



Basic Principles & Techniques in Nurse Anesthesia  
CRNA 7423  
**Summer 2026**

**Scheduled Class Days and Times: See Course Schedule**

**Instructor's Name:** Douglas Massey II, DNP, CRNA

**Office:** B201-B

**Phone:** (903) 566-7320

**Email:** douglasmasley@uttyler.edu\*

**Office Hours:** Tuesday 0800-0930; Wednesday 0800-0930; and by appointment

\*Best way to contact me.

**Instructor's Name:** David Warren DNAP, APRN, CRNA, AGACNP-BC, FNP-C, ENP-C

**Office:** Remote

**Phone:** (903) 566-7320

**Email:** davidwarren@uttyler.edu\*

**Office Hours:** by appointment

\*Best way to contact me.

**Course Description:** This course provides Nurse Anesthesia Residents (NAR) with a comprehensive understanding of the nurse anesthesia profession. It explores the profession's history, its scientific foundations, methods of airway assessment, and anesthesia monitoring. It also outlines the duties and responsibilities of nurse anesthetists, the specifics of the nurse anesthesia specialty, how to maintain anesthetic records, and relevant legal aspects.

The course further prepares NARs by familiarizing them with the anesthesia workstation and its components, and deepening their knowledge of the related chemistry and physics. It also tackles stress management and the effects of substance use disorders in the nurse anesthesia field.

Moreover, the course presents an overview of the AANA's Scope of Practice, Practice Standards, and Code of Ethics. To prepare NARs for real-world operating room scenarios, they will participate in simulation laboratory experiences focusing on induction sequences.

**Prerequisites:**

- Admission to the DNP-NA program

### Student Learning Outcomes:

Upon successful completion of this course, the student will be able to:

1. Comprehend topics involving student wellness and stress management and association with substance disorder. [D.39]
2. Appreciate the history and evolution of nurse anesthesia.
3. Familiarize themselves with the history of nurse anesthesia and the CRNAs role and impact in healthcare. [D.1,D.2 & D.4]
4. Learn basic patient assessment techniques and ASA classification while gaining knowledge of airway anatomy and classification by conducting appropriate airway assessment for surgical patients. {D.8}
5. Assume responsibility and accountability for diagnosis. {D.16}
6. Reinforce anatomy & physiology concepts learned from previous semesters as related to anesthesia practice.
7. Conduct a comprehensive equipment check. {D.3}
8. Formulate an anesthesia plan of care before providing anesthesia services. {D.17}
9. Apply knowledge of chemistry and physics to practical situations like the anesthesia workstation to avoid patient harm. {D.1, D.4}
10. Understand the practice standards set by the ASA and AANA and incorporate principles of informed consent into pre-anesthetic patient evaluation.
11. Gather and interpret input from non-invasive and invasive monitors during the perioperative period. [D.19]
12. Prepare for the national certification exam with NCE style questions.
13. Prioritize vigilance during patient care delivery, avoid distractions that compromise attentiveness, and safeguard patients against iatrogenic harm [D.1, D.2 & D.4]
14. Perform a thorough airway assessment for surgical patients.
15. Calculate, initiate, and manage fluid and blood component therapy. [D.20]
16. Deliver culturally competent perianesthetic care throughout the anesthesia experience for each individual patient. [D.6]
17. Adhere to the *Code of Ethics for Certified Registered Nurse Anesthetist* while formulating judgements as to how CRNA practice standards, code of ethics, and practice considerations interact with patient care. [D.33, D.34, D.35, D.36, D.37]

### Required Textbooks and Readings:

- **Primary Textbook:** Gropper , M. A., Cohen, N. H., Eriksson, L. I., Fleisher, L. A., Johnson-Akeju, S., & Leslie, K. (2025). *Miller's anesthesia*. (10th ed.). Elsevier.
- **Additional Readings:**
  - Ehrenworth, J., Eisenkraft, J. B., & Berry, J. M. (2021). *Anesthesia equipment: Principles and applications*. (3rd ed.). Elsevier.
  - Jaffe, R. A., Schmiesing, C. A., & Golianu, B. (2020). *Anesthesiologist's manual of surgical procedures*. (6th ed.). Wolters Kluwer.

### Recommended Textbooks and Readings:

- Gaba, D. M., Fish, K. J., Howard, S. K., & Burden, A. R. (2015). *Crisis management in anesthesiology*. (2nd ed.). Elsevier.
- APEX Anesthesia Review

### Special Course Notes:

- 1) **Proctoring Notice:** Examinations in this course will be administered using ExamSoft and will be proctored by a faculty or staff member of The University of Texas at Tyler. Proctoring is required to ensure academic integrity and adherence to testing standards. Additional details regarding exam procedures, scheduling, and proctoring expectations will be provided in advance of each examination.
- 2) **Dress Code:** For non-lab/simulation activities, NARs are expected to wear office or business casual attire. On days with lab/simulation activities, NARs may wear clean, solid-colored scrubs and must wear closed-toe shoes.
- 3) **Participation.** I invite you to engage, ask questions, and talk about the course content with your classmates. You can learn a great deal from discussing ideas and perspectives with your peers and professor. Participation can also help you articulate your thoughts and develop critical thinking skills.
- 4) **Time Management.** Try scheduling specific blocks of time and ensure you have enough room to finish assignments, allowing additional time for any tech issues that arise.
- 5) **PRACTICE!** Make use of your scheduled time in simulation to practice!
- 6) **Ask for help if needed.** If you are struggling with a course concept, reach out to your instructor(s) for support.
- 7) **Evaluations:** Course and instructor evaluations are required by the Council on Accreditation (COA) for Nurse Anesthesia Educational Programs. NARs must submit these evaluations at the end of each semester.

### Assignments and Weights/Percentage/Point Values

1. Assignments	10%
2. Quizzes (12)	10%
3. Formative OSCE	10%
4. Midterm Written Examination	20%
5. Summative OSCE	20%
6. Final Written Examination	30%

### Grading Scale:

Specific guidelines and grading criteria for all assignments are in the Modules. Final grades for the course will be determined based upon the following point assignments:

- A - 90-100
- B - 80-89
- C - 70-79
- D - 60-69
- F - Below 60

Grades will not be rounded when calculating the average (79.5 is not rounded to 80, and 89.5 is not rounded to 90). The simple average of all unit exam grades, including a final must be at or above 80% to pass the course. Once the student has achieved a simple unit exam average of 80% or higher, course grades will be determined based on the weighted calculation of exams and other required course work. Students are required to achieve an average of 80% (B) to complete the course successfully.

**Academic Integrity:** Cheating of any kind, as defined in Section 8 of the UT Tyler Manual of Policies and Procedures (MOPP) for Student Affairs (<https://www.uttyler.edu/mopp/>), will not be tolerated. Consequences may include:

- reprimand
- exam failure
- course failure
- expulsion from the Nursing program
- expulsion from the University
- other consequences as assigned

**Exam and homework materials, questions, and problems are the intellectual property of faculty, UT Tyler, or publishers.**

- These materials may not be distributed without permission.
- Distributing or uploading them to online resources destroys the integrity of the assignment and the course, allowing others an unfair advantage by letting them view the materials.
- Uploading these materials to online resources is a violation of UT Tyler's academic misconduct policies and may result in formal conduct charges.
- Sanctions for uploading or otherwise divulging the contents of these materials can include:
  - a reduced or failing grade on an assignment
  - a reduced or failing grade for the course
  - removal from the Nursing program
  - removal from UT Tyler

**Late Policy:** NARs are expected to complete assignments and arrive on time for quizzes, OSCEs, and examinations. If a situation arises that would preclude the NAR from completing an assignment or arriving on time for a quiz, OSCE, or examination, the NAR is expected to communicate with the instructor as early as possible to discuss alternate arrangements. Alternate arrangements are made at the discretion of the instructor. Failure to notify the instructor may result in a grade of zero (0%).

**Repeating a Course:** Students repeating this course may not use previously submitted assignments nor utilize the same patients for an assignment. Submitting the same or slightly modified assignments from previous semesters is considered self-plagiarism and is subject to academic discipline, including failing the assignment or the course.

**Attendance and Make-up Policy:** Punctuality and participation are essential; make-up opportunities for missing or late course requirements are at the discretion of the instructor.

**Graded Course Requirements Information:**

- **Assignments:** There will be online modules and worksheets designed to prepare you for in-person activities. Detailed information will be provided in Canvas.
- **Quizzes:** There will be twelve (12) quizzes scheduled throughout the semester. Quizzes will be in-person and will be proctored by a faculty member or their designee. *No books, notes, or online resources are allowed to be used during quizzes, OSCEs, or exams.* The quizzes will account for 10% of the course grade.
- **Formative OSCEs:** There will be one (1) formative OSCE; this will involve the performance of specific psychomotor skills (e.g., anesthesia workstation checkout, airway management, IV insertion, arterial line insertion). *No books, notes, or online resources are allowed to be used during quizzes, OSCEs, or exams.* The formative OSCE will account for 10% of the course grade.
- **Written Examinations:** There will be two (2) major content examinations in the course; examinations will be in-person and will be proctored by a faculty member or their designee. *No books, notes, or online resources are allowed to be used during quizzes, OSCEs, or exams.* The midterm written examination will account for 20% of the course grade and the final written examination will account for 30% of the course grade.
- **Summative OSCEs:** There will be one (1) summative OSCE; this will involve the integration of specific psychomotor skills and knowledge of basic concepts of anesthesia care delivery to deliver care to a simulated patient. *No books, notes, or online resources are allowed to be used during quizzes, OSCEs, or exams.* The summative OSCE will account for 20% of the course grade.

**Please Note:** Detailed information along with grading rubrics for course assignments will be provided in Canvas.

**Important Course Dates:**

**Classes Begin:** May 11, 2026

**Census Date (withdraw without penalty):** May 26, 2026

**Last Date to Withdraw:** July 15, 2026. Students please notify your course faculty and contact your advisor.

**Formative OSCE:** June 24, 2026

**Written Midterm Exam:** July 2, 2026

**Summative OSCE:** August 12, 2026

**Written Final Exam:** August 13, 2026

### Calendar of Topics, Readings, and Due Dates:

Course Schedule						
Week	Date	Time	Hours	Faculty	Content	Reading(s)
1	05/14/2026	1230-1330	1	Massey	Basic Principles of Anesthesia	N/A
		1330-1530	2	Massey	Anesthesia Workstation I	Ehrenworth et al. (2021) – Ch. 2, 3
	05/15/2026	1545-1645	1	Massey	Simulation – Anesthesia Workstation & Procedures – Group A	Ehrenworth et al. (2021) – Ch. 25
	0900-1000	Massey		Simulation – Anesthesia Workstation & Procedures – Group B		
	1015-1115	Massey		Simulation – Anesthesia Workstation & Procedures – Group C		
2	05/20/2026	1230-1530	3	Massey	Anesthesia Workstation II	Ehrenworth et al. (2021) – Ch. 4, 5
		1545-1645	1	Massey	Simulation – Anesthesia Workstation & Procedures – Group B	N/A
	05/22/2026	0900-1000			Simulation – Anesthesia Workstation & Procedures – Group C	
	1015-1115	Simulation – Anesthesia Workstation & Procedures – Group A				
3	05/28/2026	1230-1430	2	Massey	Preanesthetic Evaluation	Miller et al. (2025) – Ch. 27, 28, 29
		1430-1530	1	Massey	Fire Safety	Ehrenworth et al. (2021) – Ch. 24
	05/29/2026	1545-1645	1	Massey	Simulation – Anesthesia Workstation & Procedures – Group C	N/A
	0900-1000	Simulation – Anesthesia Workstation & Procedures – Group A				
	1015-1115	Simulation – Anesthesia Workstation & Procedures – Group B				
4	06/04/2026	1230-1530	3	Massey	Monitoring	Miller et al. (2025) – Ch. 32, 35, 36, 37, 39
		1545-1645	1	Massey	Simulation – Anesthesia Workstation & Procedures – Group A	N/A
	06/05/2026	0900-1000			Simulation – Anesthesia Workstation & Procedures – Group B	
	1015-1115	Simulation – Anesthesia Workstation & Procedures – Group C				
5	06/08/2026	1230-1530	3	Warren	Airway Equipment and Management	Miller et al. (2025) – Ch. 40
		1545-1645	1	Massey	Simulation – Anesthesia Workstation & Procedures – Group B	N/A
	06/12/2026	0900-1000			Simulation – Anesthesia Workstation & Procedures – Group C	
	1015-1115	Simulation – Anesthesia Workstation & Procedures – Group A				
6	06/18/2026	0900-1000	1	Massey	Simulation – Anesthesia Workstation & Procedures – Group C	N/A
		1015-1115			Simulation – Anesthesia Workstation & Procedures – Group A	
		1130-1230			Simulation – Anesthesia Workstation & Procedures – Group B	
	1245-1545	3	Warren	Mechanical Ventilation	Ehrenworth et al. (2021) – Ch. 6, 7	
	1545-1645	1	Massey	Sepsis	N/A	
7	06/24/2026	See Canvas	1	Massey	FORMATIVE OSCE	N/A

7	06/25/2026	1300-1600	3	Warren	Hemodynamic Management & Fluid Administration	Miller et al. (2025) – Ch. 43, 44, 45, 46
8	07/02/2026	1300-1500	2	Massey	WRITTEN MIDTERM EXAM	N/A
		1545-1645	1	Massey	Simulation – Induction & Procedures – Group A	N/A
	07/03/2026	0900-1000			Simulation – Induction & Procedures – Group B	
		1015-1115			Simulation – Induction & Procedures – Group C	
9	07/09/2026	1230-1430			2	
		1430-1530	1	Massey	Thermoregulation & Temperature Management	Ehrenworth et al. (2021) – Ch. 13
		1545-1645	1	Massey	Simulation – Induction/Maintenance & Procedures – Group B	N/A
	07/10/2026	0900-1000			Simulation – Induction/Maintenance & Procedures – Group C	
1015-1115		Simulation – Induction/Maintenance & Procedures – Group A				
10	07/16/2026	1230-1530			3	
		1545-1645	1	Massey	Simulation – Induction/Maintenance & Procedures – Group C	N/A
	07/17/2026	0900-1000			Simulation – Induction/Maintenance & Procedures – Group A	
		1015-1115			Simulation – Induction/Maintenance & Procedures – Group B	
11	07/23/2026	1230-1530			3	
		1545-1645	1	Massey	Simulation – Intraoperative Scenarios & Procedures – Group A	N/A
	07/24/2026	0900-1000			Simulation – Intraoperative Scenarios & Procedures – Group B	
		1015-1115			Simulation – Intraoperative Scenarios & Procedures – Group C	
12	07/30/2026	1230-1530			3	
		1545-1645	1	Massey	Simulation – Intraoperative Scenarios & Procedures – Group B	N/A
	07/31/2026	0900-1000			Simulation – Intraoperative Scenarios & Procedures – Group C	
		1015-1115			Simulation – Intraoperative Scenarios & Procedures – Group A	
13	08/06/2026	1230-1330			1	
		1330-1430	1	Massey	PACU	Miller et al. (2025) – Ch. 76, 77, 78
		1500-1600	1	Massey	NORA & Office-Based Anesthesia	Miller et al. (2025) – Ch. 68, 69
		1600-1700	1	Massey	Anesthesia Care Plans	N/A
14	08/12/2026	See Canvas	1	Massey	SUMMATIVE OSCE	N/A
	08/13/2026	1300-1500	2	Massey	WRITTEN FINAL EXAM	N/A

**Required Syllabus Language:**

UT Tyler is committed to exploring and using artificial intelligence (AI) tools as appropriate for the discipline and task undertaken. We encourage discussing AI tools' ethical, societal, philosophical, and disciplinary implications. All uses of AI should be acknowledged as this aligns with our commitment to honor and integrity, as noted in UT Tyler's Honor Code. Faculty and students must not use protected information, data, or copyrighted materials when using any AI tool. Additionally, users should be aware that AI tools rely on predictive models to generate content that may appear correct but is sometimes shown to be incomplete, inaccurate, taken without attribution from other sources, and/or biased. Consequently, an AI tool should not be considered a substitute for traditional approaches to research. You are ultimately responsible for the quality and content of the information you submit. Misusing AI tools that violate the guidelines specified for this course (see below) is considered a breach of academic integrity. The student will be subject to disciplinary actions as outlined in UT Tyler's Academic Integrity Policy.

For this course, AI is encouraged during the course, and appropriate acknowledgement is expected. These programs can be powerful tools for learning and other productive pursuits, including helping you generate new ideas, identifying flaws in reasoning, and serving as a personalized learning tool. However, your ethical responsibilities as a student remain the same; you must follow UT Tyler's Honor Code and uphold UT Tyler's Academic Integrity Policy.

**School of Nursing Policies and Additional Information:**

[https://www.uttyler.edu/nursing/college/student\\_guide\\_and\\_policies.php](https://www.uttyler.edu/nursing/college/student_guide_and_policies.php)

**Student Resources and University Policies are provided in Canvas.**

- [Student Resources](#)
- [University Policy](#)