

EMORY UNIVERSITY
NELL HODGSON WOODRUFF SCHOOL OF NURSING

<u>COURSE NUMBER & TITLE:</u>	NRSG 704D Advanced Pharmacology Across the Life Span
<u>PREREQUISITES:</u>	
<u>CO-REQUISITES:</u>	None
<u>CREDIT ALLOCATION:</u>	3 Semester Hours <i>Lecture: 3 credit = 45 contact hours/semester</i>
<u>PLACEMENT:</u>	Fall
<u>COURSE DELIVERY MODE:</u>	Online
<u>LEAD FACULTY/INSTRUCTOR:</u>	Course Coordinator: <ul style="list-style-type: none"> • Kenneth Mueller PharmD, BCPS • Office hours: by appointment only • kjmuell@emory.edu

<u>COURSE DESCRIPTION:</u>
Building on prior knowledge, APRN students will apply pharmacologic principles to treat common health problems, stable chronic conditions, and select acute care conditions in a safe, cost-effective manner.
<u>COURSE OBJECTIVES:</u>
<ol style="list-style-type: none"> 1. Identify potential adverse reactions of pharmacologic agents, including those caused by drug-drug, drug-diet and drug-disease interactions. 2. Discuss the indications, rationale, efficacy, and risks for pharmacotherapeutic agents commonly prescribed in a variety of clinical settings. 3. Describe strategies for monitoring expected effects and potential adverse effects of medications including legal and ethical ramifications 4. Discuss state and federal laws that regulate prescriptive practices. 5. Design appropriate pharmacologic interventions for treatment of the major health problems. 6. Apply the principles of pharmacology relative to pharmacotherapeutics across age levels including the impact of race, ethnic group, and special populations on drug dosing and selecting patient-specific drug regimens 7. Social Determinants of Health (SDOH): Students will evaluate and apply evidence-based knowledge about influences of SDOH (cultural, social, environmental, and political) on illness and wellness related to advanced practice and research with diverse populations at the individual,

family, community, and societal levels.

CURRICULAR THREADS:

This course will address the NHSWN curricular concept threads of: patient and family centered care, bioethics/social responsibilities, teamwork and collaboration, scholarship and evidence based practice, and basic science foundations.

LEVEL (I, II) AACN ESSENTIALS MET:

- Domain 1: Knowledge for Nursing Practice
- Domain 2: Person-Centered Care
- Domain 3: Population Health
- Domain 4: Scholarship for Nursing Discipline
- Domain 5: Quality and Safety
- Domain 6: Interprofessional Partnerships
- Domain 8: Informatics and Healthcare Technologies

STUDENT HANDBOOK REFERENCES:

Students should also refer to the Student Handbook for program information, school resources, other policies, and guidelines. Information on Religious Holidays, the Respect Statement, Accessibility Services, and information on the Office of Diversity, Equity and Inclusion are also found in the student handbook. The handbook can be found at:
<http://www.nursing.emory.edu/audience-guides/students-audience-guide.html>.

COURSE OVERVIEW:

RECORDED LECTURES:

Throughout the semester, there will be several instances where faculty will assign recorded lectures to you. You are required to view these lectures as this lecture material may show up on assignments, quizzes, case studies and exams. Lectures and other classroom presentations presented through video conferencing and other materials posted on Canvas are for the sole purpose of educating the students enrolled in the course. The release of such information (including but not limited to directly sharing, screen capturing, or recording content) is strictly prohibited, unless the instructor states otherwise. Doing so without the permission of the instructor will be considered an Honor Code violation and may also be a violation of the state and federal laws, such as the Copyright Act.

Required Textbooks and Supplies

Rosenthal, L., & Burchum, J. R. (2018). *Lehne's pharmacotherapeutics for advanced practice nurses and physician assistants* (2nd ed.). St. Louis, MO: Elsevier (Paperback: 9780323554954)

E-book: 9780323598132

LINES OF COMMUNICATION

Communicate with the:

Course or Clinical faculty teaching content and “CC” the Course Coordinator

E-Mail Messages from Students to Course Faculty

The official method of communication between students and their respective departments, programs, and the dean's office is through the Emory email system. Students must check this email at least once each day to avoid missing vital information.

When sending an email message to faculty, do the following:

1. Use your Emory email address (yourname.emory.edu) as faculty have been instructed to only respond to emails sent from the Emory email system.
2. Start the subject line of your email with the course ID, followed by a colon and then a few words about the substance of the email. Example: NRS522: Requesting a private meeting
3. Start the salutation with Dear Dr. or Ms. or Mr.
4. Sign all your email messages with your first and last name, Concentration, year of expected graduation and a contact phone number. We may not be able to tell who the sender is from by looking at your email address.

Example: ABC Student (your name)
FNP (your concentration)
May 2022 (your expected graduation date)
xxx-xxx-xxxx (your telephone number)

Faculty Response Time and Accessibility

1. Responses to emails and discussion posts are typically made within 48 hours (about 2 days) if received between 8:00 AM Monday and 5:00 PM Friday. Messages posted or emailed between 5:00 PM Friday and 8:00 AM Monday will be treated as though they were written Monday morning. Messages posted or emailed on a holiday will be treated as though they were received on the morning classes resume.
2. Every attempt is made to be accessible to meet students' needs. If you are unable to meet during scheduled office hours, contact the faculty member to set up a mutually convenient time to discuss course issues or concerns.

Student Etiquette

In online communication, students are expected to be respectful and tolerant of other people's ideas, opinions, and beliefs.

EVALUATION AND GRADING:

Assessment	Percent of Total
Weekly Assignments	20%
Pain Management Assignment	5%
Case Studies	5%
Quizzes	10%
Exams	60%
Total	100%

GRADING:

The symbols: **A, A-, B+, B, B-, C+, C, C-, D+, D, F, W, WF, S, U, WU, IP, I, IF/IU and AUD** are used in the School of Nursing for undergraduate and graduate students. The responsibility for assigning grades rests exclusively with the faculty of a course.

Quality Points	Letter Grade	Numerical Grade
4.0	A	93–100
3.7	A-	90–92
3.3	B+	87–89
3.0	B	83–86
2.7	B-	80–82
2.3	C+	77–79
2.0	C	73–76
1.7	C-	70–72
1.3	D+	67-69
1.0	D	63-66
0.0	F	Below 63

ROUNDING POLICY:

Final grades will be rounded to the nearest whole number if the 10th space number is 5 or higher ($\geq .50$). Grades are reported to the registrar at the end of each semester.

WEEKLY ASSIGNMENTS:

- a. You will have an assignment covering the material for each week's lecture. The assignment includes a series of questions designed to reinforce your learning of our new

material and other questions to help apply the new material. Each weekly assignment is due Sunday by 11:59 PM EST.).

- b. Late assignments will receive a 10% penalty per day or partial day until the last day of class.
- c. Assignments after the last day of class will not be accepted
- d. Your submission for each assignment is to be your own work. However, in addition to using the book and lecture material, you may also work with others in answering these questions. This does not mean just copy the answers from a peer, but rather you may work together to make sure everyone understands the material. Talking through the material and teaching it back to others may help you solidify your understanding.
- e. **At the end of the semester, we will drop your lowest assignment score.**

PAIN MANAGEMENT ASSIGNMENT

- a. You will need to complete the New England Journal of Medicine “Pain Management and Opioid” Board Review
- b. You can select either IM: Pain Management and Opioids or FM: Pain Management and Opioids
- c. Submit a screenshot of completion into Canvas for full credit. Please refer to the video posted in Canvas to ensure you have completed the entire module and uploaded the screen shot successfully
- d. Late submissions will not be accepted

CASE STUDIES

- 1. Students will be auto assigned into groups of about 5 students each. If there is an insufficient number of students, students will be matched up in a group of 3 or 4.
- 2. Students will be expected to be the complete the case study using Evidence Based Practice, with appropriate references in APA format (more details in Canvas).
- 3. Credit will be assigned as an all or nothing.
- 4. Late assignments will not be accepted.

QUIZZES:

Course quizzes will be administered via ExamSoft/Examplify testing application. Students will take quizzes on their laptops and must have the appropriate software loaded prior to the quiz

time. Students who take an Emory University quiz are thereby attesting to compliance with the Emory School of Nursing's Academic and Professional Codes of Conduct (available in the Student Handbook). Failure to do so will result in referral to the Academic Grievance and Appeals Committee.

Quizzes will be closed book/closed note, and are to be completed on your own, by yourself. No other resources may be used. You may not share/receive the test questions or answers with anyone. Do not copy questions from this quiz in any way. Remember that you are held to the NHWSN Student Conduct policies located on pages 107-109 of the Student Handbook. The testing format is consistent with that used for APRN certification examinations and may contain any of the alternative testing formats.

Honor Code

Honor code polices and regulations can be reviewed [here](#)

Examination policy

All exams are the property of the NHWSN and may not be reproduced in any way including taking photographs or screenshots and downloading an electronic copy. Violation of this policy will result in referral to the Honor Council.

We will drop the lowest quiz score at the end of the semester.

EXAMS

Course exams will be administered via ExamSoft/Examplify testing application. Students will take exams on their laptops and must have the appropriate software loaded prior to the exam time. Students who take an Emory University exam are thereby attesting to compliance with the Emory School of Nursing's Academic and Professional Codes of Conduct (available in the Student Handbook). Failure to do so will result in referral to the Academic Grievance and Appeals Committee.

Exams will be given on a specified date and time (please refer to course schedule).

Exams will be closed book/closed note, and are to be completed on your own, by yourself. No other resources may be used. You may not share/receive the test questions or answers with anyone. Do not copy questions from this exam in any way. Remember that you are held to the NHWSN Student Conduct policies located on pages 107-109 of the Student Handbook. The testing format is consistent with that used for APRN certification examinations and may contain any of the alternative testing formats.

Honor Code

Honor code polices and regulations can be reviewed [here](#)

Faculty Grading Expectations/Posting of Exam Grades

Every effort will be made to post grades within 2 weeks of the exam's scheduled due date. All exam grades will be posted in Canvas once the course coordinator has completed the exam analysis and an announcement will be made.

Examination policy

All exams are the property of the NHWSN and may not be reproduced in any way including taking photographs or screenshots and downloading an electronic copy. Violation of this policy will result in referral to the Honor Council.

Exam Attestations:

Complete by due date to acknowledge adherence to the honor code or to ask questions /comment regarding the exam.

LATE ASSIGNMENTS/EXAMS:

Assignments are to be completed by the due date and time. All times reflect EST. You may access the Fixed World Clock at <http://www.timeanddate.com/worldclock/converter.html> to check on the specific time that the assignment would be due for you in your time zone.

Specific submission details are provided with each assignment. Assignments must be submitted as instructed to ensure full credit is received.

As an expression of professional excellence, all assignments are expected on or before the due date and time indicated. There are no early or late exams, or make-up days for exams. For extenuating circumstances, students must contact the course coordinator **in advance** of the due date/time. It is **always** in your best interest to contact the coordinator **as soon as** you suspect that something will compromise punctual submission. The following guidelines will apply to late submissions:

Late assignments will be accepted without penalty on a case-by-case basis if the reason for the late submission meets one of the following criteria and appropriate documentation is provided to the course coordinator within one week of the original due date:

- a. severe personal illness
- b. severe illness or death of a family member
- c. birth of a child to the student or a family member
- d. other reasons which may be deemed excusable by the course coordinator

Syllabus Change Statement

The syllabus is considered a contract between the faculty and the student. Changes may be necessary in unforeseen circumstances that are not under faculty control. If a change involves a date, careful consideration will be given to ensure that the change will not be detrimental to student success. Notice of any syllabus change will be emailed to students and posted in the Announcements section of the Canvas.

Accessibility and Accommodations

As the course coordinator of this course, I endeavor to provide an inclusive learning environment. I want every student to succeed. The Department of Accessibility Services (DAS) works with students who have disabilities to provide reasonable accommodations. It is your responsibility to request accommodations. To receive consideration for reasonable accommodations, you must [register with the DAS](#). Accommodations cannot be retroactively applied so please contact DAS as early as possible and contact me as early as possible in the semester to discuss the plan for implementation of your accommodations.

For additional information about accessibility and accommodations, please contact the Department of Accessibility Services at (404) 727-9877 or accessibility@emory.edu.

Stress Management and Mental Health

As a student, you may find that personal and academic stressors in your life, including those related to remote study, COVID-19, economic instability, and/or racial injustice, are creating barriers to learning this semester. Many students face personal and environmental challenges that can interfere with their academic success and overall wellbeing. If you are struggling with this class, please visit me during office hours or contact me via email. If you are feeling overwhelmed and think you might benefit from additional support, please know that there are people who care and offices to support you at Emory. These services – including confidential resources – are provided by staff who are respectful of students' diverse backgrounds. For an extensive list of well-being resources on campus, please go to:

<http://campuslife.emory.edu/support/index.html>. And keep in mind that Emory offers free, 24/7 emotional, mental health, and medical support resources via TimelyCare:

<https://timelycare.com/emory>.

Other Emory resources include:

- [Counseling & Psychological Services](#)
- [Office of Spiritual & Religious Life](#)
- [Student Case Management and Interventions Services](#)
- [Student Health Services Psychiatry](#)
- [Emory Anytime Student Health Services](#)

Respect Statement

The Nell Hodgson Woodruff School of Nursing is a learning community enriched by diversity. We are committed to inclusiveness recognizing that open exchange is necessary as we learn from each other and respect different perspectives.

We are committed to:

Promote Respect

We will respect the dignity and rights of all students, faculty and staff regardless of position, rank or authority.

Initiate Dialogue

We will initiate dialogue and express diversity of thoughts in a courteous manner, without fear of reprisal or insult.

Cultivate Reflection

We will listen respectfully while others share ideas, allow speakers to complete their thoughts and be open to considering new approaches.

Foster Equity

We will foster a safe and equitable academic environment that acknowledges the contributions and experiences of all persons from unique identities and backgrounds.

Maintain Accountability

We will hold ourselves accountable for our ethical conduct and reject intolerance, harassment, or violence towards others.

SEMESTER SCHEDULE				
WEEK	CLASS	Faculty	TOPIC	COURSE WORK
1	8.29	KM	Module 1: Core Concepts of Pharmacology (Units II,III) Pharmacokinetics, Pharmacodynamics, Lifespan Considerations	-Assignment 1
2	9.5	KM+ HM	Module 2: Prescribing Considerations (Units I) Precision Medicine + Social Determinants of Health, Climate Change & Sustainability Medication Concepts, Prescribing Considerations, Prescriptive Authority, Rational Drug Selection and Prescription Writing, Medication Errors	-Assignment 2
3	9.12	HM	Module 3: Peripheral Nervous System (Units IV) Muscarinic Agonists + Cholinesterase Inhibitors, Muscarinic Antagonists, Adrenergic Agonists, Adrenergic Antagonists, Indirect-Acting Anti-adrenergic Agents	-Assignment 3 -Quiz 1

4	9.19	KM	Module 4: Central Nervous System (Units V and VII) Parkinson, Alzheimer, Antipsychotics	-Assignment 4 -Case Study 1 Due
5	9.26	KM	EXAM 1 (weeks 1,2,3,4) Module 5: Central Nervous System Part 2 (LECTURES RECORDED) Seizure, Muscle Spasm, Antidepressants, Sedative-Hypnotic, Anxiety, CNS Stimulants	-Assignment 5
6	10.3	KM	Module 6: Heart, Blood Vessels, Blood, and Blood Volume PART 1 (Unit IX) Diuretics, RAAS, Calcium Channel Blockers, Vasodilators, Hypertension, Heart Failure, Antidysrhythmic, Atherosclerosis, Angina, Coagulation Modifying Agents (Anticoagulant/Antiplatelet), Anemia	-Assignment 6
7	10.10	KM	FALL BREAK (LECTURES RECORDED) Module 7: Heart, Blood Vessels, Blood, and Blood Volume PART 2 (Unit IX) Diuretics, RAAS, Calcium Channel Blockers, Vasodilators, Hypertension, Heart Failure, Antidysrhythmic, Atherosclerosis, Angina, Coagulation Modifying Agents (Anticoagulant/Antiplatelet), Anemia	-Assignment 7
8	10.17	KM	Module 8: Heart, Blood Vessels, Blood, and Blood Volume PART 3 (Unit IX) Diuretics, RAAS, Calcium Channel Blockers, Vasodilators, Hypertension, Heart Failure, Antidysrhythmic, Atherosclerosis, Angina, Coagulation Modifying Agents (Anticoagulant/Antiplatelet), Anemia	-Assignment 8 -Quiz 2
9	10.24	KM	Module 9: Pain Management + SUD (Units VI and part of XIII) Local Anesthetics, Opioid, Headache, Cyclooxygenase Inhibitors, SUD Alcohol + Nicotine	Assignment 9 -Case Study 2 Due
10	10.31	HM	EXAM 2 (weeks 5 6,7,8,9) Module 10: Respiratory + Inflammation (XV and part of XIII) (LECTURES RECORDED) Antihistamines, Asthma/COPD, Allergic Rhinitis, Cough and Colds, Rheumatoid Arthritis + Gout	-Assignment 10
11	11.7	HM	Module 11: Infectious and Parasitic Diseases PART 1 (Unit XVIII) Antibiotics	-Assignment 11

12	11.14	MC	Module 12: Infectious and Parasitic Diseases PART 2(Unit XVIII) Antiviral, Antifungal, Antituberculosis, Sexually Transmitted Diseases	- Assignment 12 -Case Study 3
13	11.21	KM	Module 13: Endocrine (Unit X, Unit XI) Diabetes, Thyroid, Glucocorticoids	- Assignment 13 -Quiz 3
14	11.28	KM	Module 14: Sexual + Reproductive Health [Women + Men's Health] (Unit XII) Estrogens and Progestins, Birth Control, Androgens, Erectile Dysfunction, Benign Prostatic Hyperplasia	Assignment 14
15	12.5	KM + MC	Module 15A: Drugs for Eyes, Ears, Skin and Miscellaneous Conditions (Unit XX and part of XIII) Eye, Skin, Ear Module 15B: Gastro-Intestinal Drugs (Unit XII) Peptic Ulcer Disease, Laxatives, Other GI Drugs	No Assignment 15 (last week of class)
FINALS	12.12		FINAL EXAM/EXAM 3 (cumulative)	