MIDDLE TENNESSEE SCHOOL OF ANESTHESIA

DAPN 820 Advanced Pharmacology for Advanced Practice Nursing Syllabus

Spring Semester, 2027 – January 4th, 2027 to April 15th, 2027

Instructor(s): Dr. Bradley Steg, DNP, APRN, CRNA

Cell: 931-409-2649
Email: bradley.steg@mtsa.edu

Course Description:

This course offers an in-depth exploration of pharmacotherapeutics, pharmacokinetics, and pharmacodynamics specifically designed for advanced practice nurses. The goal is to provide a comprehensive understanding of drug therapy principles and their clinical applications. Students will understand the therapeutic uses of various drug classes and develop skills to manage and optimize patient care through effective pharmacotherapy.

This course will focus on preparing students with the advanced pharmacological knowledge needed to be a safe, effective provider.

Course Credit: 3

Required Texts:

1. Rosenthal, L. (2020). Lehne's Pharmacotherapeutics for Advanced Practice Nurses and Physician Assistants (2nd ed.). Elsevier - Evolve. https://pageburstls.elsevier.com/books/978032355495

Course Objectives:

1. Discuss the complexities of prescriptive authority and responsibility for advanced practice nurses. (DSLO 1,4,7, 13, 14, 23, 36, 37)
2. Define and understand the basic principles of pharmacokinetics (absorption, distribution, metabolism, and excretion) and pharmacodynamics (drug-receptor interactions, dose-response relationships). (DSLO 1,4,7, 13, 14, 23, 36, 37)
3. Analyze the pharmacokinetics, pharmacodynamics, and pharmacotherapeutics of various drug classes, including analgesics, antibiotics, antivirals, antifungals, cardiovascular drugs, respiratory drugs, endocrine drugs, cancer drugs, and more. (DSLO 1,4,7, 13, 14, 23, 36, 37)
4. Discuss pharmacotherapeutic considerations for special populations, including pediatric, geriatric, pregnant, and lactating patients. (DSLO 1,4,7, 13, 14, 23, 36, 37)
5. Understand the management of pharmacotherapy in patients with chronic conditions, such as diabetes, hypertension, and heart failure. (DSLO 1,4,7, 13, 14, 23, 36, 37)

Learning Activities:

Learning activities for this this course include, but are not limited to, lectures,

synchronous discussions, and exams.

Late work:

Late work without prior approval from the instructor will not be accepted in this course.

Evaluation and Grading System:

Exam 1- 20%

Exam 2- 20%

Exam 3- 20%

Exam 4- 20%

Synchronous Online Discussions via Teams- 20% (5% x 4)

- Discussions will be graded on participation. All points will be awarded if students attend and meet all expectations.
- Alternate Assignments MUST be submitted to instructor if unable to attend live Discussion

Policies and Procedures

The policies below summarize key expectations for this course. Full, authoritative policies are found in the MTSA Student Handbook. In the event of any discrepancy, institutional policies take precedence.

Syllabus Subject to Change

This syllabus is intended as a general guide for the course and is subject to change at the discretion of the instructor and/or MTSA administration. Changes may include, but are not limited to, adjustments to the course schedule, assignments, assessments, and policies. Any updates will be communicated to students in a timely manner and posted in the official learning management system. Students are responsible for reviewing and adhering to all announced revisions.

Non-Degree Course Grading Policy

Students can view their final grades for each semester by visiting the transcript section of the Student Portal https://mtsa.edu/student.

The grading scale is based on the following 4.0 grading system:

A	90-100%	(4.0 Quality Points)
B	80-89.9%	(3.0 Quality Points)
C	70-79.9%	(2.0 Quality Points)
F	Below 70%	(0.0 – Failing)
W	Withdrew	See Grade of Withdrew below
WF	Withdrew Failing	See Grade of Withdrew Failing below
T	Terminated	See Terminated below

No grades, including final grades, will be rounded up.

(There is no grade of “D” in the Grading Scale)

Withdrawing from a Course

Students may drop a course within the first 5 MTSA business days of the semester with no grade.

Grade of Withdrew (W)

Students wishing to withdraw from the course after the first 5 MTSA business days of the semester will either receive a grade of “W” or “WF.” To receive a W grade, a student must drop the course within the first 60% of the semester. A “W” grade does not impact a student’s GPA.

Grade of Withdrew Failing (WF)

Students wishing to withdraw from the course after the deadline to withdraw with a “W” grade (see above) will receive a grade of “WF.” A WF grade is calculated into a student’s GPA as a failing grade (F).

Terminated (T)

An administratively terminated student is issued a final grade of "T" for all courses in which he/she is currently enrolled, and the termination is noted on the student's transcript.

Grade Appeal/Grievance Process:

Please refer to the *MTSA Student Handbook* for the Grade Appeal Policy (link below).

https://mtsa-dnappd.cleancatalog.net/student-appeals

Communication Expectations:

Students are expected to respond to email from MTSA staff and faculty within two MTSA business days.

Technical Support:

If you have problems with your computer, technology, IT-related questions, including those related to Brightspace, please submit a ticket via the link in your student portal.

Non-Degree Course Refund Policy

Any student who wishes to withdraw from a non-degree course must notify the instructor in writing of this action.

Refund Policy

MTSA will permit any student to cancel their enrollment agreement in a non-degree course within five MTSA business days of the enrollment day. Should a cancellation occur, MTSA will refund 100% of the tuition payment that was made by the student, minus the non-refundable portion (30%) submitted to hold the student's position in the class. Students withdrawing for medical reasons are assessed and adjusted no differently than other withdrawals.

Students who withdraw after this deadline will not receive a refund.

Determination of the Withdrawal Date

The student’s withdrawal date is the date the student submits the signed withdrawal form to the Registrar's Office.

Administrative Withdrawal

Students may be administratively withdrawn from a course for non-attendance/participation. Any student who does not attend/participate in the course within 5 MTSA business days will be administratively withdrawn from the course.

Students will not receive a refund if Administratively Withdrawn.

In order to demonstrate active engagement in a course, each student must confirm that they have read the course syllabus and plan to participate in the course. This is done through a survey in the Learning Management System.

For the Spring 2027 semester, all students must complete the survey by the end of the day on Monday, January 11th, 2027.

Completion of the course participation survey demonstrates initial engagement only. If a student completes the course participation survey but does not complete any additional coursework or other academically related course activity by the withdrawal deadline, defined as the point at which 60% of the course or period of attendance has been completed, the student may be administratively withdrawn for non-participation.

The administrative withdrawal date will be determined based on the student's last documented academically related activity.

MTSA Internal Withdrawal Procedure:

1. Notify in writing the instructor who will in turn notify the Program Director and Registrar of your intent to withdraw.
2. Schedule an appointment with the Executive Vice President if requested.
3. The Registrar sends the student the withdrawal form to complete and sign electronically.
4. After the student signs, the completed form is sent to the instructor for signature.
5. The withdrawal process will be initiated upon receipt of the completed withdrawal form.

Students accepted into the DNAP Practice Doctorate

Students accepted into the DNAP Practice Doctorate program who have previously completed MTSA's non-degree course, DAPN 820 Advanced Pharmacology for Advanced Practice Nursing, may be eligible to opt out of DAPN 820 Advanced Pharmacology for Advanced Practice Nursing during their first semester of the doctoral program.

This opt-out is subject to the following requirements:

1. **Grade Requirement:** The student must have earned a final grade of "A" in **DAPN 820**

2. **Recency Requirement: DAPN 820** must have been completed within four (4) semesters of the student's program start date into the DNAP Practice Doctorate program.

3. **Request Process:** Students wishing to exercise this opt-out must submit the required opt-out form to the Registrar's Office by December 1 before their January matriculation date. This form is located in the MTSA Student Resource Hub that also acts as a new student orientation course for accepted students.

Please note the following important conditions:

- Opting out of DAPN 820 does **not** result in a reduction of tuition. Full tuition for the first semester remains unchanged.
- Students who opt out will carry a reduced course load during the first semester of the program.
- This opt-out applies only to DAPN 820 and does not affect any other program requirements.
- Students may submit the opt-out request form while enrolled in the course during the Fall semester. Approval will be contingent upon receiving the final course grade.

Artificial Intelligence (AI) and Ethical Use
Students are required to adhere to the instructor's course-specific AI policy as outlined in this syllabus. When using AI tools, you must act ethically and responsibly by:

- **Verifying Sources:** Ensure that any information generated or suggested by AI is accurate, credible, and properly cited.
- **Maintaining Accuracy:** Review and validate all AI-assisted work for correctness and alignment with course standards.
- **Taking Responsibility:** You are fully accountable for the originality, integrity, and quality of all submitted work, regardless of AI involvement.

Failure to follow these guidelines may result in academic integrity violations.

Use of AI that violates these guidelines may constitute an academic integrity violation and will be handled according to MTSA's Academic Integrity policy as outlined in the Student Handbook.

If you are unsure whether a particular use of AI is acceptable, ask your instructor before submitting the work.

Plagiarism, Cheating or Lying Involving Any Clinical, Academic, Or School Endeavor:

Any student cheating on any test, exam, quiz, or assignment; who has falsified clinical documents, such as clinical evaluations or any other documentation; falsified signatures; or who has plagiarized any assignment, will be placed on immediate probation, with the recommendation for termination from the program. The case will be heard by the Progressions Committee and the Committee will make a determination of the recommendation for termination.

Plagiarism, which is defined as “the unauthorized use or close imitation of the language and thoughts of another author and the representation of them as one's own original work,” is a form of cheating, and is subject to disciplinary action including termination.

Click the link below to review the Academic Integrity Policy in the Student Handbook.
https://mtsa-dnappd.cleancatalog.net/academic-integrity-policy

Honor Code:

As a student of Middle Tennessee School of Anesthesia, I will incorporate the principles of truth, honor, integrity, and virtue in all that I do while enrolled. I acknowledge the Honor Code as vital in fostering an environment of trust, order, and unity within the School. I accept the sacred trust placed in me to continue this heritage of honor in my efforts to become a competent nurse anesthetist. I freely pledge to abide by the MTSA Standards of Conduct and this Honor Code in all of my conduct. I understand that a violation of this Honor Pledge will result in disciplinary action up to and excluding dismissal from the program.

Click the link below to review the entire Honor Code in the Student Handbook.
https://mtsa-dnappd.cleancatalog.net/honor-code

Americans With Disabilities Statement:

MTSA complies with the Americans with Disabilities Act (ADA). To ensure equal opportunity for all qualified persons, students with documented disabilities requiring accommodation have access to support personnel within the Office of the Executive Vice President. An agent of this office will collaborate with other faculty and staff as necessary to provide reasonable accommodations for courses and examinations. Accommodations help qualified students with disabilities access resources to assist them in meeting the technical standards for nurse anesthesia program admission, continuation, and graduation.

Requests for accommodation of a disability must be made in a timely manner to the Office of the Executive Vice President. Accommodations provided by MTSA are not retroactive.

Students who receive accommodations are responsible for notifying instructors before beginning each course.

Click the link below to view the Accommodations Policy in the Student Handbook.
https://mtsa-dnappd.cleancatalog.net/accommodation-requests

Topic Outline

Week & Dates	Topic(s)	Student Activities	Doctoral Student Learning Outcomes (DSLO)
Week 1 **1/4/2027** **to** **1/10/2027**	**Introduction** • **Basic principles of pharm** • **Drug Therapy across the Lifespan**	Review Week 1 Lectures	**1, 4, 7, 13, 14, 16, 36, 37**
Week 2 **1/11/2027** **to** **1/17/2027**	• **PNS Drugs**	Review Week 2 Lectures	**1, 4, 7, 13, 14, 16, 36, 37**
Week 3 **1/18/2027** **to** **1/24/2027**	• **CNS Drugs** • **Drugs for Pain**	Online synchronous discussion #1- Teams	**1, 4, 7, 13, 14, 16, 36, 37**
Week 4 **1/25/2027** **to** **1/31/2027**		Exam #1	
Week 5	• **Psychotherapeutic Drugs** • **Substance Abuse Disorders**	Review Week 5 Lectures	**1, 4, 7, 13, 14, 16, 36, 37**

2/1/2027 to 2/7/2027			
Week 6 **2/8/2027 to 2/14/2027**	• **Drugs that affect heart, blood vessels, blood, blood pressure & blood volume**	Review Week 6 Lectures	**1, 4, 7, 13, 14, 16, 36, 37**
Week 7 **2/15/2027 to 2/21/2027**	• **Drugs for endocrine disorders** • **Women's Health** • **Men's Health**	Online Synchronous discussion #2- Teams	**1, 4, 7, 13, 14, 16, 36, 37**
Week 8 **2/22/2027 to 2/28/2027**		Exam #2	**1, 4, 7, 13, 14, 16, 36, 37**
Week 9 **3/1/2027 to 3/7/2027**	• **Anti-Inflammatory, antiallergic, & immunologic drugs** • **Drugs for bone and joint disorder**	Review Week 9 Lectures	**1, 4, 7, 13, 14, 16, 36, 37**
Week 10 **3/8/2027 to 3/14/2027**	• **Respiratory tract drugs** • **GI drugs**	Review Week 10 Lectures	**1, 4, 7, 13, 14, 16, 36, 37**
Week 11	• **Therapy of infectious and parasitic diseases** • **Antimicrobial Therapy**	Online Synchronous Discussion #3	**1, 4, 7, 13, 14, 16, 36, 37**

3/15/2027 to 3/21/2027			
Week 12 **3/22/2027 to 3/28/2027**		Exam #3	**1, 4, 7, 13, 14, 16, 36, 37**
Week 13 **3/29/2027 to 4/4/2027**	• **Drugs for weight loss** • **Cancer Therapy** • **Drugs for eyes, ears, & skin**	Review Week 13 Lectures	**1, 4, 7, 13, 14, 16, 36, 37**
Week 14 **4/5/2027 to 4/11/2027**	• **Nutrition/Complementary Therapies** • **Drug Therapy for TB, UTIs, STDs** • **Drugs for acute care** • **Management of MI** • **Agents Affecting the Volume and Ion Content of Body Fluids**	Online Synchronous Discussion #4	**1, 4, 7, 13, 14, 16, 36, 37**
Week 15 **4/12/2027 to 4/15/2027**		Exam #4	