

CRITICAL CARE DIAGNOSTICS FOR THE AGACNP (NURS 6240)

Term: Spring/2025

Professor: Dr. Teresa Griffin, DNP, AGACNP-BC, FNP-C

Office Phone: 903-360-5896 (mobile)

Email: tgriffin@uttyler.edu

Office Hours: Thursdays 5:00 – 8:00 PM CST and by appointment

Course Dates: Jan 2, 2025 – April 19, 2025

Course Times: Online

Classroom: Remote; please email, text, or call for in-person or virtual appointment

Best way to contact: Do not hesitate to reach out for any needs. First, send an inbox message through the associated Canvas course to your assigned faculty. Follow-up with secondary method if no response within two (2) business days. If no response to inbox->email->text->call.

Teaching Assistant: Dr. Carlton Rojas, DNP, APRN, FNP, ACNP, CNEcl, EMT-P

Email: crojas@uttyler.edu

Office Hours: Lead instructor for Critical Care Evaluation and Management, contact for appointment

Course Overview

This course focuses on the utilization of diagnostic reasoning to formulate actual and differential diagnoses, through the integration, translation, and application of established and evolving scientific knowledge from diverse sources such as the basis for diagnostic reasoning. Knowledge of appropriate diagnostic and screening tests and imaging, acute care medical devices/interventions, and life-support systems including intubation, placing intravenous lines, and wound/injury care are emphasized.

Prerequisites

NURS 6112, NURS 6361, NURS 6363

Student Learning Outcomes

After successfully completing this course, you will be able to:

- A. Demonstrate the integration of ethical principles, relevant theoretical frameworks and evidence-based practices in the assessment, diagnosis, and treatment planning for adult and geriatric patients with acute and chronic health conditions, ensuring patient-centered care that considers the unique physical, psychological, and social needs of this population.
- B. Apply critical thinking skills to assess and determine the risk-benefit ratio of diagnostic tests and procedures for adult and geriatric patients, considering potential adverse outcomes associated with both undertreatment and over-treatment to guide safe and effective clinical decision-making.
- C. Apply entry-level procedural skills specific to adult gerontology acute care practice to effectively promote and prevent disease. This includes accurately executing procedures, ensuring patient safety, and providing targeted education on preventive strategies for adults and older adults.
- D. Utilizes and evaluates diagnostic and therapeutic interventions including, but not limited to laboratory studies, interpretation of EKG, imaging studies, respiratory support, hemodynamic monitoring, line and tube insertion, lumbar puncture, wound debridement, and closure.
- E. Utilize shared decision-making with the patient and their support system when formulating and implementing a plan of care for adult and geriatric patients experiencing acute and chronic health conditions
- F. Integrates advanced communication skills and processes to collaborate with patients, caregivers, and professionals to optimize healthcare outcomes for adults with acute, critical, or complex chronic illnesses.
- G. Identify the process and responsibility of the AGACNP to obtain and maintain certification including diagnostic and procedural skillset for the advanced practice nurse practitioner in acute care.

Required Textbooks and Readings

- **Primary Textbook:** Angelow, A. M., & Specht, D. M., (2021). Essential Procedures: Acute Care. ISBN/ISSN: 9781975120283.
- Secondary Textbooks and Readings:
- Campo & Lafferty (2021). Essential procedures for Emergency, Urgent, and Primary Care Settings: A Clinical Companion. ISBN 9780826141040.
- Ferri (2022). Ferri's Best Test E-book: A practical guide to laboratory medicine and diagnostic imaging. ISBN: 9780323812894.
- Harris, C., (2023). Adult Gerontology Acute Care Practice Guidelines. ISBN: 9780826176172; eBook: 9780826176189. Can obtain from the library through the following link: https://www.r2library.com/Resource/Title/0826176178
- Pagana & Pagana (2024). Mosby's Diagnostic and Laboratory Test Reference E-Book, fifth ed. ISBN: 9780323089494.
- Varkey, B. (2021). Principles of Clinical Ethics and Their Application to Practice, Medical Principles and Practice; 30:17-28. DOI: 10.1159/000509119

- Additional Readings: Throughout the semester, you will encounter insightful readings assigned and posted on Canvas.
- Total Estimated costs of required course materials: \$XX.XX

Angelow & Specht	Essential Procedures: Acute	\$XX.XX listed for paperback on
Textbook	Care	Amazon.com
Harris textbook	Adult-Gerontology Acute Care	\$52.17 listed for paperback on
	Practice Guidelines	Amazon.com; online available free
		through UT Tyler library etextbook
		(Required textbook for AGACNP
		Pharmacology course)
Campo & Lafferty	Essential Procedures for	
	Emergency, Urgent, and	
	Primary Care Settings: A	
	Clinical Companion (2021).	

Recommended Resources (Optional):

- Publication Manual of the American Psychological Association: The Official Guide to APA Style, 7th ed.; American Psychological Association; ISBN: 978-1433832161; eBook ISBN: 978-1433832154
- Other resources may be suggested throughout the semester.

Special Course Notes:

• Proctoring Notice: This course will utilize ProctorU for all exams. However, the exams will NOT utilize a live proctoring service but will utilize AUTO Proctoring. Do NOT contact ProctorU to reserve exam times. All exams will be accessed through Canvas at the appropriate day/time. You need only to download the appropriate browser [Guardian browser] you will be using. You will need to have a webcam and microphone. If you are not able to provide these items, you must contact your faculty the first week of the course, so we can arrange for you to take your exam on campus.

Please note that some issues could present when using the Proctor U Guardian browser.

- **If you get a page asking for an access code, this means you either do not have the web extension downloaded or have not logged into ProctorU. If you have any other issues, ProctorU Support is available for students at (855) 772-8678.
- Alternate Locations: During OSCEs, we will meet in the Braithwaite Building School of Nursing at UT Tyler Simulation Center.
- External Resources: This course does not require external programs for assignments and assessments. Detailed instructions will be provided in class for each assignment. Exams are embedded in the course.

Course Structure

This course is structured as an online self-paced learning environment. However, this course has live sessions via ZOOM that are designed as question-and-answer (Q&A) sessions to review course material and assignments. Attendance is highly recommended; however, they will be recorded and available for students who cannot attend. This does not require you to be in a specific location to participate; however, you must have access to a full-screen computer or tablet for each live session. (If you use a tablet for the live session, you must be comfortable typing responses on it.) The online nature of this class will push you to take an active role in the learning process. You will do this by engaging and collaborating with other students and the instructor regularly, in live sessions and through group work and activities.

Tips for Success in this Course

- 1. **Participate.** I invite you to engage deeply, 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.
- 2. **Manage your time.** I get it—students usually juggle a lot, and I know you've got commitments beyond this class. Still, doing your best often means carving out enough dedicated time for coursework. Try scheduling specific blocks of time and ensure you have enough room to finish assignments, allowing extra space for any tech issues that might pop up.
- 3. **Login regularly.** I recommend that you log in to Canvas several times a week to view announcements, discussion posts and replies to your posts.
- 4. **Do not fall behind.** This class moves at a quick pace and each week builds on the previous class content. If you feel you are starting to fall behind, check in with the instructor as soon as possible so we can troubleshoot together. It will be hard to keep up with the course content if you fall behind in the pre-work or post-work.
- 5. **Use Canvas notification settings.** Pro tip! Canvas can ensure you receive timely notifications in your email or via text. Be sure to enable notifications to be sent instantly or daily. (Canvas Notification Guide)
- 6. **Ask for help if needed.** If you are struggling with a course concept, reach out to me and your classmates for support.

Graded Course Requirements Information

Homework Assignments

- An application Paper will be assigned regarding the principles of ethics in diagnostic testing selection.
- The application paper will be worth 15% of the total grade.

Weekly Quizzes

- There are 12 quizzes that correlate to the first 12 modules that will be due by the end of the module week.
- The quizzes can be taken at any time during the module week and are not proctored. You may utilize your resources for the quiz; however, they are time limited to 30 minutes.
- The guizzes will be 10 questions and will assess your comprehension of the reading assignments.
- The two lowest quiz grades will be dropped prior to averaging your final quiz grade for the course.

• The average of all quizzes will be worth 10% of the total grade.

EKG Test

- A test for EKG recognition of the major heart rhythms presented in the modules will be given.
- The EKG test will be worth 10% of the total grade.

Diagnostics Intensive

- Students will have the opportunity to demonstrate entry-level competency in the performance of common acute care procedures:
 - Intubation
 - Arterial line placement
 - o Central line placement
 - o Thoracentesis
 - o Paracentesis
- Diagnostic intensive is meant to be a fair and accurate way to assess competence and identify areas needing more work and practice.
- Diagnostics intensive will be held during Week 11 on-campus and are Pass/Fail.
- The use of virtual reality (VR) simulation will be utilized to assist with procedure practice and competency attainment. Diagnostic intensives are part of a current grant through the University to incorporate artificial intelligence into classroom learning. The grant will sponsor the student licensure fee for the VR program and equipment will also be obtained via grant funding and available to students through the simulation lab.

Exams

- There will be four exams corresponding to three modules each throughout the course.
- The average of all four exams will be worth 40% of the total grade.
- A final exam will be administered the last week of the course and covers material in all module readings.
- The final exam will be worth 25% of the total grade.
- A student must maintain an average exam grade of 80% or higher to pass the course and move forward in the program.

Grading Structure

Assignment	Percentage %
Application Paper	15%
Quizzes	10%
EKG Test	10%
Diagnostics Intensive (on campus)	P/F
Four Exams (must obtain average 80% or higher)	40%
Final Exam	25%
Total	100%

Grading Scale

- A (90% or higher)
- → **B** (80 89%)
- → **C** (70 79%)
- → **D** (60 69%)
- → **F** (Below 60%)

Late Work and Make-Up Exams:

All assignments, quizzes, and exams are due on or before midnight (Central Time) of the assigned date. 5% will be deducted each day an assignment is past due unless prior arrangements have been made with your course faculty. Extenuating circumstances may apply.

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 Policy (optional):

Attendance/participation is expected. Make-up for exams, quizzes, assignments, clinical time missed is at the discretion of the instructor.

University Policies & Student Resources:

University policies and student resources are available on the University website and in Canvas under "Syllabus". (You may copy or print the following information to include in your syllabus or use the links provided below.)

- University Policy
- Student Resources

Calendar of Topics, Readings, and Due Dates

NURS 6240 Critical Care Diagnostics for the AGACNP

Spring 2024

	Course Schedule			
Week #	Date	Class Topic	Readings	Assignments
	January 1	New Year's Day	School Closed/Holiday	
	January 2			CANVAS course opens
1	January 6-12	Module 1: Course Introduction and Ethical Principles in Diagnostics and Procedures Common Labs and Imaging in Acute Care Neurological Testing EEG ICP Monitoring Lumbar Puncture	Varkey (2021) Principles of Clinical Ethics and Their Application to Practice Angelow – Section 5 (23)	Quiz #1 due January 12
	January 14	CENSUS DAY		
2	January 13-19	Module 2: Pulmonary Monitoring – PFTs Mechanical Ventilation Oxygen ABGs Nocturnal oximetry Sleep study	Angelow – Section 6 (30); Section 7 (33) (34) (35) (36)	Quiz #2 due January 19
	January 20	MLK Holiday	Offices Closed	
3	January 20-26	Module 3: Pulmonary Procedures – ET Intubation CT Placement CT Removal Needle Decompression Thoracentesis Bronchoscopy Tracheostomy	Angelow – Section 2 (8) (9) (10) (11) (12) (13) (14)	Quiz #3 due January 26
	January 30	Exam #1	Modules 1-3	
4	January 27-Feb 2	Module 4: Cardiovascular Monitoring – EKG & Telemetry Echocardiogram Stress Tests Cardiac Caths		Exam #1 due January 30 Quiz #4 due Feb 2

		CTs & MRIs		
		Hemodynamics		
5	February 3-9	Module 5: Cardiovascular Procedures *Arterial line insertion CVC Placement Temp Pacing Pacemaker Cardioversion Pulmonary Cath	Angelow – Section 1 (1) (2) (3) (4) (5) (7)	Quiz #5 due Feb 9 EKG Test due Feb 6
6	February 10–16	Module 6: GI Procedures – Paracentesis NG Tube DHT EGD Colonoscopy ERCP/MRCP Abd US CT abd/pelvis	Angelow – Section 3 (15) (16)	Quiz #6 due Feb 16
7	February 17-23	Module 7: GU & GYN Procedures Pelvic Exam Prostate Exam		Quiz #7 due Feb 23
	February 20	Exam #2	Module 4-6	
	February 24	MIDTERM GRADES		
8	February 24-Mar 2	Module 8: Skin Procedures –Local anesthetic Sutures & staples Incision & Drainage Nail hematoma release	Angelow – Section 4 (17) (18) (19) (20) (21) (22)	Exam #2 due February 24 Quiz #8 due Mar 2
9	March 3-9	Module 9: Musculoskeletal Compartment pressure monitoring Arthrocentesis Negative pressure wound therapy Cast application	Angelow – Section 5 (24) (25) (26) (27)	Quiz #9 due Mar 9
	March 11	Last day to Withdraw		
10	March 10-16	Module 10: Hematological – Peripheral venipuncture Femoral venipuncture Central line placement	Angelow – Section 6 (28) (29) (30)	Quiz #10 due Mar 16

		Tunneled line AV fistulas AV grafts		
	March 13	Exam #3	Modules 7-9	
	March 17-23		SPRING BREAK	
11	March 24-30	Module 11: Rapid Response & Codes RRT Teams Code Stroke Code Blue CPR ACLS	Angelow - Section 7 (32) (38) (39)	Exam #3 due March 13 Diagnostics Intensives March 28 – on site procedural skills checkoff Quiz #11 due March 30
12	March 31-April 6	Module 12: Trauma Assessment	Angelow – Section 7 (37)	Quiz #12 due April 6
	April 10	EXAM #4	Modules 10-12	
13	April 7-13	Module 13: Putting It All Together		Application Paper due by April 13
	April 17	FINAL EXAM	ALL MODULES 1-13	
14	April 14-20	Finals Week		Final Exam Thurs 4/17 Final Grades Posted 4/22

Note: This is a tentative schedule, and subject to change as necessary – monitor the course page for current deadlines. In the unlikely event of a prolonged university closing, or an extended absence from the university, adjustments to the course schedule, deadlines, and assignments will be made based on the duration of the closing and the specific dates missed.