The curricular design seeks to prepare the advance nurse anesthesia professionals at the doctoral level. To achieve such a design, five content areas were created to distribute all the program courses which are represented in the middle portion of the figure as follows: *Basic Sciences, Anesthesia Specialty Didactic, Clinical, Evidence-Based Practice/Research and DNP core courses*. Curricular content is organized in a logical sequence from simple to complex, increasing in depth and breadth, aligned with the six domains as established in the graduate standard of COA accreditation standards for practice doctorate programs in anesthesia.



The central circle represents the six domains of advanced nurse anesthesia graduate profile which encompasses: *Safety; Perianesthesia; Critical Thinking; Communication; Leadership and Professional Role*. These domains integrate the content areas through didactic and clinical experiences. At the completion of the program the graduate will possess qualifications and capabilities, as described in the six domains, to perform as a competent advanced nurse anesthetist.

Contents According to Areas Established by NBCRNA

COURSES	CONTENT AREAS
Basic Sciences	Anatomy, physiology, pathophysiology, pharmacology, biochemistry, physics, and chemistry
Basic and advanced principles in anesthesia specialty	Preoperative assessment; documentation; methods of anesthesia; instrumentation; equipment and technology; monitoring; patient safety; local, regional anesthesia, and pain management; positioning; peri-anesthesia assessment; replacement of blood and fluids; physical and advanced health assessment; clinical decision judgment; teamwork; other.
Professional aspects	Professional socialization (practice standards, professional association, culturally competent care, patient rights); quality improvement and assurance (business of anesthesia practice, accountability for practice); evidence-based practice; lifelong learning; other.

Curricular content is organized in a logical sequence from simple to complex, increasing in depth and breadth, aligned with the six areas of the *Doctor of Nursing Practice with Specialty in Anesthesia* graduate's profile.

Curricular Sequence

Master Course Schedule University of Puerto Rico – Nurse Anesthesia Program DNP-SA

	Summer Year 1	Fall Year 1	Spring Year 1	Summer Year 2	Fall Year 2	Spring Year 2	Summer Year 3	Fall Year 3	Spring Year 3
Didactic	Chemistry, Biochemistry, & Physics for Anesthesia ² (3 crs/54 hrs) Evidence-Based Practice Principles ¹ (1 cr/18 hrs) Applied Biostatistics ¹ (3 crs/54 hrs)	Basics of Anesthesia I ⁴ (3crs/36 hrs/ 36 lab) Advanced Pathophysiology I ² (3 crs/54 hrs) Advanced Pharmacology for Anesthesia I ² (3 crs/54 hrs) Advanced Human Anatomy and Physiology ² (3 crs/54 hrs)	Basics of Anesthesia II ⁴ (3crs/36 hrs/ 36 lab) Advanced Pathophysiology II ² (3 crs/54 hrs) Advanced Pharmacology for Anesthesia II ² (3 crs/54 hrs) Advanced Health Assessment ² (3crs/36 hrs/ 36 lab)	Nursing Theories, Professional and Legal Aspects of Nurse Anesthesia Practice ³ (3 crs/54 hrs) A Team-Based Practice Approach to Healthcare Seminar ³ (1 cr/18 hrs)	Healthcare Policies ³ (3 crs/54 hrs) Advanced Principles of Anesthesia I ⁴ (2 crs/36 hrs) Informatics and Health Technologies ³ (3 crs/54 hrs)	Advanced Principles of Anesthesia II ⁴ (3 crs/54 hrs) DNP Evidence-Based Practice Project I ¹ (3 crs/54 hrs) Anesthesia for Special Populations ⁴ (3 crs/45 hrs/18 lab)	Advanced Principles of Anesthesia III ⁴ (2 crs/36 hrs) Comprehensive Nurse Anesthesia Examination ⁴ (0crs/30 hrs IS)	DNP Evidence-Based Practice Project II ¹ (3 crs/54 hrs) Healthcare Finance and Economics ³ (3 crs/ 54hrs)	Nurse Anesthesia Review ⁴ (3 crs/54 hrs/30 hrs IS)
Clinical			Clinical Practice I ⁵ (1crs/144hrs)	Clinical Practice II ⁵ (4crs/192hrs/18 hrs.ccc)	Clinical Practice III ⁵ (3crs/432hrs)	Clinical Practice IV ⁵ (3crs/432hrs)	Clinical Practice V ⁵ (3crs/192 hrs)	Anesthesia Residency I ⁵ (5crs/576hrs/18hrs. ccc)	Anesthesia Residency II ⁵ (5crs/576hrs/18hrs.ccc)

- 1 = EBP/Research Courses (10 credits)
- 2 = Basic Sciences Courses (21 credits)
- 3 = DNP Core Courses (13 credits)
- 4 = Anesthesia Specialty Courses (19 credits)
- 5 = Clinical Courses (24 credits)

Total didactic = 1,071 hours
 Total clinical = 2, 544 hours
 Total Laboratory/simulation = 126 hours
 Total clinical correlation conferences (CCC) = 54 hours
 Total Independent Study (IS) = 60 hours

Ratios

Theoretical (1:1)
 Clinical (1:8)
 Laboratory (1:2)
 Clinical Correlational Conference (1:1)

Course Descriptions

Comprehensive Nurse Anesthesia Examination

This course is designed to ensure that the nurse anesthesia student undergoes a comprehensive evaluation process that assesses the knowledge acquired by the student throughout the program. The student is provided with 30 hours of independent study and is expected to work on consolidating knowledge and improving knowledge gaps. The student is then exposed to a comprehensive nurse anesthesia examination to demonstrate mastery of the content. Examination approval is a prerequisite for starting the first residency established in the program's curriculum.

Nurse Anesthesia Review

The course is designed to provide a comprehensive review of the content knowledge required to enter nurse anesthesia practice. Specifically, the course covers content in anatomy, physiology and pathophysiology by system, pharmacology for anesthesia, applied chemistry, biochemistry and physics, equipment, instrumentation and technology related to anesthesia practice, monitoring devices, general principles of anesthesia, anesthesia for surgical procedures and special populations. The student is provided with 30 hours of independent study and is expected to work on consolidating knowledge and improving knowledge gaps. The student is required to demonstrate mastery of content with the approval of a comprehensive nurse anesthesia examination.

Informatics and Health Technologies

The course will allow the student to understand the significance of nursing informatics to advance the care of patients, communities, and populations, influencing the state of health and well-being of human beings. They will increase capabilities in informatic management, clinical information systems, and provision of evidence-based decision-making and in what way it changes the healthcare delivery systems. In addition, discusses the standard of nursing informatic services, ethical-legal aspects, and policies related to the use of informatics technology in health systems. The course uses conferences, simulation, discussion of readings, and others. The course may be offered in any of the following modalities: face-to-face, hybrid or online.

Healthcare Policies

The course will allow the graduate student to explore the foundations of creating and/or modifying healthcare policies that shape the landscape for how patients and providers interact with the healthcare system. The student will understand how lawmakers and organizations are influenced to create and/or modify health policies. In addition, the students will be able to evaluate health practices and policies in various contexts, design methods and lobbying strategies that promote health policy changes. The course uses interactive lectures, group discussions, concept maps, role-plays and others. The course is face-to-face.

Chemistry, Biochemistry, & Physics for Anesthesia

Through interactive lectures, group discussions, and Problem Based Learning, among other instructional strategies, this course provides an in-depth analysis of chemistry, biochemistry, and physics as it relates to the science of anesthesia. Students are expected to acquire the necessary tools to develop expert knowledge in pharmacology, anatomy, physiology, pathophysiology, basic and advanced principles of anesthesia.

Advanced Human Anatomy and Physiology

The course provides an in-depth study of human anatomy and physiology while integrating the use of cadaveric dissections to provide students with a detailed knowledge on each body system. Special emphasis is directed towards the respiratory, central nervous, musculoskeletal, hepatobiliary, and gastrointestinal, renal, hematologic, and immune systems functions. Through lectures and group discussions, among other instructional strategies, the course prepares the student to understand and integrate future knowledge stemming from advanced pathophysiology, advanced pharmacology, basic and advanced principles of anesthesia. Thus, the student will amplify its capability of critical thinking and decision making as he/she gains further knowledge in the practice of nurse anesthesia.

Advanced Pharmacology for Anesthesia I

Through lectures and group discussions, among other instructional strategies, the course provides an in depth understanding of the pharmacokinetic and pharmacodynamics principles involved in the administration of pharmacologic agents. Anesthetics agents and adjuvants are studied to provide a thorough knowledge of each class of drug that include its physiochemical properties, mechanism of action at the cellular level, physiological effects, undesired side effects, interactions with other drugs and anesthesia considerations. Students incorporate the use of scientific evidence, ethical and legal standards into the decision-making process that involves administering any pharmacologic agent.

Advanced Pharmacology for Anesthesia II

The course builds upon prior knowledge to conduct an in-depth study of local anesthetics, muscle relaxant agents, and antagonists, vasoactive drugs, antiarrhythmics, psychopharmacologic agents, adjuvant drugs, and others. Students are required to search the scientific literature to find evidence on newer, safer, and cost-effective pharmacologic therapies being used for the management of the surgical and pain management patient. The course uses interactive lectures, groups discussions, problem-based learning, and others. The course is face-to-face.

Advanced Health Assessment

The course provides students the opportunity to develop advanced knowledge and skills to perform a thorough health assessment of patients. Students practice collection of comprehensive health history, regional physical examination, preoperative assessment, and documentation of findings. The course uses interactive lectures, demonstrations, case study discussions, work group through media, and others. Simulated laboratory experiences are incorporated to enhance competency development. The course is face-to-face.

Advanced Pathophysiology I

The course provides a review of normal physiological mechanisms of specific body systems with an analysis of the etiology, pathogenesis, clinical progression, and manifestations of known pathologic processes. Students will develop clinical knowledge of physiologic, and pathophysiologic processes to identify and analyze findings that serve as the foundations to build an anesthesia or pain management plan. Principles of cell physiology and transport mechanisms, genetic alterations, cancer, immunity, infections/inflammatory processes and pathophysiology of the cardiovascular, hematological, respiratory, central nervous system, and musculoskeletal disorders, are emphasized.

Advanced Pathophysiology II

The course builds upon prior knowledge and leads students to an in-depth study of pathophysiologic mechanisms and disease processes. Students are expected to identify and analyze patient findings that serve as the foundations to develop a care plan in providing anesthesia during the perioperative period. Emphasis is on the physiology and pathophysiology of renal, gastrointestinal, endocrine, reproductive, and the multiple organic dysfunction syndrome. The course uses interactive lectures, case study discussions, work group through media and simulation, and others. Correlation of laboratory studies/findings with clinical manifestations of diseases is integrated. The course is face-to-face.

Basics of Anesthesia I

Through lectures and group discussions, among other instructional strategies, this course provides nurse anesthesia students with comprehensive and specialized study of basic anesthesia management skills, standard monitors, equipment's, and techniques that are essential to anesthesia practice. Students are acquainted with preoperative assessment of patients, anesthesia methods, techniques, and equipment, and airway management. Other areas discussed include: fluid and blood replacement, positioning, monitoring devices, and post-anesthesia care. The acquisition of basic skills is enhanced using simulated laboratory experiences.

Basics of Anesthesia II

The course provides nurse anesthesia students with a thorough understanding of advanced clinical monitoring systems and its applicability. It integrates all relevant aspects pertaining to outpatient and office-based anesthesia. Students develop all pertinent knowledge and skills in the use of ultrasound guided anesthesia techniques for placement of invasive lines and peripheral nerve blocks. The study of hematologic system and anesthesia is also incorporated. The course analyzes the physiological and pathophysiological underpinnings of chronic and acute pain, and its management. Important complications related to anesthesia practice are discussed and subjected to critical analysis. The course uses interactive lectures, case study discussions, simulations and supervised laboratory practices, and others. The acquisition of all skills and knowledge is incorporated with the use of simulated laboratory experiences. The course is face-to-face.

Advanced Principles of Anesthesia I

This course is designed to enhance the student's basics foundation in anesthesia and the development of critical thinking skills. It will provide the student with an in-depth coverage of anesthesia management for extrathoracic, ophthalmic, otorhinolaryngology, maxillofacial, trauma, hepatobiliary and gastrointestinal procedures. The student will be able to plan the anesthetic care for burn patients and also for those requiring orthopedic and laparoscopic procedures. This course will foster communication, teamwork, and knowledge to protect patient safety. The course uses lectures, group discussions, case analysis, simulation, and others. The course is face-to-face.

Advanced Principles of Anesthesia II

The course seeks to increase and apply the students' knowledge of advanced courses, basic anesthesia physiology and clinical practice in offering anesthesia delivery care. It examines anesthetic management and considerations for patients with pathophysiologic disruptions requiring surgical interventions in the cardiac, vascular and respiratory systems. Considers communication and teamwork to assure continuity of care and patient safety. Conferences emphasize problem-based learning (PBL) allowing the student to integrate advanced physiology and nurse anesthesia knowledge, skills, and critical thinking. The course also uses group discussions, simulation, skills laboratories, case analysis, and others. The course is face-to-face.

Advanced Principles of Anesthesia III

This course provides nurse anesthesia students the opportunity to enhance concepts related to surgical procedures of the renal, neuroskeletal, endocrine and central nervous system. The course emphasizes neuropathophysiology, peripheral nervous system and neuroanesthesia. It also includes renal and endocrine pathophysiology and anesthesia management. Effective communication and teamwork are included to assure continuity of care and patient safety. Evidence-based techniques and best practices related to safe management for patients undergoing

these procedures will be integrated. The course also uses group discussions, simulation, skills laboratories, case analysis, and others. The course is face-to-face.

Anesthesia for Special Populations

The course leads nurse anesthesia students to develop critical thinking and evidence-based knowledge needed to provide safe nurse anesthesia care for special populations including pregnant women, neonates, pediatrics, elderly, and the obese population. Physiologic and pathophysiologic differences that affect the anesthetic plan, pharmacokinetics and pharmacodynamics are discussed in relation to each population. In addition, the student is led to devise appropriate interventions for prevention and management of anesthesia complications. Simulated laboratory experiences, lectures, and problem based learning are used to enhance student learning. The course is face-to-face.

Clinical Practice I

Nurse anesthesia students are introduced to the clinical practice setting to enable the development of basic skills and techniques in the preoperative evaluation of the patient, anesthesia machine check, table-top preparation, patient positioning, maintenance of normothermia, airway management, perioperative and post-operative care. Students apply the knowledge and techniques with the surgical patient on their clinical training sites, while maintaining patient safety and use of critical thinking skills. The course uses self-evaluations, anesthesia care plans, formative assessment sessions, and others. Students practice with the direct supervision of the CRNA or MDA clinical preceptor and/or course instructor. The course is face-to-face on the clinical training sites.

Clinical Practice II

The student engages in the pre-operative, intraoperative and postoperative care of the surgical patient. Development of critical thinking and clinical judgement is employed during the induction and maintenance of general and regional anesthesia, and monitored anesthesia care. The student is expected to manage patients with minimal comorbidities within the general surgery population, acute and chronic pain. The course uses self-evaluations, anesthesia care plans, problem based learning, formative assessment sessions, and others. Clinical correlational conferences are integrated to enhance student learning. Students practice with the direct supervision of the CRNA or MDA clinical preceptor and/or course instructor. The course is face-to-face on the clinical training sites.

Clinical Practice III

Students actively participate and lead the provision of anesthesia during the perioperative phases of patients undergoing neurosurgical, musculoskeletal, endocrine, renal, and urological surgical procedures. Also, the administration of anesthesia for therapeutic and diagnostic procedure. They apply knowledge related to anesthetic agents, adjuvants, techniques, positioning, delivery systems, anesthesia care plan and manage anesthesia complications to ensure patient safety. The course uses student' self-evaluations, on-call experiences, anesthesia care plans, review of clinical cases and others. Students practice with the direct supervision of the CRNA or MDA clinical preceptor and/or course instructor. The course is face-to-face on the clinical training sites.

Clinical Practice IV

Students use clinical judgment application and decision-making in the development of skills with patients undergoing anesthesia for thoracic, cardiothoracic, vascular, and endovascular surgical procedures. Anesthesia is provisioned while the patient is under the use of extracorporeal circulation or the use of one lung ventilation techniques. Considers anatomical, physiological, and pathophysiological aspects of special patient populations (obstetric, pediatric, neonatal, obese, and geriatric) into the anesthesia care plan. The course uses student' self-evaluations, on-call experiences, anesthesia care plans, review of clinical cases and others. Nurse anesthesia students train under the direct supervision of the CRNA or MDA clinical preceptors and/or course instructor. The course is face-to-face on the clinical training sites.

Clinical Practice V

Students actively participate and lead the provision of anesthesia during the perioperative phases of patients undergoing hepatobiliary, gastrointestinal, eyes, ears, nose and throat, maxillofacial and other important surgical procedures such as laparoscopic surgery, orthopedic trauma, and critical care. Students are allowed to participate in the perioperative period with direct supervision of CRNA or MDA clinical preceptors.

Anesthesia Residency I

Clinical course in which the nurse anesthesia students have the opportunity to incorporate all the knowledge acquired into anesthesia practice with patients undergoing different surgical procedures and pertaining to different surgical populations. The student should solidify psychomotor skills for placement of regional anesthetics with the use of ultrasonography. Students practice anesthesia procedures and techniques related to all phases of anesthesia delivery. The nurse anesthesia student must function under indirect supervision of the clinical preceptor as an advanced practitioner in collaboration with the health clinical team. Clinical correlations conferences are integrated.

Anesthesia Residency II

Nurse anesthesia students function as advanced practitioners applying clinical competencies related to all phases of anesthesia delivery. Clinical performance focuses on perioperative interventions with patients undergoing all types of surgery and utilizing different types of general, regional and local anesthesia methods. Clinical correlation

conferences are integrated. Students are provided with flexibility to solidify or strengthen knowledge in their area of preference.

Applied Biostatistics

Through interactive lectures and group discussions this course provides a study of both descriptive and inferential statistics to enable students in applying and critically analyzing statistical methods and results emanating from scientific research or data analysis. Knowledge gained during this course will prepare the student for appraisal of scientific evidence in future courses and advanced nursing practice.

Healthcare Finance and Economics

The course provides nurse anesthesia students with the financial knowledge, to actively participate and lead needed economic changes in healthcare systems and organizations. Students analyze business aspects of the advanced nursing practice profession, that involve financing, billing, planning, financial statements, and insurance policies among other aspects. The course uses interactive lectures, group discussions, problem-based learning, and others. The course is face-to-face.

Nursing Theories, Professional and Legal Aspects of Nurse Anesthesia Practice

The course provides the student with comprehensive knowledge on all relevant aspects that govern advanced practice nursing with emphasis on nurse anesthesia. The theoretical foundation and history of nurse anesthesia practice are incorporated as an important pillar of weighing on the value of the profession. Also, the standards and scope of practice, ethical guidelines, professional attributes, and legal and regulatory parameters among other relevant aspects are incorporated as part of the course. The course uses interactive lectures, group discussions, role play, conceptual maps, and others. The course is face-to-face.

A Team-based Practice Approach to Healthcare Seminar

The seminar engages students in the utilization of a team-based approach to providing healthcare. The evidence-based underpinnings are examined and discussed with students. Students are expected to acquire the necessary tools to develop expert knowledge using the Team Strategies and Tools to Enhance Performance and Patient Safety Model (TeamSTEPPS). The course uses interactive lectures, case study discussions, role play, and others. The course may be offered in any of the following modalities: face-to-face, hybrid or online.

Evidence-Based Practice Principles

Through interactive lectures and group discussions in this course the basic concepts of evidence-based practice (EBP) required for advanced clinicians will be analyzed. The course is designed to bring students with the opportunity to develop and strengthen their knowledge about EBP. Students are expected to broaden their skills and incorporate an evidence-based attitude into clinical practice as a nurse anesthetist, using the seven-step model of EBP.

DNP Evidence-Based Practice Project I

In this course, students are required to identify a clinical, administrative or academic situation for the development of a project based on scientific evidence under the supervision of faculty. The tools for the development of the proposal are provided, integrating the steps of the evidence-based practice (EBP) model. The course uses lectures, assignments, group work, tutorial sessions and others. The course is face-to-face.

DNP Evidence-Based Practice Project II

This course is designed for students doctor of nursing practice in anesthesia to translate scientific evidence into practice and the evaluation and improvement of nurse anesthesia practice and outcomes. Students will also disseminate project outcomes to stakeholders and relevant communities.

DNP Lock Step Program

The UPR-NAP is a lockstep program. Students are allowed to retake one course; however, they must return in a year when the course is offered in the sequential lock step sequence. Students can only take a course twice.

Program-Student Communications

Students are responsible for receiving from and, if appropriate, sending messages to program administrators, staff, and faculty. Students are responsible to advise the NAP faculty and Clinical Coordinator(s) of any change in email address, phone number or mailing address. All students are issued an institutional email account upon enrollment and are required to check their email daily.

Communication is provided to students via the following:

1. Institutional e-mail
2. Online Platforms – Teams, Blackboard
3. Letter
4. Phone

Rights and Responsibilities

Applicants

Rights

- To receive clear, timely and truthful information about the admission criteria, tuition and other costs, accreditation status, and other requirements of the Program.
- To be treated according to the Non-discrimination Admission Policy.
- Have their admission application be considered in the same level as other applicants
- To be notified about the status of their admission application and any information needed to complete the process.

Responsibilities

- Provide honest information in the admission application and during the admission interview.
- Complete and submit the admission application before the deadline.

Patients

Rights

Patients have the right to receive quality and safe anesthesia care, not affected by the educational process. Therefore, patients have the right to know the student involved in administering anesthesia and his/her supervisor. The patient has the right to be guaranteed that the student's supervisor is a board-certified anesthesiologist and/or a certified registered nurse anesthetist. The assignment of students to cases should be based on the student's clinical competency and academic knowledge of the case, the complexity of the case, and the judgment of the clinical instructor.

Faculty

Faculty duties, responsibilities and rights are established in the following documents: Rules and Regulations of the University of Puerto Rico (*Reglamento General de la Universidad de Puerto Rico*), MSC Faculty Manual (*Manual del Docente*), MSC Duties, Responsibilities, and Rights of Faculty and Students (*Deberes, responsabilidades y derechos del profesor para con el estudiante y del estudiante para con el profesor*). Faculty members should familiarize themselves with these publications available on the campus web page (www.rcm.upr.edu).

Additional faculty responsibilities:

- Operate the program in accordance with the COA standards, policies and procedures manual, clinical sites policies, regulations of the University of Puerto Rico and applicable federal and local laws.
- Maintain its national certification as a CRNA by the NBCRNA, be a current member of the AANA, and accomplish scholarly activities.
- Respect the dignity of each student in all academic contexts.
- Attend their clinical and didactic courses.
- Be available for appointments with students.
- Evaluate the student's work in a fair and timely manner.
- Discuss the results of course evaluations and academic performance with the student.

Students

Students' duties, responsibilities and rights are detailed in MSC Duties, Responsibilities, and Rights of Students (*Deberes, responsabilidades y derechos del estudiante*).

Rights

Additional students' rights:

- The student has the right to receive a quality education necessary to fulfill the six competency areas of the Doctor of Nursing Science with Specialty in Anesthesia graduate's profile.
- To discuss the course syllabus with the professor.
- To receive a fair and objective evaluation of their academic and clinical work. This evaluation must be accessible at an appropriate time.
- Received a continuous evaluation of their academic progress and clinical performance.

Responsibilities

Additional students' responsibilities:

- Students will be held accountable for complying with the policies and regulations pertaining the nurse anesthesia program and clinical affiliated sites.
- Comply with the didactic and clinical program requirements (minimum cases and anesthesia hours) as established by the COA.
- Attend punctually to didactic courses, laboratories, and clinical experiences.
- Excusing their absence or delay in advance or as soon as possible.
- To evidence completion of the student documentation for clinical sites (preceptor weekly evaluation, Medatrax case summary and daily self-evaluation).
- To wear a neat and appropriate clinical attire according to clinical site requirements.

Conducting and Affiliating Institutions

The Nurse Anesthesia Program of the School of Nursing and their affiliated clinical sites have the following right and responsibilities.

Rights

1. The students and faculty operate the program in accordance with the COA standards, policies and procedures manual, clinical sites policies, regulations of the University of Puerto Rico and applicable federal and local laws.
2. Receive information of accrediting agency evaluations and new standards.
3. Receive objective evaluations from students, graduates, alumni, faculty and COA.

Responsibilities

1. Provide a teaching-learning environment that promotes the achievement of cognitive, psychomotor and affective competencies of the NAP.
2. Operate the NAP in accordance with the COA standards, policies and procedures manual, clinical sites policies, regulations of the University of Puerto Rico and applicable federal and local laws.
3. Review the policies and procedures manual according to COA standards, scope of nurse anesthesia practice and code of ethics, clinical sites policies, as well as the rules and regulations of the University of Puerto Rico and applicable federal and local laws.
4. Provide the resources for effective operation of the NAP.
5. Assist the COA in all requirements necessary to conduct a thorough evaluation.
6. Provide any required supportive documentation to demonstrate compliance with COA standards.
7. Provide complete and truthful documentation that supports compliance with COA standards.
8. Coordinate and carry out the admission process of the program.
9. Maintain the physical facilities and resources for didactic courses and clinical instruction.
10. Refer and offer academic counseling to NAP students.
11. Offer exams with a similar format used for the NCE.
12. Provide liability insurance to NAP students.
13. Offer continuous evaluation and feedback.
14. Provide orientation to the clinical sites.
15. Provide supervision and students evaluation in clinical areas.
16. Provide support to EBP projects.
17. Evaluate didactic and clinical courses at the end of each academic period.
18. Continually evaluate the program effectiveness.
19. Conduct the program in compliance with accreditation requirements according to COA standards.
20. Submit self-study and annual reports according to COA requirements.
21. Maintain reports, records and any evidence available to on-site accreditation reviewers.

Council on Accreditation

Rights

1. The program will provide all requirements necessary to conduct a thorough program evaluation.
2. Obtain any required supportive documentation from the program to demonstrate compliance with COA standards.
3. Receive complete and truthful documentation that supports program compliance with COA standard.

Responsibilities

1. Publish all applicable standards necessary for accreditation and successful re-accreditation.
2. Evaluate programs in their ability to meet the published standards.
3. Identify any areas of noncompliance and to inform the program accordingly.
4. Reserves the right to conduct periodic announced and unannounced site reviews to assess for program compliance with published standards.

Nurse Anesthesia Program Policies and Procedures

1. Equal Opportunity / Nondiscriminatory Policy

The MSC-UPR prohibits all discrimination in education, employment, provision of services, admissions and financial aid for reasons of race, color, sex, birth, age, origin or social status, ancestry, marital status, religious or political beliefs, gender, sexual preference, nationality, ethnic origin, disability, veteran status of the Armed Forces, or as a victim or being perceived as a victim of domestic violence, sexual assault or stalking (Article 2.3 - Prohibition of discrimination, Medical Sciences Campus Student Bylaws)

2. Admissions

As part of the University of Puerto Rico, the Medical Sciences Campus enforces a general policy of admissions established by the Council on Education in its 1978-79 Certification No. 116. In addition, the Medical Sciences Campus offers equal opportunity to all applicants without discrimination regarding sex, marital status, age, race, creed, or handicap. Applicants must have the intellectual, physical and emotional capabilities to meet the requirements of the school's curriculum to function as a safe anesthesia provider.

The admission deadlines are published on the web page of each program of the Medical Sciences Campus.

The Medical Sciences Campus encourages all applicants to seek the broadest intellectual and cultural formation prior to their training in the health professions. Candidates are admitted on a competitive basis. Therefore, the applicant must present evidence of successful completion of the admission requirements for the program in which he or she is interested. In most programs, an admissions committee will also consider nonacademic factors as additional criteria in screening applicants. An application fee has been established for the applicants, but the amounts vary by each program. The applications must be addressed to:

Admissions Officer
Central Office of Admissions
Medical Sciences Campus, UPR
G.P.O. Box 365067
San Juan, Puerto Rico 00936-5067

2.1 Admission Criteria

The admissions criteria for the DNP with Specialty in Anesthesia program require that the candidates meet:

- 2.1.1 Possess a Baccalaureate or master's degree in nursing from a nationally accredited program (CCNE or ACEN; *previously NLNAC*).
- 2.1.2 A 3.00 GPA in general education courses, sciences and nursing courses.
- 2.1.3 Undergraduate Statistics and Chemistry courses with B grade or better (3 credits each).
- 2.1.4 English proficiency as evidenced by TOEFL (preferably a general score of 80 or above and a specific reading score of 20 or more) or completing a minimum of high school or bachelor's degree from an educational institution in the continental U.S.
- 2.1.5 Demonstrate Spanish proficiency during the interview process. The entire personal interview and simulation session may be conducted in Spanish.
- 2.1.6 Evidence of current license as registered nurse.
- 2.1.7 To comply with state laws, all students are required to be licensed in the Commonwealth of Puerto Rico. Reciprocity forms may be obtained from the Puerto Rico State Board of Nursing. The license is required at the beginning of the program.
- 2.1.8 Must have a minimum of one year (two preferred) of full-time work experience (2,080 hours), or its part-time equivalent, as a registered nurse in a critical care setting within the last five years.
- 2.1.9 Possess current Basic Life Support (BLS), Advanced Cardiac Life Support (ACLS) and Pediatric Advanced Life Support (PALS) certifications.

- 2.1.10 Three letters of recommendation. One from each of the following: a) most recent employer; b) a health care professional preferably a licensed physician or a CRNA, and c) a teacher that can attest to the academic suitability of the candidate to pursue graduate education. The letters should reflect an accurate appraisal of clinical skills, experience, and independent decision-making.
- 2.1.11 Submit a signed written commitment to sit for the National Certification Examination (NCE) within 120 days after graduation.
- 2.1.12 Submission of Curriculum Vitae
- 2.1.13 Complete the official application kit and submit the required supporting documentation.
- 2.1.14 Obtain a minimum average of 70% as a result of the total of the following criteria:
 - 2.1.14.1 Personal Interview (25%)
 - 2.1.14.2 Simulation Session (15%)
 - 2.1.14.3 Scientific Paper Analysis (10%)
 - 2.1.14.4 Minimum General GPA (20%)
 - 2.1.14.5 Minimum Specific GPA (25%)
 - 2.1.14.6 Analysis of Curriculum Vitae (5%)

2.2 Admission Committee

- 2.2.1 The admissions committee will be presided by a nurse anesthesia faculty member nominated by the program director each year.
- 2.2.2 The admissions committee will have at least one member outside the nurse anesthesia faculty and will have at least three members.
- 2.2.3 The president of the admissions committee will select the members that will constitute the committee.
- 2.2.4 The committee will meet as necessary during the academic year but at least once during each academic period.
- 2.2.5 The admissions committee will interview and evaluate candidates applying to the nurse anesthesia program and recommend a selection of candidates to the program director.
- 2.2.6 The committee will review any re-entry request to the nurse anesthesia program, the students record and assess for compliance of the nurse anesthesia program policies and procedures. The committee will emit their recommendation of re-entry to the program director.
- 2.2.7 The admissions committee will emit recommendations on the re-entry request during their next meeting after the readmission request has been received by the program.
- 2.2.8 The admissions committee will emit a report at the end of each admission cycle to the program director and provide recommendations for future changes to the admission process.
- 2.2.9 Recommendations will be discussed and approved in faculty meeting.

2.3 Criteria for Student's Selection

Obtain a minimum of a cumulative 70% in which the following factors are considered:

General GPA	20%
Specific GPA	25%
Personal Interview	25%
Simulation Session	15%
Scientific Paper analysis	10%
Analysis of Curriculum Vitae	5%

2.4 Enrollment

Maximum of 17 students per year.

2.5 Previous Graduate Nurse Anesthesia Program Experience

Applicants who have attended a previous nurse anesthesia program must have a letter submitted that includes a statement regarding the student's standing at the previous school. Applicants who have been previously dismissed from a program or who are not in good standing will not be considered for admission. Admission will not be considered for anyone who earned a C in any two graduate nursing courses; or a D, F, or withdrew with a failing grade (WD or WF) in any graduate anesthesia course.

2.6 Foreign Students

The nursing professional credentials must be submitted to US credentialing center to determine the equivalent standards required in the BSN program of the University of Puerto Rico. The courses are delivered in Spanish. References, books, journals, and other printed material are mainly in English.

Students with foreign residency must contact the Admissions Office to obtain information of the required documents for admission. This requirement also applies to the applicants that have studied in international universities. Cost of the study program varies according to the country of origin. For further information, please contact the Bursar's Office at (787) 758-2525 extension 1207.

2.7 Orientation

After student enrollment, orientation about the policies and procedures of the Nurse Anesthesia Program is provided and a digital copy manual is distributed. Orientation regarding anesthesia educational faculty responsibilities, the clinical sites, and students' rights and responsibilities is provided. After receiving and being oriented about the policies and procedures of the nurse anesthesia program, students are required to sign a compliance commitment within the next 7 days. Students are encouraged to clarify any doubts or raise concerns within the seven-day period.

2.8 Tuition

Additional costs are to be covered by the student and include but are not limited to uniforms, diagnostic equipment, safety equipment, books, reviews, housing, transportation, and meals. See *section #2.8 - Other Expenses* for details.

- Puerto Rico resident students pay \$500.00/per credit
- Non-resident and international students pay \$700/per credit

2.9 Other Expenses

The following expenses must be covered by the student registered nurse anesthetist throughout the program. Costs for studies may vary according to the country of origin.

1.	Application Fee	\$30.00
2.	Special Equipment	\$200.00
3.	Graduation Fee	\$80.00
4.	Laboratory Fee	\$100.00 per laboratory
5.	Technology Fee	\$100.00 per semester (\$50.00 – summer)
6.	Maintenance Fee	\$200.00 per semester (\$50.00 – summer)
7.	Cost Per Credit	\$500.00 – P.R. Resident \$700.00 – Non – P.R. Resident
8.	UPR-NAP Fee	\$2,000 per year
9.	AANA Associate Member Fee	\$200.00
10.	Self-Evaluation Examination (SEE)	\$280.00 per attempt
11.	National Certification Examination (NCE)	\$1,100.00 per attempt
12.	APEX Anesthesia Review	\$549.00
13.	Scrub Clothes	\$250.00
14.	Laptop	\$1,000.00
15.	Math/Chemistry Review Course	\$120.00
16.	ACLS/PALS/BLS	\$400.00
17.	Books	Variable
18.	Living Expenses	Variable

Notes: Partial payment during the program of study. Additional fees may be added/changed every academic year.

3. Reasonable Accommodation

Requests for accommodation of a disability must be made in a timely manner to the Students Counselors and Psychology Center of the Medical Sciences Campus. Refer to the student's manual of the Medical Sciences Campus for specific details on the procedure established to request reasonable accommodation:

- 3.1 Students on reasonable accommodation will be called for a meeting with the professor of each course to establish an accommodation agreement that meets the student needs. A copy of the agreement will be sent to the Associate Dean of Students Affairs (ADSA).
- 3.2 In evaluating a request for an accommodation, the NAP will take into account the individual's specific limitations and needs to determine whether the requested accommodation is reasonable and will permit the applicant or student to satisfy the Technical Standards (See Policy 28 on Technical Standards).
- 3.3 Accommodations that may be appropriate will depend on individual circumstances.
- 3.4 An accommodation is not reasonable if it poses a direct threat to the health or safety of self-and/or lowers academic standards or poses an undue administrative or financial burden.
- 3.5 Except for rare circumstances, the use by a student of an intermediary to perform any of the functions described in the Technical Standards would constitute an unacceptable substantial modification.
- 3.6 Any student whose reasonable accommodation status is not being provided as agreed or who's meeting for accommodation agreement hasn't occurred is responsible to notify the ADSA and PD immediately.
- 3.7 Any modification to the reasonable accommodation status is prospective in nature.
- 3.8 Any amendment to the reasonable accommodation status must be processed and evaluated by the Medical Sciences Campus Center for Counseling and Psychology.
- 3.9 Reasonable accommodation arrangements for the self-evaluation examination (SEE) and national certification examination (NCE) are the responsibility of the student as established within the corresponding handbooks published by the National Board of Certification and Recertification of Nurse Anesthetists (NBCRNA).
- 3.10 The student is responsible and required to communicate the program director if any inconveniences arranging reasonable accommodation to sit for the self-evaluation examination or national certification examination occur.
- 3.11 The program is not responsible for students whose request for reasonable accommodation with the NBCRNA is not initiated with prudent anticipation (15 days or more).

4. Attendance and Authorized Leave

- 4.1 Punctual attendance to class and clinical assignments is mandatory.
- 4.2 Students should be required to attend all units of didactic instruction, including classes, conferences, in-service and on call weekends.
- 4.3 Only excused absences are allowed. Excused absences are those related to illness, family emergencies, or other special circumstances.
- 4.4 Absence or late arrival to classes or clinical training must be notified in advance to NAP faculty and clinical coordinator.
- 4.5 Absence from classes, simulation lab sessions, and clinical training without prior and valid authorization are subject to disciplinary action.
- 4.6 Personal business (non-emergent physician appointments, job interviews, etc.) must be scheduled during the student's own time and are not to be scheduled during class or clinical time except in emergency situations.
- 4.7 Where an illness, injury, or personal emergency precludes attendance at a class or simulation lab session, the student is to notify the class session professor via email in advance of the scheduled class session, or as soon as possible within 24 hours. If illness, injury, or personal emergency precludes notification of the class session professor within 24-hours, the student will be required to provide medical documentation from

a health care provider for the delay, or other documentation as applicable to the situation, according with 029 Resolution.

- 4.8 Any leave of absence should be solicited in writing to the program director and is subject to approval. Leave of absences without Program Director approval is subject to dismissal from the nurse anesthesia program.
- 4.9 During absences, students are held academically accountable for all instructional materials presented in both the clinical and didactic courses.
- 4.10 Any unexcused absence to the clinical training area represents immediate academic dismissal from the nurse anesthesia program.
- 4.11 The professor and/or the Program Director may require, before allowing the student to return to class and clinical assignments, that he/she obtain a written certificate from a physician following an illness.
- 4.12 The students must commit approximately 36 – 48 hours weekly for clinical training, call experience, pre and post rounds and class time. Students are exposed to call experience by assisting to evening shifts and weekends on a rotating basis. Although a student may be assigned to a 24-hour call experience, at no time may a student provide direct patient care for a period longer than 16 continuous hours and must have a 10-hour rest period between scheduled clinical period. Any student should not exceed 64 hours per week of didactic and clinical hours.
- 4.13 The Director or Assistant Director of the Nurse Anesthesia Program prepares the time schedule, and any special request should be made in advance to be authorized.
- 4.14 Abandoning clinical site without prior approval from the course instructor or Program Director is subject to dismissal from the nurse anesthesia program.
- 4.15 Failure to provide notification of absence, in advance, as outlined above will constitute an unauthorized absence and will result in the final calculated course grade being reduced by 5 points per occurrence. Upon the third instance of an unauthorized absence from a course, the assignment of a grade of "F" for the course will be given. Failure of this course could constitute grounds for dismissal from the Program.
- 4.16 Excessive absence or habitual tardiness may affect course grade (meeting of objectives is hindered) and can result in failure.

Late Arrival or Early Departure

Consistent punctual arrival and attendance is a personal and professional responsibility for all students enrolled in the Program. Late arrival and/or early departure will be treated in the same manner as outlined above. Where an illness, injury, or personal emergency precludes on-time or full session attendance at a class or simulation lab session, the student is to notify the class session professor via office phone AND follow-up email in advance of the scheduled class session. Late arrival after the fifty percent point of the session time, or early departure prior to the fifty percent point of the session time will constitute a partial absence. A partial absence with prior notification shall be counted as one half of an authorized absence. A partial absence without notification shall be counted as one half of an unauthorized absence and shall result in the final calculated course grade being reduced by 5 points per occurrence.

Military Duty

Uniformed Service Members and Veterans Rights

Our military service personnel and veterans have extensive rights under federal and Puerto Rico Laws. The Uniformed Services Employment and Reemployment Rights Act of 1994 (USERRA) and the Law 203 accordingly. Our program is proud of our uniformed service members and will provide the support necessary to students serving the military.

"Performing Service in the uniformed service" is defined by USERRA. Eligible service includes voluntary or involuntary service in one of the military branches of the United States armed forces and other public service agencies. Uniformed service personnel have the right to be free from discrimination and retaliation.

Military/Uniformed Services Leave of Absence Policy

To be granted military leave, the student must be in good standing with the program. It is required that students provide the school with advance notice of military service, with some exceptions. An initial notification can be provided orally but must follow in writing. Students must present official military orders to the program director during most circumstances at least 30 days before the assigned leave. A first-line commanding officer or a non-commissioned officer above the rank of E-8 may certify a short duration leave of absence of less than 14 continuous days. Active duty orders are required for any military leave of absence longer than 15 successive days.

Military students are responsible for didactic coursework while on military leave. The student must coordinate their training to not interfere with their clinical commitment. It is recommended that the student perform active duty training after graduation.

Circumstances involving an extended period of absence for military duty will be evaluated in a case-by-case scenario by the UPR-NAP Program Director, the Dean of the School of Nursing, and the Dean of Academic Affairs. In some cases, an application for readmission must be submitted to the University within 90 days after completing a person's military service.

Veterans and Service Members Office

The University of Puerto Rico Medical Sciences Campus has a Veteran's Services Office (Servicios de Apoyo al Veterano) to serve federal uniformed service members, veterans, and families. To access the benefits and services offered, please contact:

Mrs. Glorimar López (glorimar.lopez3@upr.edu), or the Registrar Abelardo Martinez (abelardo.martinez@upr.edu) in the Registrar's Office on the second floor of the Main Building Office B-227 or by calling 787-758-2525, extension 5229.

Please find the UPR-MSU veteran's forms and services information following this link: <https://daa.rcm.upr.edu/oficina-registrador/>

Funeral Leave

If there is a death in the immediate family, absence from didactic or clinical studies may be allowed. The student's relationship to the deceased and the necessary travel time will be considered in determining the amount of leave granted. Immediate family includes spouse, children, parents, grandparents, and siblings. At no time will the leave of absence be greater than three (3) days, including weekends.

Maternity Leave

The NAP will follow the University of Puerto Rico "Carta de Consideraciones y Derechos de la Estudiante Embarazada" (The University of Puerto Rico Pregnant Student Considerations and Rights Position Statement). <https://de.rcm.upr.edu/wp-content/uploads/sites/13/2020/08/Carta-de-Derechos-Estudiantes-Embarazadas.pdf>

Short-term periods of leave can be approved at the program director's discretion or assistant program director. All non-clinical coursework must be completed during the leave of absence. Clinical time must be made up at the end of each semester or the end of the 3-year cohort program. An extended leave of absence may be granted to anesthesia students in certain circumstances. The program faculty reserves the right to dismiss any nurse anesthesia student who requires extended periods of leave not covered by the University's policy or federal law.

Responsibilities of the Pregnant Student Nurse Anesthetists and the Program Administrators

1. The student is responsible for providing written notice of the pregnancy to the program director right after obtaining written confirmation of the pregnancy from the obstetrician.
2. The pregnant student must sign a "UPR Student Nurse Anesthetist Pregnancy Health Release Form" to begin or continue with the clinical portions of the program.
3. The Pregnant student must obtain written consent from her obstetric provider regarding her participation in the clinical part of the program. In some circumstances, the student will be required to obtain a written medical clearance before returning to clinical rotations.
4. The student is responsible for discussing any safety concerns regarding her assignment with the instructor.
5. Clinical faculty will not knowingly assign the student to a situation that poses a recognized potential threat to the welfare of the pregnant student or the fetus.

Jury Duty

If a student receives notification of jury duty summons, they should immediately contact the Program Director. The Program may be able to provide a letter for the student to file with the Clerk of the Court with a request for postponement of jury duty until later date. The Program will not provide a letter requesting an exemption, only deferral of service to a later date.

5. Dress Code

Students must present a professional appearance and follow the policies and procedures of the UPR-SON and clinical sites related to dress code.

- 5.1 Graduate students are required to use a white gown while in training at the clinical sites.
- 5.2 Nurse anesthesia students must follow the dress policy of the institution they are training.
- 5.3 The use of scrub clothes is mandatory for clinical sites and skills development laboratory and must be purchased by the student.
- 5.4 No ripped jeans, mid-drifts, mini-skirts, tank tops or attire which show undergarments or skin.

6. Employment

The curriculum is rigorous and time consuming. The time of clinical training vary according to the clinical site that enables them to become a competent clinician. The registered nurse anesthesia student should devote the time to this demanding specialty.

- 6.1 The program forbids the employment of registered nurse anesthesia student as nurse anesthetists by title or function.
- 6.2 Any student employed as a nurse anesthetist while being a registered nurse anesthesia student will face disciplinary actions, such as suspension or dismissal from the program.
- 6.3 Students should not maintain a full-time job. The program understands that this will interfere with the fulfillment of the student academic progress and goals.

7. Wellness

The nurse anesthesia program believes on the importance of students maintaining a balance between the programmatic commitments of studying anesthesia and activities of the daily living, that are important for achieving wellness in the different aspects of life. The program works in close collaboration with the Office for Students Affairs and the Student Center for Counseling and Psychology of the Medical Sciences Campus to develop workshops and/or lectures that aim to provide our students with the tools necessary to maintain wellness and minimize the hazards of chemical dependency in the health care setting.

8. Handling of Controlled Substances

The UPR-NAP acknowledges the high rate of substance abuse in the anesthesia profession. The institutional policy regarding the use of illegal drugs, controlled substances, and abuse of alcohol states that the institution will adopt strong measures to prevent and prohibit in an effective manner the manufacture, distribution, delivery, possession and use of such substances and the abuse of alcohol. Employees and students who fail to comply with the policy are subject to disciplinary actions.

9. Acceptable Use of Social Media

Refer to the Protocol for the Acceptable use for Social Media in the Medical Sciences Campus for the guidelines on the use of social media. This protocol has been established by the Academic Senate of our campus through certification #077, approved on June 15, 2017. The protocol is available in the UPR-Medical Sciences Campus website.

10. Promotion/Progression and Retention Criteria

- 10.1 Promotion of graduates from one semester to next requires that students approve prerequisite courses with a B average.
- 10.2 The general grade point average for promotion from one academic period to the next is 3.0 at the end of each period.
- 10.3 Nurse anesthesia students must maintain a minimum of 3.00 average in anesthesia courses and comply with the clinical training hours.
- 10.4 Any student with an average below 3.0 in anesthesia courses will enter academic probation status immediately. (See academic probation)
- 10.5 A student with an average below 3.0 in anesthesia courses must achieve an average at or above 3.0 within the next academic period the student enrolls.
- 10.6 Failing to increase an average at or above 3.0 within the next academic period the student enrolls is subject to academic dismissal.
- 10.7 Students will take and approve (pass or no pass) a Comprehensive Examination (CE) in summer of the third year to be promoted to Anesthesia Residency I course.
- 10.8 Students that don't comply with promotion criteria, will be evaluated and advised of appropriate actions in relation to his/her status in the program (probation/dismissal). Academic advising will be offered to assist students in dealing with the situations that may have hindered the academic progress.

11. Repeating Courses and Program Completion

- 11.1 The Nurse Anesthesia Program is designed to be completed within a period of 3 years.
- 11.2 The maximum amount of time allowed to complete the nurse anesthesia program is 4.5 years.
- 11.3 Any students failing the same course on its second attempt or who fails two courses will be recommended for academic dismissal immediately.
- 11.4 Any student failing a course will automatically enter probation status (see probation status for details).
- 11.5 Students that do not repeat a required didactic or clinical course the next semester it is offered will automatically disqualify this student for re-entry.
- 11.6 Students may be dismissed from the program if he/she does not comply with the nurse anesthesia policies and rules or commits violations to the MSC Student Bylaws, which prescribe this type of sanction.

12. Withdrawal/Resignation

- 12.1 Students may withdraw from courses during the period established by the Registrar Office (published yearly on the official university calendar) after officially notifying the professor and obtaining permission from the Program Director, Associate Dean for Student Affairs, and the Dean of the School of Nursing.
- 12.2 No student will be granted permission for partial withdrawals after the period established within the official calendar of the university has ended.
- 12.3 Outstanding circumstances related to health issues that may hinder the ability of a student to withdraw or continue a program course should present evidence and notify the program director (preferably by e-mail) as soon as possible.
- 12.4 The registrar will post a "W" on the student's permanent record and no grade will be given for any assignment performed in the course.

- 12.5 A student may totally withdraw from the University of Puerto Rico at any time up to the last day of classes and are encouraged to visit the school counselor before this determination. He/she must obtain written permission from the Dean. The Registrar will post a "W" on all courses for that session.

13. Re-entry

- 13.1 Any student seeking re-entry to the Nurse Anesthesia Program will be evaluated by an admission committee.
- 13.2 The committee will review the students record and determine eligibility of re-entry.
- 13.3 The student must be in full compliance with updated policies and procedures of the program at the time of the re-admission.
- 13.4 The committee will evaluate the availability of seats in accordance with program resources and limits established by accrediting agencies. No student will be allowed re-entry twice.

14. Transfer

The Nurse Anesthesia Program abides by the policies established by the Medical Sciences Campus "Norms and Procedures of the Registrar's Office" revised and approved on August 9, 2022, p. 40.

- 14.1 The Nurse Anesthesia Program has established that a maximum of six (6) credits may be transferred from an accredited institution. No basic sciences or anesthesia specialty courses can be transferred.
- 14.2 The student must notify the Program Director in writing of the reason for transfer.
- 14.3 The director of the program to which the student is making application must request an official transcript of the Student's Record, including all experiences, both didactic and clinical from the Director of the Program from which the student is transferring prior to acceptance of the student.
- 14.4 In turn, the Program must supply not only the transcript, but also any other pertinent objective information prior to acceptance in the program.
- 14.5 The program determines the credit to be given to the student for previous experience and will notify about the official decision.

15. Disciplinary Actions

Disciplinary action may be imposed upon a student following the violation of any of the rules and regulations. The Nurse Anesthesia Program expects every student to observe basic rules of good behavior in the academic scenarios including clinical setting.

15.1 Types of Disciplinary Actions

- 15.1.1 Reprimand-oral and documented warning to the student.
- 15.1.2 Academic Probation (See Academic Probation for details)
- 15.1.3 Academic Dismissal (See Academic Dismissal for details)

15.2 Acts that are Considered Cause for Reprimand or Probation

The action decided upon will depend on the type of the offense.

- 15.2.1 Non-compliance with the nurse anesthesia program and SON policies.
- 15.2.2 Defamatory statements about the hospital, fellow students, or employees.
- 15.2.3 Unexcused absence or lateness: Habitual or frequent lateness or absence from duty, classes, conferences, or extracurricular activities.

- 15.2.4 Untidiness: Both personal untidiness with respect to personal grooming and hygiene, or untidiness in work areas, care of equipment, keeping of records, etc.
- 15.2.5 Smoking in an unauthorized area or at an unauthorized time.
- 15.2.6 Insubordination: Students are expected to comply with directions given by a supervisor, without argument or dissent. Any questions concerning the directions may be presented to the Director or the advisor of the school.
- 15.2.7 Non-Payment of contracted debts: Students are expected to have a sense of obligation to contracted agreements with SON and the MSC.
- 15.2.8 Unsatisfactory performance of assignments.
- 15.2.9 Contributing or causing unsafe conditions.
- 15.2.10 Unauthorized absence from assigned work.
- 15.2.11 Extending lunches or break-time without permission.
- 15.2.12 Failure to sign-in and out when required.
- 15.2.13 The use of profane or abusive language.
- 15.2.14 Any conduct detrimental to patient safety, fellow students, employees or hospital operations.
- 15.2.15 Divulging any confidential information.
- 15.2.16 Refusal to carry out assignments.
- 15.2.17 Soliciting tips, loans, or gifts from patients or another person.
- 15.2.18 Failure to report an injury, accident, incident, or unsafe conditions occurring or existing on hospital premises.
- 15.2.19 Engaging in extraneous activities that jeopardize safety and interfere with adequate vigilance of the patient. The following are examples of such activities: texting, web-browsing, e-mailing, taking pictures, reading books, and talking over the phone.
- 15.2.20 Any student incurring in an act subject to reprimand or probation will be notified by the faculty member. The faculty member will counsel the student and will emit a written report on the meeting and non-compliance acts observed. The student has the opportunity to provide a written response within 48 hours of being notified on non-compliance acts. Depending on the non-compliance nature of the acts incurred by the student and with consultation of the Program Director, the student could be subject to academic probation.

15.3 Acts that are Considered Cause of Dismissal

- 15.3.1 Failure to fulfill responsibilities to an extent that might or does cause injury to a patient, visitors, other students, or hospital personnel.
- 15.3.2 Deliberate violation of a posted health, safety, and fire prevention or security rule.
- 15.3.3 Falsification of record, i.e., health forms, or application forms.
- 15.3.4 Habitual non-compliance with departmental policies.
- 15.3.5 Deliberate false, fraudulent, or malicious statements or action involving relations with a patient, the hospital, employees, or the public or other action disloyal to the hospital.
- 15.3.6 Administering of anesthesia outside of the confines of the Department of Anesthesiology prior to completion of the program.
- 15.3.7 Failure to comply or violation of a leave of absence.'

- 15.3.8 Theft: Removal of or unauthorized possession of property belonging to employee, students, visitors, patient, or the hospital. This includes the intent to remove or the actual removal of university and hospital property from hospital grounds.
- 15.3.9 Illegal use of or possession of drugs or the dispensing of drugs without a prescription.
- 15.3.10 Possession of use of intoxicating substances or narcotic on hospital premises or reporting to duty under the influence of an intoxicating substance or drug as evidenced by:
- Inability to perform assignments.
 - Undesirable influence towards patient, visitors, staff and employees.
- 15.3.11 Giving, receiving, or utilizing unauthorized aid on examinations, assignments, preparation of notebooks, themes, reports, projects, and/or other assignments or undertakings.
- 15.3.12 Misrepresenting the source of academic work.
- 15.3.13 Committing unethical practices in conducting and/or reporting research.
- 15.3.14 Copying from a textbook or class notes during a closed book exam.
- 15.3.15 Taking a test or writing a paper for another student.
- 15.3.16 Falsifying clinical hours, cases, case conferences or any other student data.
- 15.3.17 Failure to enter clinical hours, cases, or any other student data into the Medatrx system in a timely manner.
- 15.3.18 Knowingly breaching patient's rights to privacy and confidentiality by disclosing Protected Health Information as specified by HIPAA regulation. This include but are not limited to accessing electronic health records where others can see it, printing information from unauthorized printer, sharing patient information or pictures in social media (Facebook, Twitter, Text Messages or any other form of electronic communication).
- 15.3.19 Securing or supplying in advance a copy of an exam without the knowledge and consent of the instructor.
- 15.3.20 Any student incurring in an act subject to dismissal will be notified by the faculty member. The faculty member will counsel the student and will emit a written report on the meeting and non-compliance acts observed. The students have the opportunity to provide a written response within 48 hours of being notified on non-compliance acts. Depending on the non-compliance nature of the acts incurred by the student and with consultation of the program director, the student could be subject to academic probation and/or dismissal.
- 15.3.21 Any student in clinical probation status who repeats or incurs in any act subject to probation or dismissal is subject to dismissal from the Nurse Anesthesia Program.
- 15.3.22 The student has the right to appeal the above decision following the appeal mechanisms established for these purposes by the MSC student By-laws.

16. Academic Probation

- 16.1 Any student failing a course of the nurse anesthesia program (<B grade) will enter academic probation immediately.
- 16.2 Any student with a grade point average below 3.0 in anesthesia courses will enter academic probation immediately.
- 16.3 Any student incurring in acts subject to academic dismissal or probation as established in section 15 of this manual is subject to academic probation.
- 16.4 A notification (official letter) of probation status will be emitted by the PD and delivered in person to the nurse anesthesia student. A copy will be sent by email.
- 16.5 The Nurse Anesthesia Program has established that a maximum of six (6) credits may be transferred from an accredited institution. No basic sciences or anesthesia specialty courses can be transferred.

- 16.6 Any student entering probation status must have a meeting with the PD to discuss the student's status and future program expectations.
- 16.7 Any student on probation status will be referred to the school's counselor, the Associated Dean of Students Affairs (ADSA) and the Associate Dean of Academic Affairs (ADAA).
- 16.8 Any student who doesn't meet probation status requirements will be subject to dismissal.

17. Academic Dismissal

- 17.1 Any student failing to comply with any policy subjected to academic dismissal will be referred to the student evaluation and promotion committee for further evaluation and final recommendations.
- 17.2 Decisions for dismissal will be discussed and recommended by the student evaluation and promotion committee.
- 17.3 The Program Director will evaluate the recommendation of the student evaluation and promotion committee with the Associate Dean of Academic Affairs and the Dean of the SON to make a final decision.
- 17.4 Any student deemed dismissed from the program will receive an official letter from the Program Director, Associate Dean of Academic Affairs and Dean of the SON.
- 17.5 A dismissal letter shall specify the policy violations that deem the student dismissed from the nurse anesthesia program.

18. Student Evaluation and Promotion Committee (SEPC)

- 18.1. Nurse anesthesia program students that fail a course or incurs in academic acts subject to probation or dismissal may be referred to the SEPC.
- 18.2 Recommendations emitted by the SEPC will be evaluated by the program director when determining the status of students referred to the SEPC.
- 18.3 Recommendations by the committee can be as follows:
 - 18.3.1 Probation subject to terms deemed appropriate by the committee.
 - 18.3.2 Dismissal from the Nurse Anesthesia Program.
 - 18.3.3 Other recommendations as deemed appropriate by the committee.

19. Clinical Supervision

- 19.1 The program restricts the clinical supervision of the nurse anesthesia student in anesthetizing areas to certified registered nurse anesthetists (CRNA) and/or anesthesiologists with institutional staff privileges who are immediately available in all clinical areas.
- 19.2 Instruction or supervision by graduated registered nurse anesthetists and/or physician residents is never appropriate if they act as the sole agent responsible for the nurse anesthesia student.
- 19.3 The supervision in non-anesthetizing areas is restricted to credentialed experts who are authorized to assume responsibility for the nurse anesthesia students.

20. Clinical Supervision Ratio

- 20.1 The clinical supervision ratio is coordinated based on the student knowledge and ability, the physical status of the patient, the complexity of the anesthetic and/or surgical procedure, and the experience of the instructor to ensure patient safety.
- 20.2 The clinical ratio will not exceed two anesthesia students to one CRNA or Physician Anesthesiologist.
- 20.3 In the case of medical direction, where the anesthesiologist medically directs 4 concurrent procedures, the ratio of graduate students to CRNA will not exceed 2:1.

21. Required Anesthesia Cases

Each student must comply with the minimum of 650 cases and 2000 anesthesia hours as established by the COA in a variety of procedures, techniques, and specialty practice, to be eligible for the National Certification Examination and to be a graduation candidate.

22. Schedule Call Experience

The program provides opportunities for students to obtain clinical experiences outside the regular clinical schedule by a call experience or other mechanism. The clinical faculty will assign the call experience. Although a student may be assigned to a 24-hour call experience, at no time may a student provide direct patient care for a period longer than 16 continuous hours.

23. Exposure to Blood or Body Fluids in the Clinical Setting

In the event a student is injured during clinical training or exposed to a patient's bodily fluids via needle stick, splash or other mechanism:

1. Immediately report the exposure incident to the preceptor and faculty course instructor.
2. Notify the Program Director (or Assistant Program Director) at the earliest possible time, but no later than 24 hours following the event.
3. Follow the UPR-SON protocol for the management of special situations during clinical training.

24. Travel Requirements

All students should be prepared to travel by themselves to the affiliated institutions. Students will not receive travel allowance.

25. Skills Development Laboratory

1. Scrubs must be worn at all times during skills development activities.
2. Faculty member must be present during skills development sessions.
3. If you are unfamiliar with an equipment or mannikin, you are required to ask for assistance prior to use.
4. No food is allowed in the laboratory.

26. Exams

The question format used in the exams may mirror the format used for the NCE and consists but is not limited to the following question formats (Extracted from NBCRNA.com):

- 26.1 Multiple-choice question** (consisting of a stem and four response options).
- 26.2 Multiple Correct Response (MCR):** This question format is similar to a multiple-choice (MC) question. However, MCR questions consist of a stem and four to eight response options, and a correct response consists of more than just one option. The examinee must select all of the correct response options in order to be awarded credit. The question stem will indicate how many response options are correct.

- 26.3 Calculation:** Examinees are asked to respond by typing in a numerical response, typically a whole number (no decimals) or a number consisting of 1 or 2 decimal places. It is very important that the response to calculation questions be entered in the form of a number (e.g., 2 or 2.11), and NOT the word form of a number (e.g., “two” or “two point one-one”). *Example: What is 2+2? Correct: 4; Incorrect: Four.* A calculator application will be available for calculation items that may be computationally complex.
- 26.4 Match (Equivalent to Drag and Drop):** These questions involve selecting and matching objects or premises to corresponding targets and may take the form of matching or placing objects in order.
- 26.5 Hotspot:** Examinees indicate their answer by using their pen to mark a region of a presented image or figure. Letters can be assigned to an image and the examinee must match it with the corresponding premise.

Electronic Exams (ExamSoft/Examplify)

- 26.6** The program uses electronic exams for some or all of its courses.
- 26.7** Students will bring their own laptops on the day of the exam in order to access ExamSoft electronic exams (prepared by the program).
- 26.8** Laptop costs are included within the additional costs section of this manual and is the responsibility of the student.
- 26.9** Students are responsible to have the minimum operational system requirements to use ExamSoft/Examplify.

Policies for Electronic Exam Taking

26.10 Exam or Quiz General Rules

- 26.10.1 No other electronic items except for the computer in which the student is going to complete the electronic exam or quiz is allowed.
- 26.10.2 Smartphones, smartwatches, headsets, and electronic noise cancelling devices are not allowed during the electronic assessment and evaluation process.
- 26.10.3 Only non-electronic noise cancelling devices such as earplugs or ear covers are allowed.
- 26.10.4 Only the calculator provided by the electronic exam taking platform is allowed whenever deemed necessary by the course instructor.
- 26.10.5 The instructor can relocate any student when considered appropriate.
- 26.10.6 The instructor will determine the availability of highlighting, backwards navigation, alarms, type of review and others during the exam or quiz as appropriate.
- 26.10.7 Students will have a minimum of one (1) minute per question or more as determined by the course instructor.

26.11 Internet Connection

- 26.11.1 When taking an assessment in a personal computer, only institutional wi-fi is allowed as a mean of establishing internet connection to download or upload an exam.
- 26.11.2 When taking an assessment in an institutional computer, only the institutional LAN or Wi-fi connection is allowed.

26.12 Download

- 26.12.1 When allowed by the course instructor, the student is responsible for downloading the exam before the exam date.

- 26.12.2 Authorization for repeat downloads are at the discretion of the course instructor after evaluating the circumstances that produce the need for a repeat download.
- 26.13 Upload**
- 26.13.1 Students are responsible for uploading their quiz or exam.
- 26.13.2 The student should upload the exam immediately after completing the exam or quiz.
- 26.13.3 Any student not uploading their quiz or exam would be considered as a no-completion of the corresponding exam or quiz and is subject to lose all credits.
- 26.14 Login**
- 26.14.1 Students are responsible for knowing their login information.
- 26.14.2 Students are responsible for using the correct login information and thus, are required to carefully verify they have accessed their account before completing an exam or quiz.
- 26.14.3 Any time lost on the login process due to forgotten credentials is the responsibility of the student.
- 26.15 Access Passwords**
- 26.15.1 Access passwords will be provided by the course instructor after all exams or quizzes have been downloaded.
- 26.15.2 Students are prohibited from writing down passwords other than when required to do so in the exam taking platform.
- 26.16 Confidentiality and Academic Integrity**
- 23.16.1 Questions must be maintained confidential by exam takers. Any student found to have been distributing, copying, or sharing exam content is subject to disciplinary actions as outlined by the Student Manual of the Medical Sciences Campus, Student Manual in article 6.2 thru 6.4 and the Policies and Procedures Manual of the Nurse

27. Comprehensive Nurse Anesthesia Examination (CE)

The comprehensive nurse anesthesia examination (CE) serves to assure continued development of the core foundation of anesthetic knowledge, retention of introduced concepts, and application of the didactic curriculum into clinical practice. The student will be expected to demonstrate depth and breadth of knowledge of the practice of anesthesia. The Self-Evaluation Examination (SEE) will serve as the comprehensive examination for the Comprehensive Nurse Anesthesia Examination Course.

- 27.1 Students will take and approve the CE (SEE) with a pass or no pass grading system.
- 27.2 The minimum score required to pass the CE (SEE) will be established by the course instructor on yearly basis by using as a reference the yearly publication (published by NBCRNA) on SEE score national means and other related measures.
- 27.3 Students will pay the cost to take the CE (SEE).
- 27.4 The student is responsible to schedule the CE (SEE) after receiving instructions from Program Director.
- 27.5 The course requirement is to pass the CE (SEE) before the end of the course.
- 27.6 If the student did not approve the CE (SEE) in the first attempt, he/she will have the opportunity for a second attempt, only when dates for a second attempt are available in the testing center before the end of the course. Attempts after the course has ended are not allowed.
- 27.7 If the student fails the first and/or second attempt he/she will not be able to enroll on Anesthesia Residency I clinical rotation.

- 27.8 No more than two attempts will be allowed (each attempt is paid by the student).
- 27.9 Students can repeat the Comprehensive Nurse Anesthesia Examination Course the following semester.
- 27.10 Student failing to pass the Comprehensive Nurse Anesthesia Examination Course on the second attempt will be dismissed from the Nurse Anesthesia Program as established by the policies in this manual.
- 27.11 When the student approves the comprehensive exam course, he/she can enroll on Anesthesia Residency I course on the next regular semester after approval (first or second semester).

28. AANA Membership

Students are required to maintain membership in the American Association of Nurse Anesthesiologists throughout the program. The cost of membership shall be the responsibility of the individual student.

29. Self-Evaluation Examination (SEE)

The purpose of the Self-Evaluation Examination (SEE) is to expose the nurse anesthesia students to the advanced knowledge, skills, and abilities of the program of studies. The SEE measures the student academic strengths and weaknesses. It provides opportunities to identify areas requiring adjustments prior to sitting for the national certification examination and in doing so increases the chances for successful first attempt. The course Anesthesia Residency II requires to pass the SEE before the end of the course. The minimum score required to pass the SEE will be established by the course instructor on yearly basis by using as a reference the yearly publication (published by NBCRNA) on SEE score national.

The nurse anesthesia student must:

- 29.1 Pay and schedule a date when allowed by the faculty for the SEE at the National Board of Certification and Recertification of Nurse Anesthetists (NBCRNA) website.
- 29.2 Students on reasonable accommodation are responsible in planning with testing center for accommodation. The Nurse Anesthesia Program is not responsible for arrangements.
- 29.3 A student with a documented disability may request a reasonable accommodation for the SEE by submitting his or her request and supporting documentation in writing to the NBCRNA when the program administrator submits the SEE application, or as soon as the student learns of the need for the accommodation. Students must submit documentation from a licensed health care provider who specializes in evaluating and treating the specific disability for which the accommodation is being requested. The documentation must be on the health care provider's letterhead and must include a description of the evaluative process used in determining the disability and any testing modifications that are being requested (e.g., reduced distraction room). An official letter from the program administrator documenting the types of accommodation provided during the nurse anesthesia educational program is required. The NBCRNA will work directly with the student and Pearson VUE to attempt to make reasonable modifications in the testing environment and procedures to make it possible for a student with a documented disability to take the examination under conditions that will accurately reflect the student's aptitude or achievement level. The inability to read English is not considered a disability and does not make a student eligible for accommodations.
- 29.4 It is the responsibility of the student to read the handbook for the Self Evaluation Exam and clarify any doubts that may arise through the program director of NBCRNA staff. The handbook can be found at: http://www.nbcna.com/Publication_Events/Pages/Handbooks.aspx

30. National Certification Examination (NCE)

To be eligible to apply to take the NCE for registered nurse anesthetists and to receive a certification eligibility notification, a candidate must:

- 30.1 Comply with all state requirements for current and unrestricted licensure as a registered professional nurse.
- 30.2 Complete a nurse anesthesia educational program accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs.
- 30.3 Comply the program graduation policy (see Graduation Policy section).

Submit

- 30.4 A complete and accurate examination application form signed by the candidate, which includes the NBCRNA Waiver of Liability and Agreement of Authorization, Confidentiality, and Nondisclosure Statement.
- 30.5 An official word processed or typed notarized transcript of the candidate's record of performance in an accredited program, on a transcript form prescribed by the NBCRNA Council on Certification of Nurse Anesthetists, signed by the program director and by the candidate, which accurately documents the candidates' academic and clinical experiences, and his or her completion of the accredited program.
- 30.6 If transcripts are submitted prior to completion of the program, a program Completion Verification Form verifying that the candidate has in fact completed the program must be signed and submitted by the candidate's program director after the program has been completed.
- 30.7 A copy of the candidate's valid license to practice as a registered professional nurse that is current on the candidate's requested examination date in at least one state.
- 30.8 A cashier's check or money order made payable to the National Board on Certification and Recertification of Nurse Anesthetists (NBCRNA) for the current application fee and any other applicable fees.
- 30.9 A signed Authentication of Applicant Identity Form with a passport photo or digitalized photo taken within the previous six (6) months attached.
- 30.10 Comply with the written commitment signed by the nurse anesthesia student on the admission process stating that he/she would take the examination within 120 days after graduation. If the candidate cannot comply with the written commitment in the established period, he/she must submit a letter stating the reason or reasons. The nurse anesthesia faculty will act per the information obtained.
- 30.11 Students on reasonable accommodation are responsible to plan with testing center for accommodation. The Nurse Anesthesia Program is not responsible for arrangements.
- 30.12 A candidate with a documented disability may request a reasonable accommodation for the NCE by submitting his or her request and supporting documentation in writing to the NBCRNA with his or her completed application, or as soon thereafter as the candidate learns of the need for the accommodation. Candidates must submit documentation from a licensed health care provider who specializes in evaluating and treating the specific disability for which the accommodation is being requested. The documentation must be on the health care provider's letterhead and must include a description of the evaluative process used in determining the disability and any testing modifications that are being requested (e.g., reduced distraction room). In addition, if the candidate is currently enrolled or a recent graduate, an official letter from the nurse anesthesia educational program administrator documenting the types of accommodation provided during the nurse anesthesia educational program is required. The NBCRNA will work directly with the candidate and Pearson VUE to attempt to make reasonable accommodations in the testing environment and procedures to make it possible for a candidate with a documented disability to take the NCE under conditions that will accurately reflect the candidate's aptitude or achievement level. The inability to read English is not considered a disability and does not make a candidate eligible for accommodations.
- 30.13 It is the responsibility of the student to read the handbook for the National Certification Examination and clarify any doubts that may arise through the program director or NBCRNA staff.

The handbook can be found at: <https://www.nbcrna.com/exams/see-resources>

For any additional information please refer to the current NBCRNA Handbook.

31. Graduation Policy

The candidate must have to complete the didactic and clinical program requirements to be granted the degree. It includes:

- 31.1 Completion of eighty-seven (87) credits for the degree.
- 31.2 Obtain a minimum General Academic Point Average (GPA) of 3.0 in the scale of 4.0.
- 31.3 Approval of the specialty courses of the curricular sequence with a minimum of a B average.
- 31.4 Completion of the didactic courses and clinical hours as specified by the Program and the National Board of Certification and Recertification for Nurse Anesthetists (NBCRNA).
- 31.5 Comply with the total number of required and preferred anesthesia cases by “patient physical status, special cases, position, anatomical categories, methods of anesthesia, pharmacological agents, arterial technique, central venous pressure catheter, pulmonary catheter and others” as established by the COA Standards.
- 31.6 Comply with the signed written commitment to sit for the NCE within 120 days after graduation.

32. Technical Standards

Admission, Continuation and Graduation Technical Standards for Nurse Anesthesia Studies

A candidate or student for the Doctor of Nursing Practice with specialty in Anesthesia must be able to show intellectual, conceptual, integrative, and quantitative abilities; observation skills, communication and motor functions; and mature behavioral and social attributes. Technological compensation can be obtained for some disabilities in certain areas. Nevertheless, a candidate should be able to perform in a reasonably independent manner without the need of a trained intermediary. The use of a trained intermediary reflects a candidate's whose judgment or performance must be mediated by someone else's power of performance, selection, and observation.

32.1 Sensory

- 32.1.1 A candidate or student must be able to identify, detect and interpret changes in monitoring alarms and equipment.
- 32.1.2 A candidate or student must have sufficient sensory capacity to observe in the lecture hall, the laboratory, the outpatient setting, and the patient's bedside.
- 32.1.3 Sensory skills adequate to perform a physical examination are required. Functional levels of vision, hearing and tactile sensation must be present to observe a patient's condition and to formulate information from computerized monitors, and through procedures regularly required in a physical examination, such as inspection, auscultation, and palpation.
- 32.1.4 A candidate or student must be able to accurately observe a patient when close or at a distance.

32.2 Communication

- 32.2.1 A candidate or student should be able to talk, hear and see patients in order to elicit information; describe changes in mood, activity, and posture; and appreciate nonverbal communications.
- 32.2.2 A candidate or student must be able to effectively and sensitively communicate with patients. Writing, speech, and reading are all part of the skills required for effective communication.

32.3 Motor

- 32.3.1 Candidates or student should have a motor function that sufficiently permits it to elicit information from patients by palpation, auscultation, percussion and other diagnostic maneuvers.
- 32.3.2 A candidate or student must be able to adapt in different patient care environments and must be able to re-locate self/patients between areas, such as clinic, classroom, and hospital.
- 32.3.3 A candidate or student should be able to carry out motor activities required to provide general care. This include but is not limited to direct laryngoscopy, arterial and venous line insertion, and peripheral and central nerve blocks, anesthesia gas machine check and operation, and provide emergent or urgent care to patients that require fiberoptic intubation and/or airway management technique for the difficult airway.
- 32.3.4 The candidate or student should be able to perform CPR which requires equilibrium, a certain amount of muscular force and physical exertion.

32.4 Intellectual-Conceptual, Integrative and Quantitative Abilities

- 32.4.1 Intellectual-conceptual, integrative and quantitative abilities include measurement, calculation, reasoning, analysis and synthesis. Problem-solving, the critical skill demanded of a nurse anesthetist, requires all of these intellectual abilities.
- 32.4.2 A candidate should be able to comprehend 3-dimensional relationships and to understand the spatial relationships of structures for the performance of peripheral and central nerve blocks.
- 32.4.3 A candidate must be able to read and understand medical and nursing literature. In order to complete the degree, candidates must be able to demonstrate mastery of these skills and the ability to use them together in a timely and often critical fashion in problem-solving and patient care.

32.5 Behavioral and Social Attributes

- 32.5.1 A candidate must possess the emotional health required for full utilization of intellectual abilities, the exercise of good judgment, the prompt completion of all responsibilities attendant to the diagnosis and care of patients, and the development of mature, sensitive, and effective relationships with patients and other healthcare personnel.
- 32.5.2 A candidate must be able to tolerate physically taxing workloads and to function effectively under stress. They must be able to adapt to changing environments, display flexibility and learn to function in the face of uncertainties inherent in the clinical problems of many patients.
- 32.5.3 Commitment to excellence, service orientation, goal-setting skills, academic ability, self- awareness, integrity and interpersonal skills are all personal qualities that are assessed during the admission and education process. Because the nature of nurse anesthesia education is based on a mentoring process, candidates are expected to be able to accept criticism and respond by appropriate modification of behavior. Compassion, integrity, concern for others, interpersonal skills, interest and motivations are all personal qualities that are required.

32.6 Other Examples of Technical Standards

In addition to the existing text incorporated within the Technical Standards for Nurse Anesthesia Studies for Admission, Continuation and Graduation, there are specific needs that are relevant to successful completion of curriculum requirements. This addendum provides specific examples to enhance the interpretation of the Technical Standards, particularly within the “Motor” and “Behavioral and Social Attributes” categories.

- 32.6.1 Students are required to master the skills of a complete physical examination.
- 32.6.2 Students must be able to complete Basic Life Support (BLS), Advanced Cardiac Life Support (ACLS), Pediatric Advanced Cardiac Life Support (PALS)
- 32.6.3 Students must be available for academic activities or hospital orientations. This may include evening, night and weekend obligations.
- 32.6.4 During clinical practice or residency, several mandatory rotations require extended hours, with start times as early as 5:00 am. Evening, on-call and weekend shifts are common and may extend into 12

to 16-hour days. As a result, students must be able to physically and psychologically perform capably and competently with moderate degrees of sleep deprivation.

- 32.6.5 Many surgical procedures essential to training may last for 3 or more hours. Students may be required to stand in a relatively fixed position for the entirety of the procedure with minimal rest or breaks.
- 32.6.6 In emergency situations, patients may need to be moved, turned or resuscitated, and the student may be in situations that necessitate short periods of bending, lifting, reaching, squatting or straining.

Faculty

The nurse anesthesia faculty must be currently licensed as registered nurses, have a doctoral degree, must be certified or recertified as a CRNA by the National Board on Certification/Recertification of Nurse Anesthetists (NBCRNA), and be a current member of the AANA. Anesthesia preceptors assigned to clinical supervision will be anesthesiologists and CRNAs with a master's/doctoral degree. At each clinical site there will be a clinical coordinator.

Nurse Anesthesia Clinical Faculty Responsibilities

1. Provides onsite visit for evaluation and support students in accordance to student's learning competence and skills.
2. Work in unison with clinical coordinators and preceptors on their daily responsibilities.
3. Establishes clinical practice objectives according to the program objectives.
4. Oversee clinical assignments and make changes to schedules along with the clinical coordinator according to the student's educational needs, level of preparation, experience, and to course objectives.
5. Monitor student's attendance to the clinical sites.
6. Monitor student's progress and quality of clinical experiences.
7. Supervise the student's compliance with the scope and standards of nurse anesthesia practice and code of ethics.
8. Complete formative and summative clinical student performance evaluation. Weekly clinical evaluation conducted by clinical preceptors' feedback will be used by the clinical faculty as objective tool for student's evaluation.

Nurse Anesthesia Clinical Coordinator Responsibilities

1. Serve as liaison between the Nurse Anesthesia Program and the clinical site anesthesia preceptors and staff.
2. Orient students at the clinical site.
3. Coordinate clinical assignments and make changes to schedules according to the students' educational needs.
4. Serve as liaison between students and clinical site staff.
5. Assign students to clinical experiences according to their level of preparation and experience and to course objectives.
6. Serve as a resource person for students.
7. Encourage preceptors to complete weekly student evaluations.
8. Guide clinical practice according to program established objectives.
9. Monitor the student's attendance to the clinical area.
10. Monitor the student's progress and quality of clinical experiences.
11. Discuss with students their strengths and weaknesses.
12. Supervise the student's compliance with the scope and standards of nurse anesthesia practice and Code of Ethics.
13. Assure compliance of the facility with the Council on Accreditation of Nurse Anesthesia Educational Programs' Standards.

14. Maintain confidentiality of student records.
15. Maintain effective communication and interpersonal relationships between students, the clinical site, and program staff.

Anesthesia Clinical Supervisor Responsibilities

1. Guide clinical education according to established objectives and level of the student.
2. Attest to student's attendance to clinical area.
3. Supervise daily student's performance during clinical assignments.
4. Complete weekly student evaluations.
5. Assess formative clinical performance according to requirements and utilizing established instruments.
6. Supervise the student's compliance with scope and standards of nurse anesthesia practice and Code of Ethics.
7. Maintain effective communication and interpersonal relationships with students, and clinical site coordinator.
8. Maintain confidentiality of student daily evaluations.
9. Monitor student's progress and quality of clinical experiences.
10. Discuss with students their strengths and weaknesses.
11. Discuss with the clinical coordinator the student's progress.
12. Discuss the anesthesia care plan with the student.

Students

Evaluation

Students are evaluated both in didactic and clinical areas with a grading system in which “A” and “B” are given for satisfactory and outstanding work. All concentration courses must be approved with a minimum of “B” average.

Academic Calendar

The Academic Calendar is developed by the Registrar’s Office and approved by the Administrative Board after receiving program directors’ suggestions. This calendar includes established dates for the beginning and ending of each academic session, registration, withdrawals, late registrations, transfers, changes in program, removal of incompletes, holidays, and graduation date. It may be accessed at www.rcm.upr.edu/rcm/calendar.

Advising

Policy: The University of Puerto Rico – Nurse Anesthesia Program (UPR-NAP) faculty members provide academic advising to all students in the Program. Academic advisors meet with students to assess needs or factors that are or may potentially affect their academic progress and address them in a timely manner, with the end goal of promoting successful advancement through the Program. Advisors will meet the advisees in person or virtually at least once per semester.

Procedure: All students will be assigned a faculty advisor at the start of the Program. The faculty advisor will assist students in interpreting the UPR-NAP policies and procedures requirements and developing a plan of study.

The faculty advisor will:

1. Meet with the student shortly after enrollment to the Program and establish a relationship centered on the student needs.
2. Focus on promoting student’s success in the Program.
3. Assess needs or factors that are or may potentially affect student’s academic progress and address them in a timely manner.
4. Review daily evaluations, Medatrax records, case log numbers, and didactic strengths and weaknesses during each meeting.
5. Perform actions needed and complete a report form at the end of each semester, which will also be saved as part of the students’ permanent record

The student will:

1. Arrange a meeting with the assigned academic advisor as soon as possible and at least once per semester.
2. Attend all advising sessions as scheduled with the advisor.
3. Complete a self-evaluation form before each meeting.
4. Meet with advisor as necessary and as desired.
5. Provide the advisor with current contact information. Each student should update the student’s mailing address, telephone number, and non-institutional email address on an annual basis or as changes occur.

Deanship for Student Affairs

A dean who is responsible for the administrative control of most student services heads the Deanship for Student Affairs of the MSC. The development, coordination, and supervision of programmed activities for students are handled through the offices of Admissions, Guidance-Counseling, Financial Aid, Student Health Services, Quality of Life, and Cultural Activities. Specifically, this Deanship:

- Coordinates and supervises the admissions process. The programs make the admissions decisions.
- Develops, coordinates, and supervises financial aid programs for students.
- Provides, coordinates, and supervises the Student Health Services Program.
- Through its Guidance and Counseling Office it promotes the Medical Sciences Campus academic offerings among potential students, faculty, and counselors of public and private universities, high schools, and colleges throughout the island.
- Provides and supervises academic counseling services to the Medical Sciences Campus students.

- Organizes and supervises the election of official student bodies such as the Medical Sciences Campus Student Councils, the student representatives to the University Board and the student representatives to the Academic Senate.
- Provides official recognition and support services to the diverse student organizations.
- Promotes and coordinates student exchange programs with other institutions.
- Develops, organizes, and supervises social, cultural, and sports activities.
- Coordinates and promotes the Campus Committee for AIDS Prevention and oversees compliance with the Alcohol and Drug Abuse, Student Right to Know, and Campus Security Act policies.

The Office of the Assistant Dean for Student Affairs at the School of Nursing offers the following services:

- School counseling and guidance regarding the students' academic, financial, and personal matters.
- Collaborates with the process of recruitment, admission, enrollment, registration, retention, and student progress throughout the nursing programs.
- Organizes and supervises the election of student representatives to official student bodies.
- Supports the official student bodies.
- Develops and organizes social, cultural, and sports activities.

Student Health Services

MSC has an Office of Student Health Services. These services are offered to all students from 8:00 a.m. to 5:00 p.m., on Monday through Thursday and on Friday, from 8:00 a.m. to 3:00 p.m. A physician and a registered nurse offer health services. Dental emergency services are offered in coordination with the dental clinic of the School of Dental Medicine.

First aid care is available at the Student Health Clinic. Students needing acute emergency care are referred to the Emergency Room of the Puerto Rico Medical Center, or to private hospitals in the community. During nonworking hours, students are instructed to seek medical emergency care or hospitalization at affiliated hospitals or at the offices of participating physicians.

The University of Puerto Rico requires that all students carry medical insurance coverage. The institution provides low-cost health insurance, which covers ambulatory medical and surgical services, hospitalization, laboratory, and maternity care. Pharmacy coverage is optional. Students may also choose to carry other health insurance plans in order to comply with this requirement.

Social and Cultural Activities

The Cultural Activities Office of the Deanship for Student Affairs provides activities for the cultural development of students and the campus community. These include concerts, conferences, dances, lectures, films, variety shows, and games offered throughout the academic year. Art exhibits are displayed at the main building. Leading local painters and sculptors have exhibited their work on campus. The Medical Sciences Campus Choir brings together members of the academic community, professors, students, and staff. The choir participates in official institutional and off-campus activities.

Athletic Activities

The campus gymnasium is located on the second floor of the old School of Pharmacy building. It has facilities for intramural sports, workout area, locker rooms, and a capacity for 1,000 persons. Students must apply directly to the Athletic Activities Coordinator for the use of the facilities.

Student Housing

The Medical Sciences Campus does not provide student housing facilities. However, the Office of the Dean of Students has compiled a list of boarding houses in the vicinity. This list is available upon request.

Food Services

There are several cafeterias and fast-food establishments on the grounds of the Puerto Rico Medical Center and in the vicinity.

Campus Government and Student Representation

Each year students of the Medical Sciences Campus meet for the purpose of electing Class Boards, School Student Councils, and the General Student Council as well as for appointing representatives to institutional bodies.

School Student Councils: Students at each school elect a student council. These are the official student representatives and spokespersons.

General Student Council: This is the official forum of the student body of the Medical Sciences Campus. It is composed of the president and two additional members from each school student council, the student representatives to the Academic Senate, and the student representatives to the University and Administrative Boards.

Disciplinary Board: Students select two (2) representatives to the Disciplinary Board through the General Student Council, thus insuring student representation in disciplinary actions.

Faculty Meetings: Students in each School have the right to elect representatives to faculty meetings. This number may not exceed 10 percent of the total number of faculty members.

Faculty Standing Committees: There are some standing committees in which students have representation, among them curriculum. Representation may vary at each school depending on existing committees.

Academic Senate: Students from each school elect one (1) student who represents them in the Academic Senate. The President of the General Student Council is also a student representative to this body.

Administrative Board: Students elect a representative to the Administrative Board through the General Student Council.

University Board: Students of the Medical Sciences Campus elect one student representative to the University Board.

Liability Insurance

Provided by the University of Puerto Rico, Medical Sciences Campus.

Anesthesia Cases Records

The nurse anesthesia program will keep all cumulative records of student anesthesia cases using the **Medatrax System**. The record must comply with all information necessary as evidence for certification upon completion of the program and for the annual report to be submitted to the Council on Accreditation (COA).

Confidentiality of Medical Records and Health History Information (HIPAA)

All data gathered about the patient and his/her illness, including all items within a patient's medical history, is privileged information.

Students should not discuss or present a patient's records in a manner or situation which would violate the confidential nature of that record. Charts or contents, e.g., lab reports, etc., are not to be removed from the hospital or clinical setting.

The Health Insurance Portability and Accountability Act (HIPAA) of 1996 mandates privacy protection for individually identifiable health information. Standards have been set for health care providers who transmit health care transactions electronically. While in clinical practice, health care providers are subject to the HIPAA guidelines and requirements.

Graduates' Evaluation of the Nurse Anesthesia Program

At the end of the program graduates will evaluate the Nurse Anesthesia Program.

Alumni Self-Evaluation

The one-year evaluation is important to maintain the quality of the program. Feedback and recommendations obtained are helpful in the revision of the educational goals and activities.

Employers' Evaluation

This evaluation is an important criterion in the program's self-evaluation. It attempts to determine the graduates' performance and their adaptation to the workplace, one year after graduation.

Clinical Training

The clinical training is organized so that the student progresses gradually from observation to full participation in all aspects of the clinical experience: pre-operative visits and pre-medication, holding area, operating rooms, post anesthesia visits, as well as other hospital facilities where anesthesia services are required. Students also progress within a range from maximum to minimal supervision by CRNA or physician anesthesiologists. Training includes non-surgical experiences, scheduled call experiences and clinical correlated conferences. The students are scheduled to the clinical area after completion of the first semester's courses.

Clinical Conferences (Integrated in Clinical Practice II, Anesthesia Residency I and Anesthesia Residency II)

- Clinical correlational conferences are developed as an opportunity to discuss clinical cases, new techniques, and agents; attend staff meetings for morbidity and mortality, conference cases as quality assurance and present journal seminars.
- The course instructor will assign the conference topics.
- The clinical correlative conferences are integrated.

Clinical Sites

Required Clinical Site

The Administration of Medical Services of Puerto Rico (ASEM) is a government agency which is part of the Department of Health of Puerto Rico. Its mission consists of providing health services to all citizens in general, regardless of economic condition, race, color, sex, origin, age, religion, or creed.

Description of the Anesthesia Services

The Division of Anesthesia is one of the centralized auxiliary medical services. This has been achieved through an agreement of the participant agencies with the approval of the Board of Directors of the Puerto Medical Services Administration.

The purpose of the centralization of the Division of Anesthesia is to utilize the medical, professional, non-professional, administrative personnel, the equipment, and physical facilities at the maximum level to operate the services. The centralization process provides a high quality and low-cost care.

The main objective of the service is to provide immediate care to clients who require anesthesia and under anesthesiologist's supervision. Opportunities are offered for personal and professional development. Programs are directed to orientation, in-service education, continuing education, leadership and research. The division of anesthesia has an accredited physician's residency in anesthesia. The services are offered to clients of the University, Municipal, Pediatric, and Industrial Hospitals.

The Department of Anesthesiology is directed by a medical anesthesiologist, in charge of the coordination of the medical service, professional and non-professional personnel activity. He/she coordinates training and educational programs for residents and medical students.

The administrative offices are located in the 9th floor of the main building of the Medical Sciences Campus of the University of Puerto Rico and the twenty-two (22) operating rooms are located in the second level of the main building of the Medical Services Administration of Puerto Rico.

Nurse Anesthesia Specialty Services Description

This is one of the service units of the Puerto Rico Medical Services Administration. It provides perioperative care 24/7.

The nurse anesthetist is involved in four (4) main areas: service, administration, teaching, and research. They assess, plan, implement and evaluate the care of the client and their family.

They function in harmony with the philosophy, objectives, and policies of the Puerto Rico Medical Services Administration (ASEM), operating rooms and the nurse anesthetist's department.

Enrichment Sites

- VA Caribbean Healthcare System
- Hospital Español Auxilio Mutuo, Inc.
- Cardiovascular Center of Puerto Rico and the Caribbean
- San Jorge Children & Women's Hospital
- University Medical Services UPR Hospital Federico Trilla
- Doctor's Center Hospital: Bayamón, Manatí, San Juan, Carolina
- Bayamón Medical Center
- Manatí Medical Center
- Centro Médico Menonita - Cayey

Student Documentation

Students are responsible to evidence completion of the following documentation:

1. Clinical Performance weekly evaluation
2. Medatrax case summary
3. Daily self-evaluation

Students who submit incomplete and/or late documentation of the above forms may be placed on a period of probation in the program for a minimum of thirty days.

Clinical Attire and Uniforms

As representatives of the NAP, Nurse Anesthesia Students are expected to wear neat and appropriate clinical attire. Each clinical affiliate has specific written guidelines for clinical attire for their employees and staff. It is required that Nurse Anesthesia students present to the clinical setting in proper and professional attire, that is within specific guidelines of clinical sites affiliated with the program. Failure to adhere to the policy on clinical attire will be grounds for disciplinary action. Also, the program has specific guidelines related to the official attire of the program, used for clinical sites that don't provide clothing for students. Below attire guidelines:

1. Blue scrub (top and pant).
2. Clean, ironed white lab coat to be worn to/from the facility, and in all patient areas outside the operating room.
3. Clean shoes (shoe covers are to be worn if shoes are worn outside the clinical facility).
4. Scrubs used to/from the clinical site (royal blue) should be from a different color from scrubs used inside the operating room (ceil blue).

Deviation from the above attire is not permitted unless specifically required by a particular clinical affiliate. Scrubs may be worn to/from the facility provided that a white lab coat is worn over the scrubs. Students changing to scrubs at the clinical facility should wear appropriate dress attire to/from the facility. Long-sleeve shirts worn under the scrub shirt are not permitted. It is not appropriate to wear OR surgical gowns in place of a warm-up jacket, except in cases requiring care of infectious precautions patients. Scrubs that become contaminated or soiled should be changed as soon as possible.

Clinical Evaluation

Clinical evaluation is an essential part of the student's academic progress in the program. It is used to assess clinical performance and evaluate students' competencies. The data collected serves to provide the students with the necessary feedback.

The documents used in the evaluation process will be discussed during the clinical experience and maintained in the student's permanent file.

Types of Clinical Evaluations

Formative Evaluation

- Student's daily anesthesia care plan, which is reviewed pre-operatively with discussions or changes.
- Immediate verbal assessment, demonstration, and practice during daily performance.
- Post anesthesia reviews of student's daily management of the cases with discussion about points and concepts involved included in the Anesthesia Care Plan.
- Weekly clinical performance evaluations by clinical supervisors.
- Student meetings held to review all students' experience based on the periodic evaluation and log cases prepared by the students.
- Student's self-evaluations.

Summative Evaluation

- The summative evaluation will consist of the sum and average of the didactic and clinical final grade. The average obtained will be taken to the nearest hundredth and will never be less than a B or 3.0.

Student Self-Evaluation

Students' daily computerized self-evaluations, and the results are used for validation of the student's strengths and strategies for improvement.

The self-evaluation process is utilized for individual student improvement in the Program and is not included in a student's grade for the course. This process provides documentation to students on an ongoing basis related to the objectives they have established for themselves, and an opportunity for the clinical faculty to provide specific suggestions and/or guidance.

In each Anesthesia Nursing Clinical Practicum course, students are required to complete a self- evaluation each day. The NAP faculty will review self-evaluations daily. Students should review their advising self-evaluation with the faculty advisor to identify concerns about their academic or clinical progression.

Counting Clinical Experiences

The NAP encourages its students to read the Guidelines for Counting Clinical Experiences, published by the Council on Accreditation on October 15, 2015 (Revised on January 2021). Students are encouraged to clarify any doubts or concerns with the process of counting clinical experiences with the program director or clinical course instructor. Go to the following link for the Guideline for Counting Clinical Experiences:

Link: <https://www.coacrna.org>

Clinical Training Documents

The student registered nurse anesthetist is responsible to turn in and maintain an updated file of required documentation for clinical training. Students that have not turned in required documentation or whose documents have expired past the deadline established by the program will not be able to initiate clinical training and will be subject to an administrative withdrawal from the course.

1. Current Health Certification by PR Department of Health.
2. Evidence of Hepatitis B immunization titers.
3. Seasonal Flu Vaccine.
4. Varicella Vaccine.
5. Nose culture (when requested).
6. Fitting test.
7. COVID-19 Vaccine.
8. HIPAA course certificate.
9. Other immunizations required by clinical sites.

10. Current Registration as a professional nurse in the United States, its territories or protectorates.
11. Current membership to the PR College of Nursing Professionals.
12. Current criminal Background Check (from the PR Police Department).
13. National Sex Offender Search Results.
14. Compliance with PR Law #300.
15. Current Basic Life Support Certificate (BLS).
16. Current Advanced Cardiac Life Support Certificate (ACLS).
17. Current Pediatric Life Support Certificate (PALS).
18. Curriculum Vitae.
19. Official University Identification Card.
20. Requirements for specific clinical affiliations as requested.

Travel Requirements: All students should be prepared to travel by themselves to the affiliate institutions. Students will not receive travel allowance.

APPENDIX- Documents for Clinical Training

Clinical Training Master Schedule

Non-Clinical Practice					Non-Clinical Practice										Clinical Practice I																																																		
June					July					August					September					October					November					December					January					February					March					April					May										
1	2	3	4	5	1	2	3	4	1	2	3	4	5	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

Clinical Practice II					Clinical Practice III										Clinical Practice IV																																																										
June					July					August					September					October					November					December					January					February					March					April					May																		
1	2	3	4	5	1	2	3	4	1	2	3	4	5	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

Clinical Practice V					Anesthesia Residency I										Anesthesia Residency II																																																										
June					July					August					September					October					November					December					January					February					March					April					May																		
1	2	3	4	5	1	2	3	4	1	2	3	4	5	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

Clinical Correlations Conferences are included in Clinical Practice II, Residency I and II courses.

Criteria for Evaluation of Clinical Courses

Student Name: _____

Date: _____

Instructions: The degree of competency reached by the student will be determined by using the following scale:

- | | |
|-----------------------------|--|
| 1. Novice | Performance below requirements but should improve. |
| 2. Advanced Beginner | Fulfill normal requirements well, have some strong points. |
| 3. Nearly Competent | Able to provide safe and effective anesthesia care to uncomplicated patients who experience predictable problems. Able to identify gaps in knowledge and is proactive in seeking help. |
| 4. Competent | Able to provide comprehensive, individualized anesthetic care with minimal direction; anticipates and seeks assistance for extraordinary situations. |
| 5. Proficient | Able to provide comprehensive, individualized anesthetic care to complex patients, demonstrates the ability to manage complex situations independently. |

Terminal Objectives Scale Performance Check list	Score	Comments
A. Patient safety is demonstrated by the ability of the student to:		
1. Be vigilant in the delivery of patient care.		
2. Refrain from engaging in extraneous activities that abandon or minimize vigilance while providing direct patient care.		
3. Conduct a comprehensive equipment check.		
4. Protect patients from iatrogenic complications.		
B. Perianesthetic management is demonstrated by the ability of the students to:		
5. Provide individualized care throughout the perianesthesia continuum.		
6. Deliver culturally competent perianesthesia care.		
7. Provide anesthesia services to all patients across the lifespan.		
8. Perform a comprehensive history and physical assessment.		
9. Administer general anesthesia to patients with a variety of physical conditions.		
10. Administer general anesthesia for a variety of surgical and medically related procedures.		
11. Administer and manage a variety of regional anesthetics.		
C. Critical thinking is demonstrated by the student's ability to:		
12. Apply knowledge to practice in decision making and problem solving.		
13. Provide nurse anesthesia services based on evidence-based principles.		
14. Perform a preanesthetic assessment before providing anesthesia services.		
15. Assume responsibility and accountability for diagnosis.		
16. Formulate an anesthesia plan of care before providing anesthesia services.		

Terminal Objectives Scale Performance Check list	Score	Comments
17. Identify and take appropriate action when confronted with anesthetic equipment-related malfunctions.		
18. Interpret and utilize data obtained from noninvasive and invasive monitoring modalities.		
19. Calculate, initiate, and manage fluid and blood component therapy.		
20. Recognize, evaluate, and manage the physiological responses coincident to the provision of anesthesia services.		
D. Communication skills are demonstrated by the student's ability to:		
21. Utilize interpersonal and communication skills that result in the effective exchange of information and collaboration with patients and their families.		
22. Utilize interpersonal and communication skills that result in the effective interprofessional exchange of information and collaboration with other healthcare professionals.		
23. Respect the dignity and privacy of patients while maintaining confidentiality in the delivery of interprofessional care.		
24. Maintain comprehensive, timely, accurate, and legible healthcare records.		
25. Transfer the responsibility for care of the patient to other qualified providers in a manner that assures continuity of care and patient safety.		
E. Leadership is demonstrated by the student's ability to:		
26. Integrate critical and reflective thinking in his or her leadership approach.		
27. Provide leadership that facilitates intraprofessional and interprofessional collaboration.		
E. Professional role is demonstrated by the student's ability to:		
28. Interact on a professional level with integrity.		
29. Apply ethically sound decision-making processes.		
30. Function with legal and regulatory requirements.		
31. Accept responsibility and accountability for his or her practice.		
32. Provide anesthesia services to patients in a cost-effective manner.		

Reference: Standards for Accreditation of Nurse Anesthesia Programs – Practice Doctorate – Rev. 01/29/2022

Rev. J.Bonilla/11.2022

Clinical Performance Evaluation Tool

Student Name: _____

Date: _____

Clinical Course: _____

The purpose of this tool is to evaluate the student performance in clinical experiences*.

Instructions: (1) The degree of competency reached by the student will be checked (x) using the scale *Novice, Advanced Beginner, Nearly Competent, Competent, and Proficient*:

(2) See expected level of competency by clinical practice or residency course at the end of this document.

1. Novice	Needs constant guidance, but practice is safe.
2. Advanced Beginner	Needs assistance with establishing priorities. Able to provide basic anesthesia care with low level of guidance.
3. Nearly Competent	Able to provide safe and effective anesthesia care to uncomplicated patients who experience predictable problems. Able to identify gaps in knowledge and is proactive in seeking help.
4. Competent	Able to provide comprehensive, individualized anesthetic care with minimal direction; anticipates and seek assistance for extraordinary situations.
5. Proficient	Able to provide comprehensive, individualized anesthetic care to complex patients, demonstrate ability to manage complex situations independently.

CLINICAL BEHAVIORS	1	2	3	4	5	N/A
1. Maintain vigilant in the delivery of patient care. Refrain from engaging in extraneous activities that abandon or minimize vigilance while providing patient care (e.g., texting, reading).						
2. Conduct a comprehensive and appropriate anesthesia equipment check and take appropriate action when confronted with equipment-related malfunctions.						
3. Perform a comprehensive history and physical assessment and formulate an anesthesia plan of care for patients to whom they are assigned to administer anesthesia.						
4. Utilize standard precautions and appropriate infection control measures.						
5. Provide individualize care throughout the perianesthetic continuum.						
6. Administer general anesthesia to patients with a variety of physical conditions.						
7. Provide anesthesia services to all patients across the lifespan.						
8. Utilize a variety of current anesthesia techniques, agents, adjunctive drugs, and equipment while providing anesthesia.						
9. Demonstrate patient safety and prevention of iatrogenic complications in the delivery of patient care.						
10. Demonstrate the application of theory to practice in decision-making and problem solving.						

CLINICAL BEHAVIORS	1	2	3	4	5	N/A
11. Interpret and utilize data obtained from noninvasive and invasive monitoring modalities.						
12. Calculate, initiate, and manage fluid and blood components therapy.						
13. Recognize, evaluate, and manage the physiological responses coincident to the provision of anesthesia services.						
14. Utilize interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and other healthcare professionals.						
15. Maintain comprehensive, timely, accurate, and legible healthcare records.						
16. Deliver culturally competent perianesthesia care.						
17. Integrate critical and reflective thinking in his or her leadership approach.						
18. Interact on a professional level with integrity.						

Reference: Standards for Accreditation of Nurse Anesthesia Programs – Practice Doctorate – Rev. 01/29/2022

Recommendations:

**The program restricts the clinical supervision of the nurse anesthesia student in anesthetizing areas to CRNAs and/or physician anesthesiologists with institutional staff privileges who are immediately available in all clinical areas.*

Clinical Supervisor

Print Name _____

CRNA Physician Anesthesiologist

Signature _____

License # / NBCRNA # : _____

Date: ____/____/____

<p>Expected level of competency by clinical practice or residency course:</p> <p>a. Clinical Practice 1: Students are expected to perform with a level of competency at or above novice.</p> <p>b. Clinical Practice 2: Students are expected to perform at a level of novice to advanced beginner.</p> <p>c. Clinical Practice 3: Students are expected to perform at a level of advanced beginner or above.</p> <p>d. Clinical Practice 4: Students are expected to perform at a level of advanced beginner to nearly competent.</p> <p>e. Clinical Practice 5: Students are expected to perform at a level of nearly competent or above.</p> <p>f. Residency 1: Students are expected to perform at a level of competent to proficient.</p> <p>g. Residency 2: Students are expected to perform at a level of proficient.</p>
--

Student's Daily Self Evaluation

Instructions: Each student should prepare a self dally clinical evaluation, after each clinical experience. Each student will be completing evidence on how he understands is achieving the knowledge, skills and competencies in patient safety, perianesthetic management, critical thinking, communication and the competencies needed to fulfill their professional responsibilities.

Student _____ Date _____ Anesthesia Faculty _____ OR # _____ Case(s): 1. _____ 2. _____ 3. _____ 4. _____ SIGNATURES: Preceptor _____ Student _____	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="7">A. Application of patient safety measures.</td> </tr> <tr> <td style="text-align: center;">5</td> <td style="text-align: center;">4</td> <td style="text-align: center;">3</td> <td style="text-align: center;">2</td> <td style="text-align: center;">1</td> <td style="text-align: center;">0</td> <td style="text-align: center;">NA</td> </tr> <tr> <td colspan="7">B. Perianesthetic management</td> </tr> <tr> <td style="text-align: center;">5</td> <td style="text-align: center;">4</td> <td style="text-align: center;">3</td> <td style="text-align: center;">2</td> <td style="text-align: center;">1</td> <td style="text-align: center;">0</td> <td style="text-align: center;">NA</td> </tr> <tr> <td colspan="7">C. Application of Critical Thinking skills</td> </tr> <tr> <td style="text-align: center;">5</td> <td style="text-align: center;">4</td> <td style="text-align: center;">3</td> <td style="text-align: center;">2</td> <td style="text-align: center;">1</td> <td style="text-align: center;">0</td> <td style="text-align: center;">NA</td> </tr> <tr> <td colspan="7">D. Communication skills</td> </tr> <tr> <td style="text-align: center;">5</td> <td style="text-align: center;">4</td> <td style="text-align: center;">3</td> <td style="text-align: center;">2</td> <td style="text-align: center;">1</td> <td style="text-align: center;">0</td> <td style="text-align: center;">NA</td> </tr> <tr> <td colspan="7">E. Leadership skills</td> </tr> <tr> <td style="text-align: center;">5</td> <td style="text-align: center;">4</td> <td style="text-align: center;">3</td> <td style="text-align: center;">2</td> <td style="text-align: center;">1</td> <td style="text-align: center;">0</td> <td style="text-align: center;">NA</td> </tr> <tr> <td colspan="7">F. Professional role responsibilities</td> </tr> <tr> <td style="text-align: center;">5</td> <td style="text-align: center;">4</td> <td style="text-align: center;">3</td> <td style="text-align: center;">2</td> <td style="text-align: center;">1</td> <td style="text-align: center;">0</td> <td style="text-align: center;">NA</td> </tr> </table>	A. Application of patient safety measures.							5	4	3	2	1	0	NA	B. Perianesthetic management							5	4	3	2	1	0	NA	C. Application of Critical Thinking skills							5	4	3	2	1	0	NA	D. Communication skills							5	4	3	2	1	0	NA	E. Leadership skills							5	4	3	2	1	0	NA	F. Professional role responsibilities							5	4	3	2	1	0	NA
A. Application of patient safety measures.																																																																																					
5	4	3	2	1	0	NA																																																																															
B. Perianesthetic management																																																																																					
5	4	3	2	1	0	NA																																																																															
C. Application of Critical Thinking skills																																																																																					
5	4	3	2	1	0	NA																																																																															
D. Communication skills																																																																																					
5	4	3	2	1	0	NA																																																																															
E. Leadership skills																																																																																					
5	4	3	2	1	0	NA																																																																															
F. Professional role responsibilities																																																																																					
5	4	3	2	1	0	NA																																																																															
Student's comments or justification on how is achieving each area of responsibility	Faculty's Comments																																																																																				

Interpretation of scale

- 0= Not a safe practice
- 1=Maximum supervision, although a safe practice
- 2=Maximum supervision in complicated cases, moderate with uncomplicated cases and safe practice
- 3=moderate supervision in specialized patients and areas of practice but is a safe practice
- 4=Able to apply anesthesia care with moderate supervision or guidance in complicated cases but minimum guidance with uncomplicated cases.
- 5=Minimum supervision or guidance in specialized and complicated cases but minimum guidance with uncomplicated cases

