NURS 5303 Pharmacology for Advanced Practice
Spring 2020
COURSE SYLLABUS:

Faculty: Debbie Mahoney, PhD, APRN, FNP-BC (course coordinator)

Office Location: Nursing Department, #218
Office Hours: as posted and by appointment
Office Phone: 903-886-5315
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Preferred Form of Communication: email
Communication Response Time: Two business days

Instructor: Kamala Fields, MSN, FNP, PMHNP
Office Location:
Office Hours:
Office Phone:
Office Fax:
University Email Address:

COURSE INFORMATION

Textbook(s) Required

Rosenthal, L. & Burchum, J. (2017). *Lehne's Pharmacotherapeutics for Advanced Practice Providers*. St. Louis: Elsevier Saunders.

Shadow Health. (2017). Digital Clinical Experience (Version 5.0) [Software]. (ISBN: 978-0-98-978886-1) Available from http://www.shadowhealth.com

Optional
Arcangelo, V., & Peterson, A. (2016). *Pharmacotherapeutics for advanced practice* (4th Ed). Philadelphia: Lippincott, Williams, & Wilkins

Course Description (3 semester credit hours)

This course focuses on general principles of pharmacology including pharmacokinetics, pharmacodynamics as they relate to the treatment and management of common illnesses and conditions across the lifespan. Attention is given to the physiologic basis and clinical characteristics of disease states relative to pharmacotherapy. Clinical decision-making and review of laws governing prescriptive authority for advance practice nursing are also emphasized.

Student Learning Outcomes

By the end of the course, the student will be able to:

1. Discuss the pharmacodynamics and pharmacokinetics of a variety of drugs used to treat primary care conditions throughout the lifespan. (AACN Essential I)
2. Integrate pathophysiology, physiology, and pharmacotherapeutics into advanced clinical nursing practice. (AACN Essential I)
3. For a given disease state, discuss pharmaceutical options, develop a therapeutic regimen that maximizes effectiveness while minimizing adverse reactions, provide appropriate patient education, and evaluate the response of the patient to the therapeutic agent. (AACN Essential VIII)
4. Demonstrate clinical application of the pharmacology content through case study presentation. (AACN Essential IV)
5. Identify pregnancy and lactation categorization of drugs and their indications for clinical use in that population. (AACN Essential III)
6. Integrate knowledge of over-the-counter medications, vitamins, minerals, and alternative medicine in clinical practice anticipating potential drug-to-drug interactions. (AACN Essential I)
7. Understand the professional and legal aspects of the advanced practice nurse in prescribing and managing pharmacological therapy, recognizing the advanced practice nurses' accountability, responsibility, and scope of practice. (AACN Essential IX)
8. Demonstrate how to correctly write a prescription, including all appropriate elements. (AACN Essential V)

COURSE REQUIREMENTS

Minimal Technical Skills Needed

Using the learning management system, using Microsoft Word, Microsoft Excel and PowerPoint.

Instructional Methods

This is an online course requiring students to complete reading assignments, online activities and independent study to be successful. Teaching and learning methods will include lecture, presentations, group discussion, use of audiovisuals, on-line course information, handouts, reading and written assignments, and case studies. While the professor will provide guidance and consultation, the student is responsible for identification of learning needs, self-direction, seeking consultation, and demonstration of course objectives.

Student Responsibilities or Tips for Success in the Course

Online Etiquette: This class will be conducted entirely online. Please use the following a guide to your online behavior.

- Make a personal commitment to learning about, understanding, and supporting your peers.

- Assume the best of others in the class and expect the best from them.

- Recognize and value the experiences, abilities, and knowledge each person brings to class. Value the diversity of the class.

- Participate actively in the discussions, having completed the readings and thought about the issues.

- Pay close attention to what your classmates write in their online comments. Ask clarifying questions, when appropriate. These questions are meant to probe and shed new light, not to minimize or devalue comments.

- Think through and re-read your comments before you post them.

- Never make derogatory comments toward another person in the class.

- Do not make sexist, racist, homophobic, or victim-blaming comments at all.

- Disagree with ideas, but do not make personal attacks.

- Be open to be challenged or confronted on your ideas or prejudices.

- Challenge others with the intent of facilitating growth. Do not demean or embarrass others.

- Encourage others to develop and share their ideas.

- Be willing to change.

Other student responsibilities:
- Logging into the course website daily during the week
- **Checking emails at least daily**
- Updating semester calendar with communicated changes
- At least three hours of weekly study
- Attendance at all class meetings, clinicals, seminars and simulations
- Review of examinations.

GRADING

Final grades in this course will be based on the following scale:

A = 90%-100%
B = 80%-89%
C = 75%-79%
D = 60%-74%
F = 59% or Below

Evaluation Methods	
Quizzes	10%
Midterm Exam	20%
Final Exam	20%
Prescribing Modules (3)	30%
Client Teaching Project	10%
Shadow Health Clinical Simulations	10%

A minimum grade of 80 is required to pass the course. Students must achieve a minimum average of 80% on the midterm and final exams in order to pass the course. Other graded assignments will not be added to the final grade unless exam grade average is 80% or higher.
All students with an exam grade of less than 80 must review their exam. It is the student's responsibility to contact their instructor or course coordinator by email to set up an appointment to review the exam. The current exam must be reviewed before the next scheduled exam. Only the most current exam may be reviewed. Do not wait until the last minute to request a review. Of course, all students are welcome to review their exams but should follow the same procedure.

Successful completion of the examinations and other required assignments will enable the student to meet the student learning outcomes.

Assessments

Quiz: Quizzes will be an online, timed assessment of the current assigned reading materials. Quizzes not completed during the assigned time-frame will not have make-ups and the student will receive a zero for the quiz.

Exam: Exam will be an online, timed assessment of the units specified in the course schedule. Proctor U will be used to ensure security of the exam. A student who is unable to take the scheduled exam must notify the instructor prior to the start of the exam to determine whether a make-up is available.

Prescribing Modules: A solid foundation of the pathophysiology of disease states, pharmacodynamics, pharmacokinetics, drug side effects, and interactions is crucial for patient safety. The assigned prescribing modules help prepare the student for these concepts and other considerations in patient safety when prescribing medications. There will be three (3) prescribing modules for students to familiarize themselves with writing prescriptions. Select a typical diagnosis treated in the primary care setting, for example, strep pharyngitis, osteoporosis, etc. Analyze one to three medications used to treat this condition. Do not use an IV formulation for these modules. You must do one pediatric, one adult, and one geriatric module.

Client Teaching Project: A group presentation will be made on campus in conjunction with the campus wellness program regarding an aspect of pharmacology. Past topics have included management of prescription medications, OTC medications, antibiotic stewardship. Powerpoint presentation to be presented along with paper is due 2 weeks prior to the scheduled presentation date. Available dates for the Spring 2020 semester are March 18, April 1, & April 15.

Shadow Health Clinical Simulations: Assignments include orientation, Concept Labs and 6 Patient Scenarios. Grading is pass/fail

    Login page: http://app.shadowhealth.com

    For registration and purchase Registration directions: http://link.shadowhealth.com/How-To-Register

    If you already have a Shadow Health account, you do not need to register for an additional student account. To add a course to your existing account log in and follow these instructions: http://link.shadowhealth.com/How-To-Add-A-Course

1. Enter Course PIN –

2. Students will purchase access to Shadow Health via their personal debit/credit cards.

3. Please complete this student introduction: resource if you haven't already: https://link.shadowhealth.com/student-Orientation-Video

Technical requirements
1. Review requirements: http://link.shadowhealth.com/Minimum-System-Specifications

2. Tablets and mobile devices are not currently supported.

3. To use Speech-to-Text, you must complete assignments in Google Chrome

Shadow Health Support:
1. Contact Shadow Health with any questions or technical issues regarding Shadow Health **before** contacting your instructor.

2. Support is available at http://support.shadowhealth.com.

If at any time you have any questions or encounter any technical issues regarding the Digital Clinical Experience, please contact the Shadow Health support specialists by visiting the Learner Support Page at http://support.shadowhealth.com for contact information and hours. You may email the Learner Support team directly at mailto:support@shadowhealth.com at any time or by calling 800.860.3241.

Late Submissions:
It is expected that you will submit all class and clinical assignments on time. If you need an extension, it should be requested before the due date/time and may or may not be approved at the discretion of the course coordinator. Unexcused late assignments will be penalized 10% per day for each of the first two days overdue; on the 3rd day, the grade will be assigned as 0%. Communication on these matters is the student's responsibility.
Multiple instances of late clinical assignments will result in receipt of a Student Performance and Behaviors Evaluation Form and, possibly, failure of clinical/course.

Paper Submissions:
All documents submitted online are to be in .docx, .rtf, or .pdf format. No other formats will be accepted (JPEG, GIF, etc.). Assignments need to be submitted in a maximum of one document per assignment. Failure to follow these guidelines will result in a grade of "0" on the assignment.

Group Work:
All members of the group will receive the same grade on any group work. However, a student can be removed from his/her team if the other students in the group come to the instructor and report that a student is not doing his/her fair share of the work. If that happens, the instructor will notify the student in writing. The student will then be responsible for doing the assignment on his/her own. It is expected that the group will make the attempt to resolve the situation within the group before instructor intervention.

TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:
https://community.brightspace.com/s/article/Brightspace-Platform-Requirements

LMS Browser Support:
https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

YouSeeU Virtual Classroom Requirements:
https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu**.**

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These

methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

https://community.brightspace.com/support/s/contactsupport

Interaction with Instructor Statement

It is expected that you will check your D2L course and email at least **DAILY** for communication from the instructor. A response to any email or message will occur within two (2) business days.

Communication between faculty and students is primary and taken seriously. Preferred communication methods are individualized office hours, email, or via cell-phone. If a phone call is not answered, please leave a message and send an e-mail using the direct e-mail link on the course home page. You will be treated with collegial respect and you are expected to communicate likewise in a professional manner.

It is expected that assignments will be graded and returned to the student within two (2) weeks of submission.

Graduate Nursing Student Guide
Specific information for the nursing student regarding the nursing program and current policies and procedures can be found in the MSN Student Guide.

It is the student's responsibility to review and understand the policies and procedures provided in the student guidebook as all students are held to the statutes and policies therein.

Technology Requirements

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LMS Browser Support:
https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_suppo rt.htm

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https://community.brightspace.com/support/s/contactsupport

Interaction with Instructor Statement

Email is preferred as the standard form of communication in this class. Please keep phone calls to a minimum. I expect your emails to be professionally prepared. For example:

Dear Professor/Dr.. Lancaster, Hello, Greetings, Good

Morning/Afternoon, etc.,

Your message

Sincerely, Thank you, Regards,

etc. Your full name

Remember to professionally compose your e-mail messages with

proper grammar, spelling, and a professional tone. Properly

addressed and signed e-mails will be replied to within 48 hours

during business hours. If a face-to-face conference is required

between the student and the instructor in the instructor's office,

an appointment must be made several days in advance by the

student

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook.
http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum:
https://www.britannica.com/topic/netiquette

TAMUC Attendance

For more information about the attendance policy please visit the Attendance webpage and Procedure 13.99.99.R0.01.
http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

Graduate Student Academic Dishonesty 13.99.99.R0.10

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf

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Students with Disabilities-- ADA Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services
Texas A&M University-Commerce
Gee Library- Room 162
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
Email: studentdisabilityservices@tamuc.edu

Website: Office of Student Disability Resources and Services

http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the Carrying Concealed Handguns On Campus

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document and/or consult your event organizer.

Web url:
http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

COURSE OUTLINE / CALENDAR

Week	Content	Readings
1/13/20	Overview of course/syllabus Conscientious and Rational Prescribing Pharmacokinetics, Pharmacodynamics, Adverse drug reactions Individual variations to drug responses **ShadowHealth Advanced Pharmacology Orientation due at 11PM on 1/19/20** **ShadowHealth Conversation Concept Lab due at 11PM on 1/19/20**	Lehne: Chap 1-6
1/20/20	Drug Therapy Across the Life Span Drugs for Eyes, Ears, Skin **Quiz 1 (chapters 1-9, 84-86) due 1/26/20 at 11PM**	Lehne: Chap 7- 9 Lehne: Chap 84-86
1/27/20	Peripheral Nervous System Drugs **Prescribing Module 1 due 11PM 2/2/20**	Lehne: Chap 10- 15
2/3/20	Central Nervous System Drugs **Quiz 2 (chapters 10-20) due 2/9/20 at 11PM**	Lehne: Chap 16- 20
2/10/20	Drugs for Pain Drug Abuse **ShadowHealth Focused Exam: Pain Management due 2/16/20 at 11PM**	Lehne: Chap 21-23, 30-33
2/17/20	Drugs that affect the heart, blood vessels, blood and blood volume – Part 1 **ShadowHealth Antihypertensives Concept Lab due at 11PM on**	Lehne: Chap 34- 39

	2/23/20	
2/24/20	Drugs that affect the heart, blood vessels, blood and blood volume – Part 2 **Prescribing Module 2 due 11PM on 3/8/20**	Lehne: Chap 40-45
3/2/20	**Midterm exam**	
3/9/20	**SPRING BREAK**	
3/16/20	Psychotherapeutic Drugs **Quiz 3 (chapters 21-33) due 3/22/20 at 11PM**	Lehne: Chap 24- 29
3/23/20	Drugs for Endocrine Disorders Women's Health Men's Health **ShadowHealth Antidiabetics Concept Lab due at 11PM on 3/29/20** **ShadowHealth Focused Exam: UTI due at 11PM on 3/29/20**	Lehne: Chap 46-51
3/30/20	Anti-inflammatory, Antiallergic, and Immunologic Drugs **Quiz 4 (chapters 34-45) due at 11PM on 4/5/20** **ShadowHealth Anti-Asthmatics Concept Lab due 11 PM on 4/5/20**	Lehne: Chap 52-56
4/6/20	Drugs for Bone and Joint Disorders Respiratory Tract Drugs **ShadowHealth Focused exam: COPD due 11 PM on 4/12/20** **Prescribing Module 3 due at 11PM on 4/12/20**	Lehne: Chap 57-61
4/13/20	Gastrointestinal Drugs Nutrition and Complimentary Therapies **Quiz 5 (chapters 52-67) due at 11 PM on 4/19/20** **ShadowHealth Focused exam:**	Lehne: Chap 62-67

	Htn & DMII due 11PM on 4/19/20	
4/20/20	Therapy of Infectious and Parasitic Diseases – part 1 **ShadowHealth Focused exam: Pediatric GAS Pharyngitis due 11PM 4/26/20**	Lehne: Chap 68-74
4/27/20	Therapy of Infectious and Parasitic Diseases – part 2 **ShadowHealth Focused exam: CAP due 11PM 5/3/20**	Lehne: Chap 75-81
5/4/20	**Final Exam APEA Comprehensive standardized exam**	

Prescribing Module Guidelines

1. Do not use any over-the-counter medications unless the dose is prescription strength.
2. The pediatric module must include a pediatric medication with a calculation. The drug calculation must be based on weight in kilograms. Pediatric medications may be oral liquids, rectal, sublingual, or intramuscular and should be commonly used in primary care. Please show your dosage calculation in mg/kg and show the math used to arrive at the proper dose, including how the medication is dosed per your reference (90mg/kg for amoxil, etc.). Please remember to use common sense and not prescribe tablets for children who may have difficulty swallowing them, such as an infant.
3. Prescribing modules should include both a cover page at the beginning and a separate reference page at the end of the assignment, both in APA format.
4. The answers to the prescribing module should not be lengthy—you may use the bulleted outline followed by a brief paragraph per question. Include your citations within the paragraph. A minimum of 3 references and a maximum of 6 references should be used to complete the module, all less than 5 years old in order to be current. Your text should be one of the references.

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Pediatric Prescribing Module Grading Rubric

Criteria	Possible points	Score	Comments
Pathophysiology of disease state discussed thoroughly including assessment and diagnostic data supporting the diagnosis, ICD-10 code, EBP guidelines.	25		
Medication(s) prescribed to treat this condition with calculation of pediatric dosage, include classification of medication(s), administration, contraindications, approximate cost, insurance formulary tier if applicable Is there a black box warning for this medication?	20		
Pharmacodynamics thoroughly addressed: Biochemical or physiologic effect Protein binding	10		

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Receptor binding Half-life			
Pharmacokinetics thoroughly addressed: Absorption Bioavailability Distribution Metabolism Excretion Renal dosing?	10		
Side effects/adverse reactions discussed Measures to reduce unwanted response to medication Any monitoring parameters?	15		
Drug/Food interactions discussed	10		
APA style for coversheet, reference list	10		
Total			

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Adult Prescribing Module Grading Rubric

Criteria	Possible points	Score	Comments
Pathophysiology of disease state discussed thoroughly including assessment and diagnostic data supporting the diagnosis, ICD-10 code, EBP guidelines.	25		
Medication(s) prescribed to treat this condition with dosage, include classification of medication(s), administration, contraindications, approximate cost, insurance formulary tier if applicable What is pregnancy and breastfeeding risk? Is there a black box warning for this medication?	20		
Pharmacodynamics thoroughly addressed: Biochemical or physiologic effect Protein binding	10		

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Receptor binding Half-life			
Pharmacokinetics thoroughly addressed: Absorption Bioavailability Distribution Metabolism Excretion Renal dosing?	10		
Side effects/adverse reactions discussed Measures to reduce unwanted response to medication Any monitoring parameters?	15		
Drug/Food interactions discussed	10		
APA style for coversheet, reference list	10		
Total			

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Geriatric Prescribing Module Grading Rubric

Criteria	Possible points	Score	Comments
Pathophysiology of disease state discussed thoroughly including assessment and diagnostic data supporting the diagnosis, ICD-10 code, EBP guidelines.	25		
Medication(s) prescribed to treat this condition with geriatric dosage, include classification of medication(s), administration, contraindications, approximate cost, insurance formulary tier if applicable	20		
Is there a black box warning for this medication? Is this medication addressed by the AGS Beers Criteria?			
Pharmacodynamics thoroughly addressed: Biochemical or	10		

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physiologic effect Protein binding Receptor binding Half-life			
Pharmacokinetics thoroughly addressed: Absorption Bioavailability Distribution Metabolism Excretion Renal dosing?	10		
Side effects/adverse reactions discussed Measures to reduce unwanted response to medication Any monitoring parameters?	15		
Drug/food interactions discussed	10		
APA style for coversheet, reference list	10		
Total			

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Pharmacology Presentation-Clients Rubric

Criteria	Possible Points	Score	Comments
Introduction of topic and objectives of presentation	15		
Creativity and effectiveness of learning aids	15		
Organized and comprehensive presentation	20		
Engages audience; appropriate responses to audience comments and questions	15		
Evaluates pre and post knowledge/if objectives were met	20		
Outline submitted on time; professional dress; appropriate presentation skills	15		
Total			

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