



COLLEGE OF NURSING

Student Affairs

**Clinical Guidelines Handbook for
Nurse Anesthesia Specialty
Doctor of Nursing Practice Program
2015-2016**

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Introduction & Relationship to Other Documents

The Clinical Guidelines Handbook is intended to be used in conjunction with other University documents such as the University of Arizona Graduate Catalog and the DNP Program Handbook. Students should first consult the appropriate Program Handbook from the College of Nursing, the Clinical Guidelines Handbook, and then consult the Graduate Catalog when questions arise. The online Graduate Catalog contains essential information about University Policies and procedures. Individual colleges within the University of Arizona may alter Graduate College policies and procedures; doing so results in the strengthening of an academic program. Therefore, the policies and procedures in the DNP Program Handbook are specific to DNP and post-graduate certificate students in the College of Nursing. The DNP Program Handbook is available on the College of Nursing's [website](#).

This specific document contains sections that will assist preceptors, faculty and students to understand: 1) the role of the preceptor; 2) teaching methods; 3) academic and professional standards for students; 4) preceptor satisfaction, and; 5) student evaluation. This policy document is adapted from guidelines established and published by the National Organization of Nurse Practitioner Faculties (NONPF) (2000) *Partners in NP Education: A Preceptor Manual for NP Programs, Faculty, Preceptors, & Students*,¹ the Council on Accreditation of Nurse Anesthesia Educational Programs (COA) (2013) *Standards for Accreditation of Nurse Anesthesia Educational Programs*, and COA (2013) *Accreditation Policies and Procedures*.

Nurse Anesthesia Practice

The University of Arizona College of Nursing BSN-DNP Nurse Anesthesia specialty is committed to fostering excellence in nurse anesthesia education as well as advancing the profession by preparing graduates to engage in evidence-based practice, envision processes that will enhance the nurse anesthesia profession and to scientifically develop, disseminate and evaluate innovative solutions to practical problems that will lead to improved patient outcomes and optimal care for each patient. **The policies and procedures in the Nurse Anesthesia Clinical Handbook are specific to Nurse Anesthesia students.** All information is subject to change without notice.

Professional Role

Certified Registered Nurse Anesthetists (CRNAs) are advanced practice registered nurses (APRNs) licensed as independent practitioners. CRNAs practice both autonomously and in collaboration with a variety of health providers on the interprofessional team to deliver high-quality, holistic, evidence-based anesthesia and pain care services. Nurse anesthetists care for patients at all acuity levels across the lifespan in a variety of settings for procedures including, but not limited to, surgical, obstetrical, diagnostic, therapeutic, and pain management. CRNAs serve as clinicians, researchers, educators, mentors, advocates, and administrators.

Education, Accountability and Leadership

CRNAs enter the profession following successful completion of graduate or post-graduate education from an accredited nurse anesthesia program and after passing the National Certification Examination. CRNAs embrace lifelong learning and practice professional excellence through ongoing recertification and continuous engagement in quality improvement and professional development. The scope of nurse anesthesia practice is determined by education, experience, state and federal law, and facility policy. CRNAs are accountable and responsible for their services and actions, and for maintaining their individual clinical competence. Nurse anesthetists are innovative leaders in anesthesia care delivery, integrating progressive critical thinking and ethical judgment.

Anesthesia Practice

The practice of anesthesia is a recognized nursing and medical specialty unified by the same standard of care. Nurse anesthesia practice may include, but is not limited to, these elements: performing a comprehensive history and physical; conducting a preanesthesia evaluation; obtaining informed consent for anesthesia; developing and initiating a patient-specific plan of care; selecting, ordering, prescribing and administering drugs and controlled substances; and selecting and inserting invasive and noninvasive monitoring modalities. CRNAs provide acute, chronic and interventional pain management services, as well as critical care and resuscitation services; order and evaluate diagnostic tests; request consultations; and perform point-of-care testing. CRNAs plan and initiate anesthetic techniques, including general, regional, local, and sedation. Anesthetic techniques may include the use of ultrasound, fluoroscopy and other technologies for diagnosis and care delivery, and to improve patient safety and comfort. Nurse anesthetists respond to emergency situations using airway management and other techniques; facilitate emergence and recovery from

¹ Dumas, Mary Staudt (Ed.) (2000). *Partners in NP Education: A Preceptor Manual for NP Programs, Faculty, Preceptors, & Students*. Washington DC: National Organization of Nurse Practitioner Faculties (NONPF).

anesthesia; and provide post-anesthesia care, including medication management, conducting a post-anesthesia evaluation, and discharge from the post-anesthesia care area or facility.

The Value and Future of Nurse Anesthesia Practice

CRNAs practice in urban and suburban locations, and are the primary anesthesia professionals providing care to the U.S. Military, rural, and medically underserved populations. The CRNA scope of practice evolves to meet the healthcare needs of patients and their families as new research and technologies emerge. As APRNs, CRNAs advocate for the removal of scope of practice barriers to increase patient access to high-quality, comprehensive care.

The Scope of Nurse Anesthesia Practice was first published in 1980. Revisions were approved by the AANA Board of Directors in 1983, 1989, 1992, 1996, January 2013, February 2013 and June 2013.

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CRNA Scope of Practice

The Arizona Nurse Practice Act states that CRNAs must hold an individual certificate or license to practice in each state where they practice (unless in a Federal facility such as VA or IHB). The Arizona Nurse Practice Act allows CRNAs to practice under the direction and in the presence of a physician/surgeon.

32-1634.04. Certified registered nurse anesthetist; scope of practice

- A. A certified registered nurse anesthetist may administer anesthetics under the direction of and in the presence of a physician or surgeon in connection with the preoperative, intraoperative or postoperative care of a patient or as part of a procedure performed by a physician or surgeon in the following settings:
 1. A health care institution.
 2. An office of a health care professional who is licensed pursuant to chapter 7, 11, 13 or 17 of this title.
 3. An ambulance.
- B. In connection with the preoperative, intraoperative or postoperative care of a patient or as part of the procedure in the settings prescribed in subsection A of this section, a certified registered nurse anesthetist as part of the care or procedure may:
 1. Issue a medication order for drugs or medications to be administered by a licensed, certified or registered health care provider.
 2. Assess the health status of an individual as that status relates to the relative risks associated with anesthetic management of an individual.
 3. Obtain informed consent.
 4. Order and evaluate laboratory and diagnostic test results and perform point of care testing that the certified registered nurse anesthetist is qualified to perform.
 5. Order and evaluate radiographic imaging studies that the certified registered nurse anesthetist is qualified to order and interpret.
 6. Identify, develop, implement and evaluate an anesthetic plan of care for a patient to promote, maintain and restore health.
 7. Take action necessary in response to an emergency situation.
 8. Perform therapeutic procedures that the certified registered nurse anesthetist is qualified to perform.
- C. A certified registered nurse anesthetist's authority to administer anesthetics or to issue a medication order as prescribed by this section does not constitute prescribing authority.

Preceptors, faculty and students should become familiar with APRN scope of practice in the state in which the student is being precepted, as well as with that state's Nurse Practice Act and pertinent Administrative Code and Regulations. Students are responsible for determining if there are state boards of nursing requirements regarding student clinical placement in their state and to convey these requirements to the Office of Academic Practice.

Student Nurse Anesthetist Competencies

The Council on Accreditation of Nurse Anesthesia Educational Programs (COA) has identified 6 domains of core competencies for student nurse anesthetists²:

- Patient safety
- Perianesthesia
- Critical thinking
- Communication

² (Accessed February 8, 2015: <http://home.coa.us.com>)

- Leadership
- Professional role

Nurse Anesthesia Specialty Track Outcome Criteria

The program demonstrates that graduates have acquired knowledge, skills and competencies in patient safety, perianesthetic management, critical thinking, communication, and the competencies needed to fulfill their professional responsibility.

Patient Safety:

The graduate must demonstrate the ability 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 (e.g., texting, reading, e-mailing, etc.).
3. Conduct a comprehensive equipment check.
4. Protect patients from iatrogenic complications.

Perianesthesia:

The graduate must demonstrate the ability 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.
12. Maintain current certification in ACLS and PALS.

Critical Thinking:

The graduate must demonstrate the ability to:

13. Apply knowledge to practice in decision-making and problem solving.
14. Provide nurse anesthesia services based on evidence based principles.
15. Perform a preanesthetic assessment prior to providing anesthesia services.
16. Assume responsibility and accountability for diagnosis.
17. Formulate an anesthesia plan of care prior to providing anesthesia services.
18. Identify and take appropriate action when confronted with anesthetic equipment-related malfunctions.
19. Interpret and utilize data obtained from noninvasive and invasive monitoring modalities.
20. Calculate, initiate, and manage fluid and blood component therapy.
21. Recognize, evaluate, and manage the physiological responses coincident to the provision of anesthesia services.
22. Recognize and appropriately manage complications that occur during the provision of anesthesia services.
23. Use science-based theories and concepts to analyze new practice approaches.
24. Pass the national certification examination (NCE) administered by NBCRNA.

Communication:

The graduate must demonstrate the ability to:

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

Leadership:

The graduate must demonstrate the ability to:

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

Professional Role:

The graduate must demonstrate the ability to:

33. Adhere to the Code of Ethics for the Certified Registered Nurse Anesthetist.
34. Interact on a professional level with integrity.
35. Apply ethically sound decision-making processes.
36. Function within legal and regulatory requirements.
37. Accept responsibility and accountability for his or her practice.
38. Provide anesthesia services to patients in a cost-effective manner.
39. Demonstrate knowledge of wellness and chemical dependency in the anesthesia profession through completion of content in wellness and chemical dependency
40. Inform the public of the role and practice of the CRNA.
41. Evaluate how public policy making strategies impact the financing and delivery of healthcare.
42. Advocate for health policy change to improve patient care.
43. Advocate for health policy change to advance the specialty of nurse anesthesia.
44. Analyze strategies to improve patient outcomes and quality of care.
45. Analyze health outcomes in a variety of populations.
46. Analyze health outcomes in a variety of clinical settings.
47. Analyze health outcomes in a variety of systems.
48. Disseminate research evidence.
49. Use information systems/technology to support and improve patient care.
50. Use information systems/technology to support and improve healthcare systems.
51. Analyze business practices encountered in nurse anesthesia delivery settings.

Course Policies

Course Grading Policy

Final Course Grade Policy for the Nurse Anesthesia Specialty courses **ONLY**

- A = $\geq 90 - 100$
- B = ≥ 80 and < 90
- C = ≥ 70 and < 80
- D = ≥ 60 and < 70
- E = < 60

Letter grades are assigned at the course grade level. CON policy states that grades are not rounded upward. For example: If the final course grade is 89.99, the course grade equals a "B".

Examination Policy

Electronic proctored examinations administered through Software Secure require access to a laptop computer. Student laptops must have the capacity to access the Internet in order to access D2L (online academic software). Students are also required to have webcam, microphone capability and/or headset. Students have the responsibility to ensure that they bring a power cord and a fully charged battery to the examination. Students must mute computer speakers during the examination period. Students are asked to visit with the LHTI department located at the College of Nursing at the beginning of the academic year to ensure their laptop computer meets the requirement to take electronic examinations and to have a lock out browser installed.

If a student encounters any irregularity or extenuating circumstance during an examination that interferes with the examination process, the student **immediately** must report the circumstances to the proctoring service. Such circumstances include, without limitation, internet disruption or failure, an illness or a disruptive incident in the examination room. The circumstance will be dealt with on a case by case basis. If the circumstance is related to power failure or technical difficulties related to the computer the student will be provided with a paper version of the exam if the situation cannot be remedied by the proctor in a timely manner. If a student fails to bring such circumstances **immediately** to the attention of the proctoring service, the student cannot later appeal the examination result based on the unreported circumstances.

In-course examinations are considered secure documents and as such all exam items and related materials are considered confidential and are not to be released or shared in any forum outside of the testing/review setting and follow the academic integrity policy.

Examination Item (Test Question) Reliability and Validity Testing

Examination security is an essential component of our nurse anesthesia educational program and is intended to ensure the fair and accurate evaluation of all students' learning. On-line testing formats do not allow for examination item (test question) challenges by students without the potential for compromise of the examination's content. Acknowledging this inherent difficulty associated with on-line testing formats, the nurse anesthesia specialty has instituted this **Examination Item Reliability and Validity Testing Policy** to ensure the specialty's student knowledge evaluation process is scientifically-based and systematic.

Policy

- Student challenges to examination items (test questions) will not be permitted.
- Prior to the administration of each examination, all examination items will be reviewed and evaluated for item quality by a minimum of two (2) nurse anesthesia faculty members.
- When possible, following the administration of each examination, the examination items will be analyzed for reliability (internal consistency) and individual item quality. The statistical index used to measure the examination items' internal consistency will be Cronbach's alpha. The point-biserial correlation coefficient will be used to analyze each examination item's quality.
- Each examination item scoring a point-biserial correlation below 0.0 will be re-evaluated by a minimum of two (2) nurse anesthesia faculty members. If deemed appropriate following faculty review, students may be given correct answer credit for such items, on an item by item basis.

Nurse anesthesia faculty will continuously monitor students' examination performance to ensure the fair and accurate evaluation of all nurse anesthesia students' learning.

Employment

Students are strongly encouraged to enter school with adequate financial resources due to rigorous time commitments (may be up to sixty four hours a week for didactic, didactic preparation, clinical practicum, and clinical preparation). It is highly recommended that no student work during the program. Work commitments which impinge on academic or clinical requirements will not be accommodated. If a student chooses to work during the clinical phase of the program, there must be an eight (8) hour lapse between work time and reporting for class and clinical. No student will receive compensation for anesthesia services or be permitted to render anesthesia services outside the Anesthesia Program. A student is forbidden to use the title of certified registered nurse anesthetist while a student in the program as the student does not have the credentials or certifications to use this title. Using this title as a student is a violation of expected professional conduct and could be cause for immediate dismissal.

Time Commitment

Successful completion of the program requires a substantial time commitment. This commitment averages 48-58 hours a week, year round, assuming that two-four hours of study are required for each class hour (credit). This figure includes time spent in the classroom, online, on campus, in clinical, and in study. Students will be limited to 64 hours of work per week averaged over a 4 week period.

Committees

Nurse Anesthesia Specialty Advisory Committee

The Nurse Anesthesia Specialty Advisory Committee is established to provide a forum for stakeholders in the Specialty to discuss issues and ideas relevant to the Nurse Anesthesia Specialty and its partnership with the community. The Nurse Anesthesia Specialty Advisory Committee will be chaired by the Nurse Anesthesia Specialty Program Director. The Committee membership will be comprised of up to nine (9) additional stakeholder representatives and will include (1) the Director of the College of Nursing (CON) Doctor of Nursing Practice (DNP) Program, (2) one additional member of the Nurse Anesthesia Specialty faculty, (3) a CON faculty member from outside of the Nurse Anesthesia Specialty, (4) a

Nurse Anesthesia Specialty Clinical Coordinator from the Northern Arizona Region, (5) a Nurse Anesthesia Specialty Clinical Coordinator from the Southern Arizona Region, (6) a first-year nurse anesthesia student, (7) a second-year nurse anesthesia student, (8) a third-year nurse anesthesia student, and (9) a public member from within the community. The Nurse Anesthesia Specialty Advisory Committee meets annually.

Simulation Lab Expectations and Policies

Simulation experiences form an important part of both the didactic and clinical phases of the program. Simulation promotes not only the development of technical competence but likewise encourages self-awareness, interpersonal communication skills and critical decision-making.

Attendance is required for all scheduled sessions which will average 16 hours per semester until enrollment in NURS 672b. Simulation events may be scheduled on the weekend in order to accomplish learning. In addition, students are occasionally required to engage in remediation sessions with faculty in the simulation lab.

Simulation Lab Guidelines

The Simulation lab contains highly sophisticated mannequins and equipment. It is important for all users to understand and follow the guidelines that have been designed to encourage professionalism and to insure the usability and care of the space and equipment.

- Wash hands prior to touching mannequins.
- No food or drink in the simulation lab.
- Gloves should be worn at all times gloves would normally be worn when caring for a patient.
- Mannequins are susceptible to staining; use care when using pens and pencils.
- Do not blow in mannequin mouth or manipulate excessively.
- Handle mannequins with care; treat with respect, as a real patient.
- The simulation lab is considered a clinical setting - professional and safe behavior is expected at all times.
- Wear scrubs or lab coat, scrub hat and mask as appropriate in the simulation lab.

Evaluations & Sign-Ins

Users will be asked to complete evaluation forms at the end of each semester or after the simulation lab experience. It is important to track simulation lab traffic and to be able to identify lab participants. Users will be required to sign in to the lab prior to the beginning of each session. There will be a sign in sheet in each lab.

Confidentiality

In order to maintain the integrity of the Clinical Simulation Program, users may be asked to sign a statement agreeing to maintain the strictest of confidentiality about any observations of individual performance in the simulation lab or of the content of any simulated training exercises.

Clinical Practicum Performance Expectations:

Students are evaluated by clinical instructors to assess progress toward meeting all of the clinical objectives. Students must meet the terminal objectives of each clinical practicum before advancement to the next level. The developmental levels for each clinical practicum are identified below and are associated with clinical objectives appropriate for that level. If program faculty have determined students have successfully met the clinical objectives, they will pass the clinical practicum.

CLINICAL EXPECTATIONS PER Clinical Practicum

NA First clinical management course (NURS 672a)

Students will:

- combine didactic and psychomotor knowledge. Performance is at the beginner level but development is observable.
- develop some independence in thought and function with simple anesthetic cases
- obtain and document a health history and conduct a comprehensive and systematic assessment in patients requiring anesthesia care across the lifespan.
- plan and implement an anesthesia plan of care for the patient undergoing
- anesthesia, under the close supervision of a preceptor. This element includes proper selection of equipment and medications, performance of basic skills, and the exhibition of thoughtful decision-making and critical thinking.
- apply interventions appropriate to the physiological and psychological status of the patient, considering the environment, available resources, and surgical events, under close supervision by a preceptor.
- provide effective postoperative management for patient including any problems or
- potential problems after surgery, under close supervision by a preceptor.
- compare and contrast the role of the nurse anesthetist with other healthcare professionals and develop effective inter-professional collaboration with other healthcare professionals to achieve optimal patient outcomes.

Skills:

- Perform IV insertions
- Perform machine check, cart set-up with appropriate tools and drugs assembled
- Perform complete preoperative assessment: H&P, airway evaluation, evaluation of ADLs, and home medication concerns
- Perform basic airway management with mask, LMA and Intubation
- Perform regional anesthetic techniques with help
- Perform some COA acceptable techniques in the simulation lab

NA Second clinical practicum (NURS 672b):

Student will:

- combine didactic and psychomotor knowledge. Performance will be at an advanced beginner level and evidenced via preceptor evaluations
- obtain and document a health history and conduct a comprehensive and systematic assessment in patients requiring anesthesia care across the lifespan
- plan and implement an anesthesia plan of care for the patient undergoing anesthesia, under the close supervision of a preceptor. This element includes proper selection of equipment and medications, performance of basic and some advanced skills, and the beginning of thoughtful independent decision-making and critical thinking in simple and complex cases.
- apply interventions appropriate to the physiological and psychological status of the patient, considering the environment, available resources, and surgical events, under the supervision of a preceptor.
- provide effective postoperative management of the patient including any problems or potential problems after surgery, under the supervision of a preceptor.
- develop effective inter-professional collaboration with other healthcare professionals to achieve optimal patient outcomes.

Skills:

- Perform IV insertions
- Perform machine check, cart set-up with appropriate tools and drugs assembled
- assembled

- Perform complete preoperative assessment: H&P, airway evaluation, evaluation of ADLs, and home medication concerns.
- Perform basic & advanced airway management
- Perform regional anesthetic techniques with assistance
- Perform some advanced monitoring techniques with assistance

NA third Clinical Practicum (NURS 672c):

Student will:

- combine didactic and psychomotor knowledge. Performance will be at advanced level of ability.
- obtain and document a health history and conduct a comprehensive and systematic assessment in patients requiring anesthesia care across the lifespan.
- plan and implement an anesthesia plan of care for both healthy and ill patients undergoing basic & complex anesthetic procedures, under the supervision of a preceptor.
- Manage the anesthesia care of complex surgical cases and populations, proper selection of equipment and medications, performance of basic & advanced skills, and the exhibition of thoughtful independent decision-making and critical thinking.
- apply interventions appropriate to the physiological and psychological status of the patient, considering the environment, available resources, and surgical events, in consultation with a preceptor.
- provide effective postoperative management for patient addressing problems or potential problems after surgery in consultation with a preceptor.

Skills:

- Performs machine check, cart set-up with appropriate tools and drugs assembled
- Performs complete preoperative assessment: H&P, airway evaluation, evaluation of ADLs, and home medication concerns.
- Plans and implements appropriate plan of care in accordance with AANA Standards of Care.
- Performs all airway management skills
- Performs all regional anesthetic techniques
- Performs all advanced monitoring techniques
- Demonstrates independent thought and function

Fall Semester II Clinical Practicum I: **Novice**

Spring Semester II Clinical Practicum I: **Novice**

Summer Semester III Clinical Practicum I: **Novice**

Fall Semester III Clinical Practicum II: **Advanced Beginner**

Winter Session III Clinical Practicum II: **Advanced Beginner**

Spring Semester III Clinical Practicum III: **Competent**

Table of expected competencies: Novice

	NURS 672a Fall II	NURS 672a Spring II	NURS 672a Summer III
	Under direct supervision and with assistance from clinical preceptors, the beginning student registered nurse anesthesia (SRNA) will gain experience and/or develop beginning level skills in the following areas:	Under direct supervision and with assistance from clinical preceptors, the beginning student registered nurse anesthesia (SRNA) will gain experience and/or develop beginning level skills in the following areas:	Under direct supervision and/or with assistance from clinical preceptors if needed, the beginning student registered nurse anesthesia (SRNA) will gain experience and/or develop beginning level skills in the following areas:
Technical skill overall	<input type="checkbox"/> Observe and Assist with Induction sequencing for general anesthesia. <input type="checkbox"/> Acquire beginning level familiarization with the maintenance phase of anesthesia under the guidance of the preceptor. <input type="checkbox"/> Observe and Assist the clinical preceptor during emergence from general anesthesia.	<input type="checkbox"/> Assist with Induction sequencing for general anesthesia. <input type="checkbox"/> Acquire beginning level familiarization with the maintenance phase of anesthesia under the guidance of the preceptor. <input type="checkbox"/> Assist the clinical preceptor during emergence from general anesthesia	Assist with Induction sequencing for general anesthesia. <input type="checkbox"/> Acquire beginning level familiarization with the maintenance phase of anesthesia under the guidance of the preceptor. <input type="checkbox"/> Assist the clinical preceptor during emergence from general anesthesia <input type="checkbox"/> Acquire beginning level familiarization and proficiency managing the emergence phase of anesthesia under the guidance of the clinical preceptor.
Invasive & Regional Skills		<input type="checkbox"/> Acquire practice and beginning level proficiency in neuraxial anesthesia techniques (e.g., subarachnoid block, epidural block).	<input type="checkbox"/> Acquire practice and beginning level proficiency in neuraxial anesthesia techniques (e.g., subarachnoid block, epidural block).
Airway management	<input type="checkbox"/> Observe/Practice basic techniques: bag-mask ventilation, oral & nasal airway insertion, LMA insertion, and endotracheal intubation.	<input type="checkbox"/> Practice basic techniques: bag-mask ventilation, oral & nasal airway insertion, LMA insertion, and endotracheal intubation.	<input type="checkbox"/> Practice basic techniques: bag-mask ventilation, oral & nasal airway insertion, LMA insertion, and endotracheal intubation.
Record-keeping	<input type="checkbox"/> For beginning students, it is recommended charting remain the primary responsibility of the preceptor to allow the SRNA to focus completely on patient care.	<input type="checkbox"/> Students will assume greater responsibility for documenting the anesthesia care that they provide.	<input type="checkbox"/> Students will assume responsibility for documenting the anesthesia care that they provide.

	Responsibility may be shifted to the SRNA as deemed appropriate by the clinical preceptor.		
Pre/Post Op assessment	<input type="checkbox"/> Observe and assist clinical preceptors with the preoperative evaluation process as well as pre-operative patient preparation.	<input type="checkbox"/> Assist clinical preceptors with the preoperative evaluation process as well as pre-operative patient preparation and post op assessment.	<input type="checkbox"/> Assist clinical preceptors with the preoperative evaluation process as well as pre-operative patient preparation and post-op assessment.
Basic knowledge	<input type="checkbox"/> Provide rationale based on didactic knowledge when participating in the development of an anesthesia care plan <input type="checkbox"/> Verbalizes rationale for drug selection, appropriate dosage and use of pharmacologic agents, drug interactions, side effects, and adverse effects/contraindication	<input type="checkbox"/> Provide rationale based on didactic knowledge when participating in the development of an anesthesia care plan <input type="checkbox"/> Verbalizes rationale for drug selection, appropriate dosage and use of pharmacologic agents, drug interactions, side effects, and adverse effects/contraindications <input type="checkbox"/> When indicated, verbalizes principles regarding the fundamentals of the reversal of neuromuscular blockade as well as assessing readiness for extubation.	<input type="checkbox"/> Students should arrive to their assigned clinical site prepared to discuss with their clinical preceptors pertinent pre-operative data, and a plan of care for their assigned <input type="checkbox"/> Verbalizes rationale for drug selection, appropriate dosage and use of pharmacologic agents, drug interactions, side effects, and adverse effects/contraindications <input type="checkbox"/> Provide rationale based on didactic knowledge when participating in the development of an anesthesia care plan.
Planning & Organization	<input type="checkbox"/> Students should assist preceptor perform the following: anesthesia machine check-out procedure, airway equipment set-up, and an anesthesia cart set-up <input type="checkbox"/> Students should meet with their preceptors as early as needed to assist them with setting up their assigned OR workstation. <input type="checkbox"/> Demonstrate an understanding of the overall 'flow' of patient care in the preoperative, perioperative, and postoperative phases of	<input type="checkbox"/> Students should perform the following: anesthesia machine check-out procedure, airway equipment set-up, and an anesthesia cart set-up <input type="checkbox"/> Students should meet with their preceptors as early as needed to assist them with setting up their assigned OR workstation. <input type="checkbox"/> Demonstrate an understanding of the overall 'flow' of patient care in the preoperative, perioperative, and postoperative phases of anesthesia care.	<input type="checkbox"/> Each day students are assigned to clinical they should prepare a written plan of care for one of their scheduled cases. The care plan should be reviewed with the clinical preceptor prior to the scheduled case. This care plan should be uploaded to the Typhon system, and may be reviewed electronically with the preceptor if the clinical site has adequate computer access to allow this to occur. If not, the student should bring a copy of the care plan with them for their preceptor to review <input type="checkbox"/> Students should

	anesthesia care.		perform the following: anesthesia machine check-out procedure, airway equipment set-up, and an anesthesia cart set-up <input type="checkbox"/> Students should meet with their preceptors as early as needed to assist them with setting up their assigned OR workstation. <input type="checkbox"/> Demonstrate an understanding of the overall 'flow' of patient care in the preoperative, perioperative, and postoperative phases of anesthesia care.
Judgment & Reasoning	<input type="checkbox"/> Develops an anesthetic care plan for most interesting case each day and review this with their clinical preceptor in a cogent, well organized manner.	<input type="checkbox"/> Develops an anesthetic care plan for most interesting case each day and review this with their clinical preceptor in a cogent, well organized manner.	<input type="checkbox"/> Develops an anesthetic care plan for most interesting case each day and review this with their clinical preceptor in a cogent, well organized manner.
Reaction to Stress	Reasonably maintains composure under stress	Reasonably maintains composure under stress	Maintains composure under stress
Response to Direction	Demonstrate willingness to receive and utilize feedback from instructors, surgeons and other OR team members	Demonstrate willingness to receive and utilize feedback from instructors, surgeons and other OR team members	Demonstrate willingness to receive and utilize feedback from instructors, surgeons and other OR team members
Industry & Reliability	Discuss with preceptor good learning experiences for the novice student to observe or assist with Seek out opportunities to learn and help (IV starts, preop/postop assessments etc.)	Discuss with preceptor good learning experiences for the novice student to observe or assist with Seek out opportunities to learn and help (IV starts, preop/postop assessments etc.)	Discuss with preceptor good learning experiences for the novice student to observe or assist with Seek out opportunities to learn and help (IV starts, preop/postop assessments etc.)
Attendance & Punctuality	Report on scheduled days and always at least one hour before scheduled case. Stays until released—which may entail additional clinical hours Informs clinical site and program of an absence prior to 7am the day of the absence.	Report on scheduled days and always at least one hour before scheduled case. Stays until released—which may entail additional clinical hours Informs clinical site and program of an absence prior to 7am the day of the absence.	Report on scheduled days and always at least one hour before scheduled case. Stays until released—which may entail additional clinical hours Informs clinical site and program of an absence prior to 7am the day of the absence.

Professional Demeanor	<p>-Interact with patients and their families as well as members of the peri-operative care team in a professional and considerate manner.</p> <p>-Acquire an understanding of the diversity of roles and responsibilities of other OR team members as well as expected behaviors and protocols required to ensure superior perioperative care.</p>	<p>-Interact with patients and their families as well as members of the peri-operative care team in a professional and considerate manner.</p> <p>-Acquire an understanding of the diversity of roles and responsibilities of other OR team members as well as expected behaviors and protocols required to ensure superior perioperative care.</p>	<p>-Interact with patients and their families as well as members of the peri-operative care team in a professional and considerate manner.</p> <p>-Acquire an understanding of the diversity of roles and responsibilities of other OR team members as well as expected behaviors and protocols required to ensure superior perioperative care.</p>
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Table advanced beginner/competent

	<p>NURS 672b Fall III With moderate guidance the advanced beginner student will demonstrate basic level of knowledge and skills in the care of ASA Classification type I, II, III, IV, and V patients in the following areas:</p>	<p>NURS 672b Winter III With minimal guidance the advanced beginner student will demonstrate basic level of knowledge and skills in the care of ASA Classification type I, II, III, IV, and V patients in the following areas: With little prompting, the student will demonstrate competence in the care of ASA Classification type I, II, III, IV, and V patients in the following areas:</p>	<p>NURS 672c Spring III With little prompting, the student will demonstrate competence in the care of ASA Classification type I, II, III, IV, and V patients in the following areas:</p>	<p>NURS XXX Summer IV With little prompting, the student will demonstrate competence in the care of ASA Classification type I, II, III, IV, and V patients in the following areas:</p>
Technical skill overall	<p>Meeting expectations of advanced beginner—may struggle with difficult or unusual events; requires some help in planning and skills</p>	<p>Meeting expectations of advanced beginner—gaining ability with difficult or unusual events, almost independent in thought and function, needs minimal help with planning and skills</p>	<p>Meeting expectations of competent senior student—independent in thought and function, asks for help when needed</p>	<p>Meeting expectations of competent senior student—independent in thought and function, asks for help when needed</p>
MAC, Invasive & Regional Skills	<p><input type="checkbox"/> Performs an accurate assessment of the feasibility for MAC and/or regional anesthesia and develops a plan of care which takes into consideration both</p>	<p><input type="checkbox"/> Performs an accurate assessment of the feasibility for MAC and/or regional anesthesia and develops a plan of care which takes into consideration both</p>	<p><input type="checkbox"/> Performs an accurate assessment of the feasibility for MAC and/or regional anesthesia and develops a plan of care which takes into consideration both</p>	<p><input type="checkbox"/> Performs an accurate assessment of the feasibility for MAC and/or regional anesthesia and develops a plan of care which takes into consideration both</p>

	<p>the patient and the planned surgical procedure</p> <ul style="list-style-type: none"> -Demonstrates correct technique for placement of noninvasive and invasive monitors as indicated by the patient's needs planned procedure, and required position. -Performs regional skills with high degree of proficiency <input type="checkbox"/> Develops an appropriate alternative plan to convert to another anesthetic technique in the event that MAC and/or regional anesthesia proves inadequate. 	<p>the patient and the planned surgical procedure</p> <ul style="list-style-type: none"> -Demonstrates correct technique for placement of noninvasive and invasive monitors as indicated by the patient's needs planned procedure, and required position. -Performs regional skills with high degree of proficiency <input type="checkbox"/> Develops an appropriate alternative plan to convert to another anesthetic technique in the event that MAC and/or regional anesthesia proves inadequate. 	<p>the patient and the planned surgical procedure</p> <ul style="list-style-type: none"> -Demonstrates correct technique for placement of noninvasive and invasive monitors as indicated by the patient's needs planned procedure, and required position. -Performs regional skills with high degree of proficiency <input type="checkbox"/> Develops an appropriate alternative plan to convert to another anesthetic technique in the event that MAC and/or regional anesthesia proves inadequate. 	<p>the patient and the planned surgical procedure</p> <ul style="list-style-type: none"> -Demonstrates correct technique for placement of noninvasive and invasive monitors as indicated by the patient's needs, planned procedure, and required position. -Performs regional skills with high degree of proficiency <input type="checkbox"/> Develops an appropriate alternative plan to convert to another anesthetic technique in the event that MAC and/or regional anesthesia proves inadequate.
Airway management	<ul style="list-style-type: none"> <input type="checkbox"/> Beginning to show increasing expertise in airway management using a broad variety of techniques as deemed appropriate for the patient and/or surgery <input type="checkbox"/> Performs Thorough Airway assessment (Mallampati class, TMD, inter-incisor distance, upper lip bite test, neck ROM, etc.). 	<ul style="list-style-type: none"> <input type="checkbox"/> Shows increasing expertise in airway management using a broad variety of techniques as deemed appropriate for the patient and/or surgery <input type="checkbox"/> Performs Thorough Airway assessment (Mallampati class, TMD, inter-incisor distance, upper lip bite test, neck ROM, etc.). 	<ul style="list-style-type: none"> <input type="checkbox"/> Demonstrates expertise in airway management using a broad variety of techniques as deemed appropriate for the patient and/or surgery <input type="checkbox"/> Performs Thorough Airway assessment (Mallampati class, TMD, inter-incisor distance, upper lip bite test, neck ROM, etc.). 	<ul style="list-style-type: none"> <input type="checkbox"/> Demonstrates expertise in airway management using a broad variety of techniques as deemed appropriate for the patient and/or surgery <input type="checkbox"/> Performs Thorough Airway assessment (Mallampati class, TMD, inter-incisor distance, upper lip bite test, neck ROM, etc.).
Record-keeping	<ul style="list-style-type: none"> -Ensures thorough documentation of anesthesia care including preoperative, intraoperative, and postoperative elements. -Proficient with EHR and understanding of utilization of data to improve care 	<ul style="list-style-type: none"> -Ensures thorough documentation of anesthesia care including preoperative, intraoperative, and postoperative elements. -Proficient with EHR and utilizes data available 	<ul style="list-style-type: none"> -Ensures thorough documentation of anesthesia care including preoperative, intraoperative, and postoperative elements. -Proficient with EHR and utilizes data available 	<ul style="list-style-type: none"> -Ensures thorough documentation of anesthesia care including preoperative, intraoperative, and postoperative elements. -Proficient with EHR and utilizes data available
Pre/Post Op assessment	<ul style="list-style-type: none"> -Performs a thorough pre-anesthetic assessment, including H&P, development of an active problem list which is pertinent to the development the anesthetic care plan. <input type="checkbox"/> Correctly identifies 	<ul style="list-style-type: none"> -Performs a thorough pre-anesthetic assessment, including H&P, development of an active problem list which is pertinent to the development the anesthetic care plan. <input type="checkbox"/> Correctly identifies 	<ul style="list-style-type: none"> -Performs a thorough pre-anesthetic assessment, including H&P, development of an active problem list which is pertinent to the development the anesthetic care plan. <input type="checkbox"/> Correctly identifies 	<ul style="list-style-type: none"> -Performs a pre-anesthetic assessment, including development of an active problem list which is pertinent to the development the anesthetic care plan. <input type="checkbox"/> Correctly identifies when intra-operative

	<p>when intraoperative lab work is needed and obtains specimens in a timely and correct manner</p> <ul style="list-style-type: none"> <input type="checkbox"/> Determines the Appropriate intervention(s) indicated by lab results <input type="checkbox"/> Accurately assesses post-operative needs of patients, including O2 therapy, pharmacotherapy, diagnostic and laboratory tests, treatments, and consults <input type="checkbox"/> Provides a complete and thorough report to nursing staff including: problem list and allergies, procedure, intraoperative course, complications, antibiotics, fluid balance, labs, and plans for postoperative care (including pain management). <input type="checkbox"/> Writes PACU orders and post –operative notes. <input type="checkbox"/> Performs timely patient follow-up with appropriate documentation -Post-op self-evaluates outcome of anesthetic care and performance 	<p>when intraoperative lab work is needed and obtains specimens in a timely and correct manner</p> <ul style="list-style-type: none"> <input type="checkbox"/> Determines the Appropriate intervention(s) indicated by lab results <input type="checkbox"/> Accurately assesses post-operative needs of patients, including O2 therapy, pharmacotherapy, diagnostic and laboratory tests, treatments, and consults <input type="checkbox"/> Provides a complete and thorough report to nursing staff including: problem list and allergies, procedure, intraoperative course, complications, antibiotics, fluid balance, labs, and plans for postoperative care (including pain management). <input type="checkbox"/> Writes PACU orders and post –operative notes. <input type="checkbox"/> Performs timely patient follow-up with appropriate documentation -Post-op self-evaluates outcome of anesthetic care and performance 	<p>when intraoperative lab work is needed and obtains specimens in a timely and correct manner</p> <ul style="list-style-type: none"> <input type="checkbox"/> Determines the Appropriate intervention(s) indicated by lab results <input type="checkbox"/> Accurately assesses post-operative needs of patients, including O2 therapy, pharmacotherapy, diagnostic and laboratory tests, treatments, and consults <input type="checkbox"/> Provides a complete and thorough report to nursing staff including: problem list and allergies, procedure, intraoperative course, complications, antibiotics, fluid balance, labs, and plans for postoperative care (including pain management). <input type="checkbox"/> Writes PACU orders and post –operative notes. <input type="checkbox"/> Performs timely patient follow-up with appropriate documentation -Post-op self-evaluates outcome of anesthetic care and performance 	<p>lab work is needed and obtains specimens in a timely and correct manner</p> <ul style="list-style-type: none"> <input type="checkbox"/> Determines the Appropriate intervention(s) indicated by lab results <input type="checkbox"/> Accurately assesses post-operative needs of patients, including O2 therapy, pharmacotherapy, diagnostic and laboratory tests, treatments, and consults <input type="checkbox"/> Provides a complete and thorough report to nursing staff including: problem list and allergies, procedure, intraoperative course, complications, antibiotics, fluid balance, labs, and plans for postoperative care (including pain management). <input type="checkbox"/> Writes PACU orders and post –operative notes. <input type="checkbox"/> Performs timely patient follow-up with appropriate documentation -Post-op self-evaluates outcome of anesthetic care and performance
Basic knowledge	<ul style="list-style-type: none"> <input type="checkbox"/> Develops an anesthetic care plan for each assigned case (either written or verbal) and reviews this with their clinical preceptor in a cogent, well-organized manner. <input type="checkbox"/> Verbalizes rationale for drug selection, appropriate dosage and use of pharmacologic agents, drug interactions, side effects, and adverse effects/contraindication 	<ul style="list-style-type: none"> <input type="checkbox"/> Develops an anesthetic care plan for each assigned case (either written or verbal) and reviews this with their clinical preceptor in a cogent, well-organized manner. <input type="checkbox"/> Verbalizes rationale for drug selection, appropriate dosage and use of pharmacologic agents, drug interactions, side effects, and adverse effects/contraindication 	<ul style="list-style-type: none"> <input type="checkbox"/> Develops an anesthetic care plan for each assigned case (either written or verbal) and reviews this with their clinical preceptor in a cogent, well-organized manner. <input type="checkbox"/> Verbalizes rationale for drug selection, appropriate dosage and use of pharmacologic agents, drug interactions, side effects, and adverse effects/contraindication 	<ul style="list-style-type: none"> <input type="checkbox"/> Develops an anesthetic care plan for each assigned case (either written or verbal) and reviews this with their clinical preceptor in a cogent, well-organized manner. <input type="checkbox"/> Verbalizes rationale for drug selection, appropriate dosage and use of pharmacologic agents, drug interactions, side effects, and adverse effects/contraindication

	<input type="checkbox"/> Demonstrates correct sequencing during different phases of the anesthetic. <input type="checkbox"/> Selects and implements appropriate fluid management for patients during the pre-operative, perioperative, and postoperative periods. <input type="checkbox"/> Determines when blood component therapy is needed and selects, administers, and monitors therapy consistent with current 'state of the science.' -Identifies patient positioning requirements for surgical cases and when appropriate, directs members of the OR team during positioning to ensure optimal protection of the patient and any attached monitoring equipment or invasive lines.	<input type="checkbox"/> Demonstrates correct sequencing during different phases of the anesthetic. <input type="checkbox"/> Selects and implements appropriate fluid management for patients during the pre-operative, perioperative, and postoperative periods. <input type="checkbox"/> Determines when blood component therapy is needed and selects, administers, and monitors therapy consistent with current 'state of the science.' -Identifies patient positioning requirements for surgical cases and when appropriate, directs members of the OR team during positioning to ensure optimal protection of the patient and any attached monitoring equipment or invasive lines.	<input type="checkbox"/> Demonstrates correct sequencing during different phases of the anesthetic. <input type="checkbox"/> Selects and implements appropriate fluid management for patients during the pre-operative, perioperative, and postoperative periods. <input type="checkbox"/> Determines when blood component therapy is needed and selects, administers, and monitors therapy consistent with current 'state of the science.' -Identifies patient positioning requirements for surgical cases and when appropriate, directs members of the OR team during positioning to ensure optimal protection of the patient and any attached monitoring equipment or invasive lines.	<input type="checkbox"/> Demonstrates correct sequencing during different phases of the anesthetic. <input type="checkbox"/> Selects and implements appropriate fluid management for patients during the pre-operative, perioperative, and postoperative periods. <input type="checkbox"/> Determines when blood component therapy is needed and selects, administers, and monitors therapy consistent with current 'state of the science.' -Identifies patient positioning requirements for surgical cases and when appropriate, directs members of the OR team during positioning to ensure optimal protection of the patient and any attached monitoring equipment or invasive lines.
Planning & Organization	<input type="checkbox"/> Completes without assistance, an anesthesia machine check-out and ensures that all needed monitoring and anesthesia equipment is functioning properly. <input type="checkbox"/> Independently sets up the anesthesia cart for general, regional, and MAC cases. <input type="checkbox"/> Anticipates and prepares for subsequent cases to maximize efficiency and facilitate timely turnover of OR	<input type="checkbox"/> Completes without assistance, an anesthesia machine check-out and ensures that all needed monitoring and anesthesia equipment is functioning properly. <input type="checkbox"/> Independently sets up the anesthesia cart for general, regional, and MAC cases. <input type="checkbox"/> Anticipates and prepares for subsequent cases to maximize efficiency and facilitate timely turnover of OR	<input type="checkbox"/> Completes without assistance, an anesthesia machine check-out and ensures that all needed monitoring and anesthesia equipment is functioning properly. <input type="checkbox"/> Independently sets up the anesthesia cart for general, regional, and MAC cases. <input type="checkbox"/> Anticipates and prepares for subsequent cases to maximize efficiency and facilitate timely turnover of OR	<input type="checkbox"/> Completes without assistance, an anesthesia machine check-out and ensures that all needed monitoring and anesthesia equipment is functioning properly. <input type="checkbox"/> Independently sets up the anesthesia cart for general, regional, and MAC cases. <input type="checkbox"/> Anticipates and prepares for subsequent cases to maximize efficiency and facilitate timely turnover of OR
Judgment & Reasoning	<input type="checkbox"/> Maintains vigilance and responds to changes in the patient's condition. <input type="checkbox"/> Implements needed	<input type="checkbox"/> Maintains vigilance and responds to changes in the patient's condition. <input type="checkbox"/> Implements needed	<input type="checkbox"/> Maintains vigilance and responds to changes in the patient's condition. <input type="checkbox"/> Implements needed interventions to help	<input type="checkbox"/> Maintains vigilance and responds to changes in the patient's condition. <input type="checkbox"/> Implements needed interventions to help

	<p>interventions to help facilitate or optimize conditions for the surgical procedure.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Performs basic trouble-shooting of monitors and/or seeks appropriate assistance when problems are faced. 	<p>interventions to help facilitate or optimize conditions for the surgical procedure.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Performs basic trouble-shooting of monitors and/or seeks appropriate assistance when problems are faced. 	<p>facilitate or optimize conditions for the surgical procedure.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Performs basic trouble-shooting of monitors and/or seeks appropriate assistance when problems are faced. 	<p>facilitate or optimize conditions for the surgical procedure.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Performs basic trouble-shooting of monitors and/or seeks appropriate assistance when problems are faced.
Reaction to Stress	<p>Maintains composure, asks for help</p> <ul style="list-style-type: none"> <input type="checkbox"/> Provides feedback concerning the clinical rotation to Clinical Coordinators, CRNA clinical preceptors, and to NAP program faculty as appropriate. 	<p>Maintains composure, asks for help</p> <ul style="list-style-type: none"> <input type="checkbox"/> Provides feedback concerning the clinical rotation to Clinical Coordinators, CRNA clinical preceptors, and to NAP program faculty as appropriate. 	<p>Maintains composure, asks for help</p> <ul style="list-style-type: none"> <input type="checkbox"/> Provides feedback concerning the clinical rotation to Clinical Coordinators, CRNA clinical preceptors, and to NAP program faculty as appropriate. 	<p>Maintains composure, asks for help</p> <ul style="list-style-type: none"> <input type="checkbox"/> Provides feedback concerning the clinical rotation to Clinical Coordinators, CRNA clinical preceptors, and to NAP program faculty as appropriate.
Response to Direction	<ul style="list-style-type: none"> <input type="checkbox"/> Demonstrates willingness to receive and utilize feedback from instructors, surgeons and other OR team members - Respectfully offers suggestions based on evidence 	<ul style="list-style-type: none"> <input type="checkbox"/> Demonstrates willingness to receive and utilize feedback from instructors, surgeons and other OR team members - Respectfully offers suggestions based on evidence 	<ul style="list-style-type: none"> <input type="checkbox"/> Demonstrates willingness to receive and utilize feedback from instructors, surgeons and other OR team members - Respectfully offers suggestions based on evidence 	<ul style="list-style-type: none"> <input type="checkbox"/> Demonstrates willingness to receive and utilize feedback from instructors, surgeons and other OR team members - Respectfully offers suggestions based on evidence
Industry & Reliability	<ul style="list-style-type: none"> -Actively seeks out additional experiences to improve performance -Finishes the cases assigned -Completes all work assigned -Implements practice Inquiry project 	<ul style="list-style-type: none"> -Actively seeks out additional experiences to improve performance -Finishes the cases assigned -Completes all work assigned -Evaluates practice Inquiry project 	<ul style="list-style-type: none"> -Actively seeks out additional experiences to improve performance -Finishes the cases assigned -Completes all work assigned -Finishes practice Inquiry project 	<ul style="list-style-type: none"> -Actively seeks out additional experiences to improve performance -Finishes the cases assigned -Completes all work assigned -Finishes practice Inquiry project
Attendance & Punctuality	<p>Report on scheduled days and always at least one hour before scheduled case. Stays until released—which may entail additional clinical hours</p> <p>Informs clinical site and program of an absence prior to 7am the day of the absence.</p>	<p>Report on scheduled days and always at least one hour before scheduled case. Stays until released—which may entail additional clinical hours</p> <p>Informs clinical site and program of an absence prior to 7am the day of the absence.</p>	<p>Report on scheduled days and always at least one hour before scheduled case. Stays until released—which may entail additional clinical hours</p> <p>Informs clinical site and program of an absence prior to 7am the day of the absence.</p>	<p>Report on scheduled days and always at least one hour before scheduled case. Stays until released—which may entail additional clinical hours</p> <p>Informs clinical site and program of an absence prior to 7am the day of the absence.</p>
Professional Demeanor	<ul style="list-style-type: none"> <input type="checkbox"/> Interacts with patients and their families as well as members of the perioperative care team 	<ul style="list-style-type: none"> <input type="checkbox"/> Interacts with patients and their families as well as members of the perioperative care team 	<ul style="list-style-type: none"> <input type="checkbox"/> Interacts with patients and their families as well as members of the perioperative care team <p>in a professional and</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Interacts with patients and their families as well as members of the perioperative care team <p>in a professional and</p>

	in a professional and considerate manner. -Educates patients, their families and surgical team on pertinent health and anesthetic care matters -Exhibits characteristics consistent with a leader in nurse anesthesia and health care	in a professional and considerate manner. -Educates patients, their families and surgical team on pertinent health and anesthetic care matters -Exhibits characteristics consistent with a leader in nurse anesthesia and health care	considerate manner. -Educates patients, their families and surgical team on pertinent health and anesthetic care matters -Exhibits characteristics consistent with a leader in nurse anesthesia and health care	considerate manner. -Educates patients, their families and surgical team on pertinent health and anesthetic care matters -Exhibits characteristics consistent with a leader in nurse anesthesia and health care
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CLINICAL TIME

All clinical shifts are 10 hours or as determined by the clinical facility. Fall II students are one day per week in Operating room, Spring II students are 2 days per week in the Operating room, Dynamic Summer III students are 3 days per week, Fall III students are 4 days per week, Winter III students are 5 days per week, Spring III students are 4 days per week. Hours are subject to change. These hours are SCHEDULED hours. Students will be required to arrive earlier than their scheduled start time to prepare and to stay after their scheduled departure when learning experiences are available.

HOLIDAYS, Off-Shifts, & Call

Throughout the clinical phase of the program, the student may be scheduled on duty for each of three shift rotations, including weekend experiences as well as holidays. Students will be granted a day for seven (7) holidays per year, New Year's Day, Martin Luther King Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day, & Christmas Day. Vacation requests during holiday weeks will be according to NA program and the clinical site.

CALL

A planned clinical experience outside the normal operating hours of the clinical facility, for example, after 5 p.m. and before 7 a.m., Monday through Friday, and on weekends. Assigned duty on shifts falling within these hours is considered the equivalent of an anesthesia call, during which a student is afforded the opportunity to gain experience with emergency cases. Senior students will need to be scheduled for on-call time at least 4 times a semester.

Clinical Correlation Conferences

The program is required to ensure that each student partakes in at least 45 hours of clinical correlation conferences. Clinical correlation conferences include departmental meeting at clinical affiliate sites, journal club/reviews, case reports, QA reviews, M & M discussions, conferences, and/or in-services related to anesthesia. Students will document these experiences and the number of clinical correlation hours they have engaged in on their daily Typhon log.

Clinical Release Time Requests

Clinical release time of fourteen (14) days will be granted during the 36 month program. Clinical release time can be used for vacation or conference attendance. Requests for days off must be in writing, submitted to Dr. Piotrowski (Director/Coordinator for the NA Specialty) and approved in advance. Requests are due for the upcoming month on the first day of the preceding month. For example, September requests are due not later August 1. Request forms are located in the NA handbook and in the program office. Finals week is not subject to requests (i.e. for sequencing of exams) since that week's schedule is determined by instructor availability. Students will be scheduled for didactic and clinical experiences by faculty during finals week.

No clinical release time will be approved during the final four weeks of the program, or on the first day of any clinical rotation.

Use of Time

During clinical rotations, students will be scheduled in class based on instructor/preceptor and University schedules. Program business such as student meetings, certification exam review, and evaluation conferences will be held on these days. Any other days off must be scheduled as vacation.

Personal illness or family emergencies necessitating extended absences will be counted as clinical release time. Students will notify and/or request such absences from the assistant director (Dr. Cox) or the director (Dr. Piotrowski). Students are not permitted to request time on class days, while on probation, or during clinical research data collection. Vacations while rotating to enrichment sites are also discouraged. Special circumstances that require class time off must have prior

approval of the course faculty and either Dr. Cox or Piotrowski. Any day missed will be counted against the 14-day allotment.

Scheduling Clinical Hours

The student should schedule clinical practicum hours that are in keeping with the preceptor's schedule and availability - not the student's schedule or convenience. Prior to beginning the clinical practicum, students and preceptors need to agree on the days and times that the student will be in the clinical agency. The student is expected to accommodate participation in the required number of clinical hours specified by the clinical course. All required supervised practice hours must be complete by the end of the semester or the student will be required to make up days at the end of the final rotation and will be in jeopardy of not progressing in the program or failing. Students are limited to 64 hours per week averaged over a 4 week period.

Professional Activities:

Attendance at professional meetings is strongly encouraged. However, prior approval must be granted by the clinical site, course faculty (s), and the Director/Specialty Coordinator for the Nurse Anesthesia Specialty for any missed clinical time.

Unscheduled Absences:

Students are allowed not more than three of their 14 total days as unscheduled absences during the program. Students must call in at least one hour before their scheduled arrival time when they are ill. While on rotation, students **must call the clinical site as well as the program offices at the University (330-564-7995)** by one hour before your scheduled shift.

Unexcused absences must be made up, and will be re-scheduled at the discretion of the program director and the clinical site. The maximum amount of time to be made-up is 5 days. Uses of time (scheduled and unscheduled absences together) in excess of 14 days or patterned absences are grounds for dismissal. Documentation of all unscheduled absences will appear in letters of recommendation required by future employers.

Two days will be deducted from a student's vacation bank for:

1. No call/no shows
2. Calling-in ill at an affiliate clinical site, but failing to notify the program office (330-564-7995) of this call-in
3. Unexcused class absences, but failing to notify the program office of this call-in

A student who calls in as unavailable for clinical on the last day preceding, or the first day following, a scheduled block of days off must bring in a note from a healthcare provider documenting their illness. In the absence of documentation of absence necessary for health or other reasons, this will be considered an unscheduled absence.

Students are expected to attend certain required events that occur outside of class or clinical time (e.g. graduation, service projects and conferences). Non-attendance will be treated as an unscheduled absence.

If a student is to be absent for a scheduled clinical day (due to illness or emergency), the student should notify the preceptor prior to the beginning of the clinical day and the clinical supervising faculty. On the first clinical day, students should identify the procedure for contacting the preceptor in case of absence. It is the student's responsibility to notify also the clinical supervising faculty of the absence and to negotiate with the preceptor regarding making up time, when possible. If the student is not attending clinical as scheduled, the preceptor should notify the clinical supervising faculty or Dr. Piotrowski. **Students are expected to schedule make-up clinical time with the preceptor, consistent with the preceptor's availability/schedule** or the student will incur extra clinical time at the end of their final rotation.

Critical incidents at an affiliate site shall be reported by the student to Drs. Piotrowski or Cox at the time of the occurrence (within 24 hours). Critical incidents include but are not limited to any patient injury, complications, morbidity, or mortality. Furthermore, any non-critical incident concerns about a student, preceptor, or clinical matter need to be conveyed to the clinical supervising faculty with 48 hours. It is highly recommended that all concerns be documented and communicated to all parties involved at the site as well as to the clinical supervising faculty and/or the specialty Director.



OVERVIEW OF CURRENT AFFILIATION SITES

The University of Arizona College of Nursing has contractual agreements with numerous healthcare institutions and facilities throughout Arizona and beyond, which provide the necessary clinical experiences in anesthesia. The student must obtain at least 600 anesthesia cases and 2000 clinical hours to meet COA approval. Clinical training sites may be added to sites already in use, and may serve as complete training sites or may offer specialty training as part of the overall clinical program. These sites represent primary and enrichment clinical sites. Students will be afforded appropriate input in assignment of sites; however, sites assigned by the program clinical director are not optional, as they may provide the student with required experiences to qualify for certification.

A complete updated list of clinical affiliation sites with updated contact information is maintained on the Typhon web site along with web addresses and contact information. Students are required to access this information at least a month prior to clinical rotation and contact the clinical coordinator for information regarding the rotation to the site.

FACULTY APPOINTMENT

Each anesthesiologist/CRNA serving on the staff or employed by an affiliating hospital is considered an adjunct clinical instructor.

CRNA clinical faculty must be licensed as a professional nurse in one jurisdiction of the United States and must also be certified/re-certified by the Council on Certification/Re-Certification of Nurse Anesthetists. Physician clinical instructors must be licensed in one jurisdiction of the United States to practice medicine.

SUPERVISION OF STUDENTS

Purpose

To establish guidelines for instruction of student registered nurse anesthesia students (SRNA).

Policy

1. SRNA will be supervised at a faculty: student ratio of 1:1 or 1:2, except where patient safety considerations dictate that this be modified.
 - a. Appropriate faculty includes CRNAs and physician anesthesiologists.
 - b. Graduate Registered Nurse Anesthetists or physicians in residency training cannot instruct students if they are the sole instructor responsible for the student.
2. The instructor will be present in the operating room continuously when SRNA is anesthetizing:
 - a. children (less than 12 years of age),

- b. the most demanding cases: this would include, for example, intracranial, major vascular, cardiovascular, cardiac valve replacement, major intrathoracic cases, unstable patients or those with a complicated intraoperative course, and ASA Physical Status V patients.
 - c. and whenever SRNA is performing regional anesthesia procedures.
3. The SRNA may be left alone in the operating room while providing an anesthetic at the discretion of the CRNA or physician anesthesiologist. While the SRNA is alone the CRNA or Anesthesiologist must be immediately available (within the OR suites, and able to respond immediately if called to the room).
4. Junior SRNA
 - a. In Phase II months 0-3, students will be supervised 1:1 (assigned to an OR with a CRNA or physician anesthesiologist who has no other assignment).
 - b. Instructors may leave the operating room for brief periods (breaks, lunches) when assigned with a junior student (beginning month 5) provided the patient's medical history and the operative course are uncomplicated.
5. Senior SRNA
 - a. In the last 6 months of their educational program senior SRNA may be supervised 1:1 or 1:2 by a CRNA or physician anesthesiologist.
 - b. The instructor may leave the room for periods dependent on the patient's medical condition, the operative course, and their assessment of the senior's demonstrated knowledge and ability.
6. Supervision outside anesthetizing areas
 - a. Students may participate in educational activities involving non-anesthetizing duties of a Nurse Anesthetist. These activities may include, but are not limited to, resuscitative services, postoperative rounds, assisting in obtaining intravenous access and respiratory and pain services rotations.
 - b. Students responding to code or respiratory distress calls are required to do so under the direct supervision of a licensed anesthesia provider who is physically present.

During the other activities listed, students may be supervised by nurse anesthetists, physician anesthesiologists, other physicians, or registered nurses provided that those accepting responsibility for supervision of nurse anesthesia students are entitled by license, hospital credentialing, or job description to perform these duties.

The decision as to when students are experienced enough to be left alone during an anesthetic will be made based on the following:

- Complexity of the surgical procedure.
- Medical stability of the individual patient.
- Level of experience (number and types of cases completed).*
- Individual clinical skills.*
- Completion of didactic courses appropriate to the surgical case.*

* This information is available through the student's case records, through the clinical coordinator at each site, or by calling the program administrative faculty directly.

CLINICAL EVALUATION TOOLS

Evaluation forms have been created and are utilized by both clinical faculty and students. A copy of the evaluation forms can be found in Doctoral Commons, in the Clinical Placement area for download. Evaluation is not negative; rather, it is an essential assessment of progress toward achievement of an objective. The SRNA will actively seek evaluation from the clinical instructors at all times.

Daily evaluation forms are available on Typhon or from the program. These forms are used by the clinical instructor and shared with the SRNA. The completed forms are uploaded to Typhon or returned to the Clinical Coordinator. Midterm & final semester evaluation forms, stored on Typhon, are available to all clinical instructors. Each clinical site coordinator is asked to regularly complete these forms and return them to the Program's Clinical Coordinator. Each SRNA is required to make an appointment with the Director and/or Clinical Coordinator at least quarterly for purposes of evaluation and counseling. Appointments may be made more frequently as necessary.

Clinical Evaluation Steps

1. **Typhon:** Each student has a unique password that enables data to be entered onto an encounter form. Encounter forms contain mandatory and optional pre-determined data fields. Students may view any of their cases, or may view their own aggregated case data in a variety of ways, such as by specific class, encounter type or demographic type. Faculty may view specific encounters or aggregate encounter data for any (or all) students within their purview. TYPHON displays

an on-going comparison of aggregate data to the required clinical hours of each specific course; aggregate data can additionally be displayed in spreadsheet or chart format. Faculty use specific and aggregate encounter data to assure that students are attaining the clinical practice portion of course objectives. TYPHON records help faculty monitor the types of anesthetics, case complexity, ages, and surgeries of clients cared for by the student. If the student is not seeing clients appropriate for learning needs (i.e. across the lifespan, complexity not appropriate for the level of the student, or the types of diagnoses are too narrow or inappropriate) clinical placements can be adjusted if needed to ensure students receive optimal clinical experiences to meet learning needs. These records are to include case logs, hours, conference time and evaluations.

2. Clinical Competency Daily Evaluation: The SRNA's clinical performance is to be evaluated daily. Either the supervising CRNA or anesthesiologist performs this evaluation. SRNAs may not be evaluated or supervised by non-certified nurse anesthetists, anesthesia assistants (AAs) or by other medical residents. It is the responsibility of the SRNA to ensure the completion of the evaluation form by the instructor daily. Students are expected to have the evaluation sheet with them **EVERY** day of clinical, so that they are available for clinical faculty to complete if they would like to offer feedback via paper for the day. Failure to have this form available could result in an "unacceptable" for the day. Both the student and instructor are required to sign the form. The signature of the student does not mean agreement. It means the student has read the evaluation and completed the self-evaluation. Instructor comments must be provided on all evaluations that are partial satisfactory or unsatisfactory. Failure to submit copies clinical evaluations to the school each month can result in clinical probation. 80% return rate is required.

3. Clinical Practicum Summative Evaluation: Students will periodically be evaluated by a summative format completed by the clinical coordinator, the clinical director or clinical faculty. This usually occurs at midpoint in the rotation and at the end of the rotation. Performance in regard to the clinical objectives will be addressed in these evaluations. This will be utilized as each student completes either a required site or an enrichment rotation. Both the student and instructor are required to sign the form. The signature of the student does not mean agreement. It means the student has read the evaluation and completed the self-evaluation. Instructor comments must be provided on all evaluations that are partial satisfactory or unsatisfactory.

4. Student Evaluation of Clinical Site & Instructors: At the end of each semester or rotation, students are asked to complete evaluations on their clinical rotations sites and on the clinical instructors at each clinical rotation site. These forms will be collected, comments compiled and shared formally with the site at least yearly.

5. Clinical Faculty Self-Evaluations: Clinical faculty will evaluate themselves annually. They will do so via standardized forms provided by the program. These forms will be collected, comments compiled and shared formally with the site.

6. Student Self-Evaluation: Students will evaluate themselves per the daily Clinical Competency Daily Evaluation tool.

The evaluation forms are to be retained either on Typhon or by the clinical coordinator in a locked cabinet.

Table for Evaluation Schedule

Evaluation	Daily	Mid-Rotation	End-Rotation	Yearly
Daily Evaluation	x			
Formative/Summative		X	x	
Clinical Site			x	
Preceptor			x	
Student Self Evaluation	x			
Faculty Self Evaluation				x

Clinical Probation/Dismissal for Nurse Anesthesia Students:

A student can be placed on clinical probation or dismissed for:

1. Unacceptable conduct which is incongruent with the rules of conduct while on affiliation at Clinical Sites.
2. Receiving an unfavorable evaluation documenting poor performance, failure to progress, and/or inability to meet the clinical practicum objectives as assessed by the program faculty.
3. Behavior, performance or judgment that jeopardizes patient safety.
4. Inability to display continual mastery of previously mastered clinical skills.
5. Failure to comply with submission of all required documents in accordance with the required deadlines for submission. (i.e. clinical evaluations, postoperative survey forms, professional licensure documentation).
6. Failed criminal background check
7. Unsuccessful completion of the clinical probationary status; unsatisfactory performance of clinical objectives or poor performance necessitating changes in clinical assignments (including rotations)

8. Falsification of documents including, but not limited to, the patient medical record, narcotic administration records, and clinical evaluation forms (including failure to turn in all daily clinical evaluations, including unfavorable ones).
9. Repeated instances of tardiness, lateness or absenteeism necessitating change in clinical assignments, or patterned absence (i.e. before exams, weekends, holidays, before or after a scheduled use of clinical release time, etc.)
10. Clinical release time use in excess of 14 days
11. Unexplained absence from the clinical area
12. Leaving the clinical area without notification of supervising staff
13. Violation of policies, rules and regulations of the hospital or anesthesia department to which the student is assigned for clinical practice
14. Unethical or unprofessional conduct associated with clinical assignments including, but not limited to:
 1. dishonesty
 2. inappropriate behavior or language in the clinical setting
 3. any violation of the substance abuse policy
 4. reporting for duty while under the influence of any substance which impairs the student's ability to perform his/her clinical tasks.
15. Insubordination or threats directed at faculty or clinical instructors
16. Failure to turn in completed written clinical evaluation forms for at least 70% of assigned clinical days
17. Student employed as a nurse anesthetist by title or function while in the educational program
18. Violation of patient confidentiality, such as posting details of care or images of patients publicly, e.g. on social media web sites.
19. Medication errors if you do not self-disclose within 24 hours; or if the error was deemed very negligent by faculty (not meeting the standard we expect of an RN even prior to anesthesia education), especially
20. Cheating is intentionally using or attempting to use, or intentionally providing or attempting to provide, unauthorized materials, information or assistance in any academic exercise. Examples of cheating are as follows:
 21. Using the work of another individual on an examination or assignment and submitting it as your own work.
 22. Using another student's electronic devices, to answer questions or provide feedback.
 23. Permitting another student to use your work on an examination or assignment without explicit approval of the instructor.
 24. Possessing or accessing unauthorized notes, crib sheets, additional sources of information or other material during an examination.
 25. Providing or receiving unauthorized aid during an examination or prior to a make-up examination.
 26. Taking an examination for another student or having an examination taken by a second party.
 27. Altering or falsifying examination results after they have been evaluated by the instructor and returned to the student.
 28. Unauthorized possession or use of examinations except examinations returned by professors from previous semesters.
 29. Collaborating on any assignment or examination without the explicit permission of the instructor.
 30. Failing to comply with instructions given by the person administering the test.
 31. Falsifying data, laboratory reports, and/or other academic work offered for credit.
 32. Fabrication, fraud and falsification common in the academic and/or clinical environments are as follows:
 33. Fabrication or falsification of examinations, reports, assignments, case studies and other assigned work.
 34. Falsification or invention of sources or page references in assignments.
 35. Falsification or alteration of original source documents, such as misquoting or misrepresenting the document, to support a specific point of view or hypothesis.
 36. Falsification or fabrication of laboratory results or patient data.
 37. Falsification of any school or university document including grade reports, transcripts or personnel files.
 38. Forging signatures of school or university officials on any official document including patient records.
 39. Providing a false excuse or reason for missing an examination, assignment, a required attendance class or clinical rotation.
 40. Providing the name or signature of another student on an attendance form; signing an attendance form when you are present for only a brief period of time, e.g., signing in and leaving or signing when you arrive near the end of the class or session.
 41. Providing false information to an instructor to increase one's grade or to attain special consideration.
 42. Providing false information regarding contributions to group assignments or projects.
 43. Misrepresenting facts about oneself or another in regard to health, personal, financial or academic considerations to gain an unfair academic or financial benefit.

Clinical Probation Process

To be successful, students are expected to meet clinical practicum objectives. If student performance indicates, “needs improvement” in the first two months of a practicum course, this will be monitored by the program faculty and communicated with the student and clinical faculty. It will be expected that the student obtain “acceptable” performance throughout the last month of the course. If the student fails to do so, program faculty may place them on probation. In addition, a clinical probation may be instituted at any time during a clinical course if a student exhibits unsafe or “unacceptable” clinical practice, or fails to submit the required evaluations or program required documentation of professional licensure.

Clinical probation entails a 30-day period. During this time program faculty will re-evaluate the student’s status. Students will communicate with program faculty and clinical faculty to develop a remediation plan based on their clinical evaluations, clinical faculty feedback and/or program faculty findings. The plan will include strategies for improvement of clinical performance. After the 30-day probation period, the student will be re-evaluated by the program faculty to determine if clinical objectives have been met. If they are successful, they will resume their clinical practicum at the same level of their peers. Failure to meet clinical objectives at that level will result in dismissal. Students who have successfully met objectives of a clinical probation period and encounter subsequent performance issues may either be placed on a second 30-day probation period or dismissed from the program, in accordance with College of Nursing policies. If placed on probation, the process described would apply. The limit for all students is (2) probationary periods. If performance issues continue to occur after a student has successfully completed (2) probationary periods, the student would be immediately dismissed.

The clinical site for the probation period will be delineated by program faculty. Students will not be allowed to take time off (except for sick time) during this period. All sick time off will be made up by adding it to the end of the probationary period.

CLINICAL CASE REQUIREMENTS

For most current requirements, please see COA document Standards for Accreditation of Nurse Anesthesia Education Programs. Current requirements for case numbers and types of cases are available on Typhon or online at: <http://home.coa.us.com>

Objectives per Specialty Rotations:

Cardiothoracic / Vascular Anesthesia

- Demonstrate knowledge related to cardiovascular and vascular pathophysiology and disease.
- Perform a thorough preanesthetic evaluation of patients undergoing cardiothoracic and vascular procedures.
- Formulate a cogent anesthesia plan of care of patients undergoing cardiothoracic or vascular procedures.
- Performs insertion of invasive monitoring devices utilizing appropriate technique.
- Demonstrate appropriate preparation and use of anesthetic equipment pertinent to cardiothoracic and vascular procedures.
- Demonstrate knowledge of the pharmacokinetics and pharmacodynamics of the medications used during cardiothoracic and vascular procedures.
- Demonstrate understanding of perioperative care related to the following:
 - CABG
 - Cardiopulmonary bypass / extracorporeal circulation
 - One lung ventilation
 - Vascular disease
 - Hemodynamic waveforms
 - Hemostasis
 - Circulatory Arrest
 - IABP / VAD
- Display knowledge related to care of a patient requiring Transesophageal Echocardiogram:
 - Probe insertion
 - Manipulation and views
 - Interpretation
- Demonstrate appropriate pacemakers parameters including modes of cardiac pacing implanted and cardioverter defibrillator.
- Verbalize understanding of the physiology, pathophysiology, and anesthetic considerations for patients undergoing profound hypothermia and circulatory arrest.
- Demonstrate understanding of the anesthetic considerations for organ transplantation procedures including:
 - Cardiac Transplantation (heterotopic and orthotopic)

- Pulmonary Transplantation (single, double, en bloc)
- Heart-lung Transplantation
- Demonstrate knowledge of indicated postoperative care of the patient undergoing cardiothoracic /vascular procedures.

Pediatric Anesthesia

- Demonstrate knowledge of pediatric physiology and pathophysiology related to perioperative care of the pediatric and neonatal patient.
- Discuss age-specific issues related to growth and development of the pediatric and neonatal population.
- Display fund of knowledge related to pharmacodynamic and pharmacokinetic principles in the pediatric and/or neonatal patient.
- Demonstrate knowledge of anesthesia and monitoring equipment related to the pediatric and neonatal population.
- Perform an age-specific, accurate and thorough preanesthetic evaluation, including chart review and patient history/physical examination.
- Display knowledge of pediatric and neonatal NPO guidelines.
- Compare and contrast differences between adult, pediatric, and neonatal airways.
- Demonstrate technical competency related to airway management of the pediatric and neonatal patient.
- Demonstrate appropriate management of pediatric and neonatal patients with difficult airways.
- Formulate and execute an appropriate, cogent, patient-specific anesthesia plan including:
 - Preoperative preparation
 - Induction, maintenance, emergence and postoperative care
 - Perioperative fluid requirements (e.g. EBV, MABL, transfusion requirements, etc.)
 - Management of mechanical ventilation
 - Perioperative pain management
- Apply and utilize both invasive and noninvasive monitoring modalities according to patient needs and type of surgery.
- Utilize regional anesthesia techniques according to patient needs and type of surgery.
- Describe anesthetic considerations related to perioperative thermal regulation in the pediatric and neonatal patient.
- Effectively manage pediatric/neonatal patients undergoing procedures outside of the operating room.
- Explain guidelines for pediatric outpatient anesthesia.
- Demonstrate fund of knowledge regarding pathophysiology and perioperative care of the pediatric and/or neonate related to:
 - Prematurity/Ex-prematurity
 - Trisomy 21
- Congenital heart disease
- Diaphragmatic hernia
- Necrotizing enterocolitis
- Gastroschisis/omphalocele
- Respiratory Distress Syndrome
- Myelomeningocele
- Pyloric stenosis
- T-E fistula
- Neonatal lobar emphysema
- Cleft palate/lip
- Croup
- Epiglottitis
- Tonsillar and adenoidal hypertrophy/tonsillitis
- Asthma
- Upper respiratory infection (URI)
- Otitis media
- Obesity/obstructive sleep apnea
- Brain tumor/pathology
- Trauma

Neurosurgical Anesthesia

- Demonstrate knowledge of neuroanatomy, neurophysiology, neuropathophysiology, and neuropharmacology.

- Verbalize understanding of the physiology and anesthesia effects on the following:
 - Cerebral blood flow (CBF).
 - Cerebral metabolism.
 - Intracranial pressure (ICP).
 - Cerebral spinal fluid production.
 - Blood-brain barrier.
 - Cerebral autoregulation.
- Describe the utilization of, and anesthetic effect on, evoked potential monitoring modalities.
- Perform an appropriate preanesthetic evaluation of a neurosurgical patient
- Discuss the impact of co-existing disease on cerebral physiology.
- Describe perioperative anesthetic management of the following related to the neurosurgical patient:
 - Induction
 - Positioning
 - Fluid management
 - Emergence
 - Post-op pain management
 - Intracranial hypertension
- Demonstrate comprehension of special neuroanesthetic concerns:
 - Detection and management of venous air embolism.
 - Management of perioperative cerebral edema.
 - Modifications for MRI suites.
 - Lumbar drains.
 - SjO₂ monitoring.
- Develop anesthesia plans for the following neurosurgical procedures:
 - Aneurysm clipping.
 - Arteriovenous malformation excision.
 - Mass / tumor resection.
 - Shunts (ventriculoperitoneal, ventriculoatrial, ventriculopleural, etc.).
 - Subdural, epidural, and intracerebral hemorrhage.
 - Transphenoidal hypophysectomy.
 - Acute / traumatic brain and spinal cord injury.
 - Spinal.
 - Neuroradiologic / stereotactic
 - CNS stimulation devices (e.g. deep brain, vagal nerve, dorsal column).

Obstetrical / Gynecological Anesthesia

- Demonstrate knowledge of physiological adaptations during pregnancy and its effect on the administration of anesthesia.
- Perform an accurate preanesthetic evaluation of the parturient.
- Discuss various stages of labor, including pain fiber pathways.
- Diagram fetal-placental circulation.
- Describe the blood-placental barrier and its effects on placental transfer of drugs and other substances.
- Outline the effects of anesthetic agents and adjuvant drugs on the fetus.
- Perform an accurate Apgar score assessment of the neonate.
- Demonstrate competence in the preanesthetic evaluation of the fetus by recognizing normal and abnormal fetal monitoring patterns and identify meaningful changes.
- Describe etiology of fetal distress including:
 - uteroplacental insufficiency
 - cord compression
 - prematurity
 - Rh incompatibility
- Demonstrate competence in interventions for treatment of fetal bradycardia.
- Discuss the pharmacodynamics and pharmacokinetics for various drugs used in the treatment of the parturient including:
 - local anesthetic agents
 - tocolytic agents
 - steroids

- magnesium sulfate
- antihypertensives
- oxytocin
- prostaglandins
- Recognize and manage aortocaval compression
- Identify the Friedman curve and compare the effects of various methods of labor analgesia.
- Demonstrate the ability to plan for and implement pain management techniques for active labor and delivery.
- Demonstrate the ability to evaluate and manage the anesthetic care of the obstetric patient undergoing non-obstetric surgical procedures.
- Demonstrate ability to plan for and implement as necessary, regional and/or general anesthesia for both elective and emergent Cesarean deliveries, while identifying possible complications of the various techniques and their treatment.
- Discuss the effects of various analgesia/anesthesia techniques, including pharmacologic agents, on the progress of labor and method of delivery.
- inhalation analgesia
- general anesthesia
- regional techniques:
- paracervical block
- caudal
- epidural
- combined spinal-epidural technique
- subarachnoid block
- parenteral medications
- Explain changes from fetal to neonatal circulation and describe normal respiratory parameters.
- Demonstrate ability to plan and implement resuscitative measures for newborn emergencies including:
 - meconium aspiration
 - respiratory distress
 - cardiac insufficiency
 - metabolic disturbance
- Interpret the results of fetal scalp and/or umbilical blood sampling.
- Discuss anesthetic management and complications for the following:
 - fetal malpresentation
 - shoulder dystocia
 - multiple gestation births
 - advanced maternal age
 - antepartum and postpartum hemorrhage
 - placenta previa
 - placental abruption
 - uterine rupture (including VBAC)
 - vasa previa
 - uterine atony
 - genital trauma
 - retained placenta
 - placenta accreta, increta, and percreta
 - uterine division
 - fetal distress
 - pregnancy-induced hypertension
 - pre-eclampsia
 - eclampsia
 - HELLP syndrome
 - gestational diabetes mellitus
 - Maternal infections (e.g. HIV, herpes, group _ Streptococci, hepatitis, STDs)
 - neuromuscular disorders
 - cardiac disease / congenital heart defects
 - obesity / pulmonary hypertension
 - amniotic fluid embolus pregnancy-induced hypertension
 - pre-eclampsia
 - eclampsia
 - HELLP syndrome

- gestational diabetes mellitus
- Maternal infections (e.g. HIV, herpes, group _ Streptococci, hepatitis, STDs)
- neuromuscular disorders
- cardiac disease / congenital heart defects
- obesity / pulmonary hypertension
- amniotic fluid embolus
- hemostatic disorders

Students are required to understand this Handbook and abide by the policies. Students should direct any questions about NA policies to Dr. Piotrowski (Director of the NA Specialty) or Dr. Cox (Assistant Director of the NA Specialty).

Conclusion

All students in the NA specialty must also refer to the DNP Program Handbook, and relevant university and college policies as noted. Additional resources and references are available in the program handbook.