



**Advanced Health Assessment & Diagnostics**

**CRNA 7321**

**Fall 2025**

**Semester 1**

**Scheduled Class Days and Times:**

Mondays 1-4PM

**Classroom:** SMILE Center North Campus

**Instructor's Name:**

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Assistant Dean for Structure and Simulation

Executive Director of SMILE Center

Director of Clinical Anatomy

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**Office Hours:** Mondays 1PM and by appointment

[Catalog page for this course](#)

**Course Description:**

This is a course on basic and advanced assessment geared towards graduate level nursing nurse anesthesia residents obtaining a Doctor in Nursing Practice in Nurse Anesthesia. The course will introduce the approach to obtaining a both complete and problem focused history utilizing technique of patient centered care. Focus will be on accuracy while at the same time demonstrating compassion and caring for the patient with understanding of social and family components . In addition, nurse anesthesia residents will learn a complete and problem focused physical assessment with emphasis on patient comfort and respect, Nurse anesthesia residents will also learn laboratory diagnostics, EKG, and imaging that is used ot help with differential diagnosis and diagnosing conditions. Proper use of diagnostics to ensure quality care with proper fiscal responsibility will be demonstrated. Nurse anesthesia residents will learn to generate differential diagnosis to help guide further workup, how to arrive at a final diagnosis and generate treatment plans with the realm of pre-operative, intraoperative, and post-operative care. Nurse anesthesia residents will learn how to document their findings and describe their clinical reasoning using a standard SOAP note format and oral presentation. The content will span the entire lifespan from neonatal, infancy, childhood, adolescence, adulthood, and geriatrics.

## **Prerequisites or Co-Requisite:**

### **Overall Course Objectives :**

#### **History and Physical Examination**

##### **1. Comprehensive Patient History:**

- Demonstrate the ability to obtain a thorough and accurate patient history, including chief complaint, history of present illness, past medical history, family history, social history, and review of systems.
- Demonstrate the ability to obtain a problem focused history of present illness including relevant systems to aid in diagnosis

##### **2. Physical Examination Skills:**

- Perform a systematic and comprehensive physical examination across different body systems.
- Perform a focused problem-based physical exam

##### **3. Clinical Reasoning:**

- Integrate historical and physical examination findings to formulate differential diagnoses.

#### **Diagnostics**

##### **1. Laboratory Diagnostics:**

- Interpret common laboratory results, including but not limited too, CBC, BMP, CMP, liver function tests, and coagulation profiles.

##### **2. Imaging Studies:**

- Explain the indications, contraindications, and interpretation of common imaging studies such as X-rays, CT scans, MRIs, and ultrasounds.

##### **3. Electrocardiography (EKG):**

- Demonstrate the ability to read and interpret EKGs, identifying common arrhythmias, ischemic changes, and other cardiac abnormalities.

#### **Documentation and Communication**

##### **1. SOAP Notes:**

- Accurately document patient encounters using the SOAP (Subjective, Objective, Assessment, Plan) note format.

##### **2. Clinical Documentation:**

- Understand the importance of precise and thorough documentation in the medical record.

##### **3. Oral Presentation Skills:**

- Develop and deliver clear, concise, and organized oral presentations of patient cases, incorporating relevant history, physical examination findings, diagnostic results, and proposed management plans.

## Integration and Application

### 1. Case-Based Learning:

- Apply knowledge and skills in simulated and real clinical scenarios to practice history taking, physical examination, diagnostic interpretation, documentation, and presentation.

### 2. Critical Thinking:

- Utilize critical thinking skills to make clinical decisions based on the synthesis of historical, physical, and diagnostic information.

### 3. Interprofessional Collaboration:

- Collaborate effectively with other healthcare professionals, demonstrating the ability to communicate findings and management plans clearly.

By the end of this course, students will have a solid foundation in conducting comprehensive patient assessments, interpreting diagnostic tests, documenting clinical encounters, and presenting cases effectively, preparing them for advanced practice roles in anesthesia care.

## Student Learning Outcomes:

Upon completion of this course, nurse anesthesia residents will be able to:

1. Remember and understand the principles of comprehensive patient assessments.
2. Apply these principles in interpreting diagnostic tests.
3. Analyze clinical encounters and create effective documentation.
4. Evaluate and present cases effectively.
5. Synthesize the acquired knowledge and skills to prepare for advanced practice roles in anesthesia care.
6. Synthesize a thorough health history and physical evaluation by applying three interviewing techniques that are suitable for the patient's developmental, educational, and cultural attributes. [D.8]
7. Perform a preanesthetic evaluation, which includes a proper airway assessment, prior to administering anesthesia services. [D.15]
8. Undertake the responsibility and accountability for making a diagnosis. [D.16]
9. Uphold the dignity and privacy of patients while ensuring confidentiality in the provision of interprofessional care. [D.27]
10. Demonstrate effective communication skills in healthcare by collaborating with patients, their families, and other healthcare professionals by integrating:
  - a. **Knowledge:** Understand the importance of communication in healthcare.
  - b. **Comprehension:** Explain the significance of collaboration with patients, families, and colleagues.
  - c. **Application:** Actively engage in effective communication during patient interactions and interdisciplinary teamwork.
  - d. **Analysis:** Evaluate the impact of communication on patient outcomes and interprofessional collaboration.
  - e. **Synthesis:** Develop strategies for enhancing communication across different healthcare contexts.

f. **Evaluation:** Reflect on your communication skills and its effectiveness in patient care and teamwork. {D.25,D.26, D.30}

### Required Textbooks:

Bickley, L. (2021). *Bates' Guide to Physical Examination and History Taking*, 13<sup>th</sup> ed. Lippincott Williams & Wilkins. ISBN-13: 978-1-4698-9341-9

Shade B. (2018) *Interpreting ECGs: A Practical Approach* 3<sup>rd</sup> edition. McGraw Hill ISBN-13: 978-1260017243

Pagana KD, *Mosby's Diagnostic and Laboratory Test Reference* 15<sup>th</sup> edition. Elsevier, ISBN-13 978-0323675192

**Important Course Dates:** Note: The complete course schedule is also available in the Course Canvas site.

### Course Schedule/Weekly Calendar

Up-to-date information on readings, pre-class actions, in-class actions, and graded assignments can be found within the **Weekly Modules** tool on **Canvas**. Didactics and lab will employ active learning strategies. Preparation prior to didactics and lab is necessary to apply.

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**Schedule subject to change based off SP availability; Please check Canvas each week.**

Week	Date	Topic	Assignment
2	9/2	Introduction to History and Physical Exam Vitals and Skin	
3	9/8	History- Part 2 Pulm and Lung Practice History and PE-Pulm	
4	9/15	History- ROS CXR Interpretation SOAP Intro SP Encounter	

5	9/22	CV History and PE ECG Intro Murmurs	
6	9/29	History -ROS ECG and PFTs SP OSCE-hsitory and physical- graded	Worksheet 1 due 5.0%
7	10/6	Abdominal History and Exam CMP and Abdominal Imaging/Diagnsotics	Quiz 1 7.5%

8	10/13	Abdominal Exam2 CBC SOAP Note	
9	10/20	MSK Exam 1 Imaging and diagnsotics Oral Presenation	Summative Written Midterm 10%
10	10/27	Partial Physical Exam and History- OSCE Summative Midterm Head and Neck History and Exam	10%
11	11/3	Neuro H and P -1 Neuro Imaging	
12	11/10	MSK-2	Quiz 2- 7.5%
13	11/17	Neuro-2	Worksheet 2- 5.0%
14	<b>Thanksgiving Week</b>		
15	<b>12/1 Final Physical Summative</b>		15%
15	<b>Final Written Exam</b>		15%
Finals	<b>12/8 and 12/9 Final OSCE- complete</b>	With SOAP Note	25%

**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. Nurse anesthesia residents are required to achieve an average of 80% (B) to complete the course successfully.

- Nurse anesthesia residents will have 72 hours after an item grade posts to Canvas in which to request a grade adjustment from the course instructor of record.
- This course is subject to the exam failure policies described in the Student Academic Progress section of the Nursing Science and Healthcare Leadership Graduate Group General Student Handbook.”

**Assessment and Remediation:**

The passing grade for this course is 80% or greater. Passing grade for a Summative Midterm and Summative Final will be 80%. Nurse anesthesia residents must pass the Summative Final to pass the course. Nurse anesthesia residents who are unsuccessful on first attempt on the Summative Final will be required to undergo remediation, and focused reassessment including a retest and/or written and oral presentation of critical concepts. Successful remediation and reassessment will result in a maximum score of 80% for this component. Nurse anesthesia residents who do not achieve a passing score of 80% on the remediation and reassessment will receive a failing grade for the course. A student who does not pass a course will be referred to the Student Progression Committee for next steps which could result in dismissal from the program, or taking a leave of absence and returning the following year to retake the course and subsequent courses. A student cannot progress to the next semester if they are unsuccessful in their remediation and reassessment.

Grades will not be rounded up. Nurse anesthesia residents will be evaluated according to the following:

Category/Item	Percentage (of total grade)
Worksheets x 2	10.0%
Formative Quizzes x2	15.0%
Summative Mid-Course OSCE	10%
Final Physical Exam	15%
Summative Written Midterm	10%
Summative Final OSCE	25%
Summative Written Final	15%
<b>Total</b>	<b>100%</b>

### **Evaluated Work**

The course grade will be assessed based on the following work:

**Worksheets:** These are formative in nature allowing students to demonstrate their knowledge and assess their progress and understanding. Answer keys will be released after submission for self-grading by students.

**Quizzes:** There will be three formative quizzes that will help students prepare for the summative midterm and final. These will count for a percentage of final course grade.

**Formative Midterm:** The midterm will consist of both a written MCQ exam covering anatomy, physiology, and pathophysiology as well as a practical history taking with a SP. The practical exam will be integrated questions in a short answer format. A single combined score will be given for these two components. They will each contribute to approximately 50% of the total midterm grade.

**Summative Final Exam:** The cumulative final exam will consist of both a written MCQ exam covering anatomy, physiology, and pathophysiology as well as a practical exam. The final practical exam will be integrated questions in a short answer format. A single combined score will be given for these two components. They will each contribute to approximately 50% of the total grade. The final exam will include material from the first half of the semester in addition to the new material following the midterm exam. Students are expected to integrate this material.

**Final Practical OSCE:** The summative SOCE will involve focused history and physical exam including ordering or diagnostics, interpretation of diagnostics, and creating a differential



diagnosis. A SOAP note will be submitted following the encounter. Between 2-3 separate encounters will be part of the summative OSCE. The cumulative score for all components must meet 80% for passing.

## **Course Expectations**

### Attendance

Student attendance is required in all lab sessions. Students are allowed two excused and one unexcused absence per semester. Students should not come in if ill and likely contagious to protect their colleagues. This is considered an excused absence. If a student is to be out more than two days a Clinician note is required upon return. It is the students responsibility to keep up on the material by obtaining material from their fellow students.

In the event that a student is unable to attend the class, they must email the instructor *prior to the class session* from which they will be absent. It is also the student's responsibility to then follow-up with the instructor to determine what information was missed during their absence and complete any make-up assignments as deemed appropriate by the instructor.

### Class Participation

Students are expected to come prepared to participate in class exercises and discussions based on the pre-class actions.

### Electronic Assignment Submission

Students are expected to submit all assignments electronically through Canvas unless otherwise specified by the instructor. Assignments should be submitted in standard formats (e.g. .docx, .pptx, etc.) and not as in-line text.

### Late Assignments

Students are expected to turn assignments in on time. We do understand there are situations that may preclude students being able to complete assignments as expected. In such a situation, students are expected to communicate with instructors as far ahead as possible and prior to assignment due date to discussion alternate arrangements (at the discretion of the instructor). Failure to let the Faculty know that an assignment will be late ahead of time, can result in no credit for that assignment. Not completing an online quiz on time without a valid reason will result in a 10% deduction in score for every 24 hours it is late.

**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

### Dress Code

Nurse anesthesia residents should dress in suitable business casual or office attire that is neat, clean, and appropriate for the workplace for any non-lab activities. For any lab sessions nurse anesthesia residents should wear clean, solid-colored scrubs with closed toe shoes.

### Student Feedback

Program improvement through comprehensive evaluation is a vital part of ensuring the vitality and success of the Program. Your voice as a student will help to shape the program as it grows. We expect all nurse anesthesia residents to participate in all online evaluations that occur mid-semester and at the end of each semester.

## **Codes of Conduct**

### Code of Academic Conduct

All members of the academic community are responsible for academic integrity. Existing policies forbid cheating on examinations, plagiarism, and other forms of academic dishonesty. Academic dishonesty is contrary to the purposes of the University of Texas and is not to be tolerated.

**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

Significant Professional Breaches

### **Professionalism:**

The list of behaviors below are examples of professional breaches that could lead to disciplinary action by a health care employer or licensing board. If exhibited during or associated with a student's clinical activities, these behaviors and other conduct contrary to the standards of professionalism may result in course failure. Other sanctions, including but not limited to dismissal and disqualification, may also be applied.

- Violation of patient confidentiality or HIPAA violation
- Disparaging a patient in a public setting (including through social media)
- Failure to respect appropriate professional boundaries interactions with patients and others in the health care environment
- Discrimination against, harassment of, or failure to care for a patient based on his or her race, age, gender, religion, national origin, medical condition, physical or mental disability, ancestry, marital status, sexual orientation, citizenship, ability to speak English or status as a covered veteran
- Failure to recognize and understand professional and personal limitations
- Use of legal or illegal substances that could impair judgment
- Gross negligence or gross neglect
- Fabrication, falsification or intentional omission of written or verbal clinical data
- Refusal to perform tasks as directed by clinical supervisor or preceptor
- Providing care to a patient in contravention of clinical supervisor's or preceptor's instructions

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

### Accommodations

Nurse anesthesia residents with established or potential disabilities: Our program is committed to all nurse anesthesia residents achieving their potential. If you have a disability or think you may have a disability (physical, hearing, vision, psychological and learning disability) which may need a reasonable accommodation, please contact the. Because accommodations can take time to implement, it is important to have this discussion as soon as possible. All information regarding a student's disability is kept in accordance with relevant state and federal laws.

### Support for Student Learning

Please notify faculty if you are having any difficulty with this course, such as challenges understanding assignments or expectations. Our goal is to help you learn, and we want you to be successful. You can make an advising appointment at any time during the semester.

**Artificial Intelligence Information:** The University of Texas at Tyler presents an AI definition, content for instructors, content for nurse anesthesia residents, and AI plagiarism awareness information. Check it out! [Artificial Intelligence \(uttyler.edu\)](https://www.uttyler.edu/artificial-intelligence).

## 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)

