

The University of Texas at El Paso College of Nursing
N2407 Pharmacology for Nursing
Spring 2025
On Campus HSN Bldg. Room 217

COURSE DESCRIPTION/COURSE OVERVIEW: This course introduces the principles of pharmacology, including pharmacokinetics, pharmacodynamics, pharmacotherapeutics, potential adverse medication reactions and interactions. Emphasis is placed on drug classifications and nursing implications related to the safe administration of medication to patients across the life span. Performing dosage calculations using varied methods are introduced.

COURSE PRE-REQUISITES: Admission into pre-requisites of nursing program classes. It is strongly recommended that students are also simultaneously enrolled or have taken N2407 Pathophysiology.

CREDIT ALLOCATION: 4 credit hours (all didactic)

FACULTY INFORMATION:

<i>Faculty</i>	<i>Office</i>	<i>Office #</i>	<i>E-mail</i>	<i>Office/Tutoring Hours</i>
Claudia Perez, MSN, RN, CHSE, CNE	349	915-747-7249	cleon2@utep.edu	T/TH 11-12 pm Wed 1000- 1400 hr Friday 1100-1300 hr
Belen Torres, MSN, RN	331		btorres23@utep.edu	T/Th 13:00-14:30 pm
David Reyes (Academic Tutor)			Djreyes4@utep.edu	
Michelle Solis (Academic Tutor)			msolis32@utep.edu	

Once Blackboard course opens, contact me via course messages. Allow for at least 24-48 hours response time (excluding weekend and holidays).

REQUIRED RESOURCES:

Workman, M.L. & LaCharity, L. (2023). Understanding pharmacology: Essentials for medication safety (3rd ed.). Elsevier. ISBN: 978-0-3237-9350-6
 ATI: Dosage Calculation and Pharmacology Made Easy Software (this is a resource provided by the College of Nursing).

RECOMMENDED RESOURCES:

Workman, M.L. & LaCharity, L. (2023). Study guide for understanding pharmacology: Essentials for medication safety (3rd ed.). Elsevier. ISBN: 978-0-3237-9351-3
 Sienkiewicz, S. & Megerdichian, S. (2019). Clinical nursing calculations (3rd ed). Jones & Bartlett. ISBN: 9781284287998

COURSE OBJECTIVES:

Upon completion of this course, the learner should be able to:

1. Apply principles of pharmacology, pharmacokinetics, pharmacotherapeutics, and pharmacodynamics to medication therapy.
2. Recognize the major classifications of medications, common medications within each classification, their side effects, and contraindications.
3. Discuss nursing implications and concepts of safety, when performing drug calculations and medication administration.
4. Understand the legal and ethical implications/aspects of medication administration.

Program Learning Outcomes, BSN Essentials, DECS, UTEP EDGE:

<p>Crosswalk of:</p> <ul style="list-style-type: none"> ➤ UTEP CON PLOs ➤ BSN Essentials (AACN) ➤ DECS Based ➤ UTEP EDGE Outcomes 	<p>UTEP CON PLOs (Level 1 Program Outcomes) & QSEN Competencies *: Patient- Centered Care*, Teamwork & Collaboration*, Evidence-Based Practice*, Quality Improvement*, Safety*, Informatics*, Professionalism, Leadership, Communication, System Based Practice, Health Promotion and Education</p> <p>2021Essentials (AACN): Essentials 1, 2, 4, 5, 8, 9</p> <p>Texas Differentiated Essential Competencies (DECs) for Baccalaureate Degree (BSN) *version year 2021</p> <p style="padding-left: 40px;">Member of the Profession A, B, C, D Provider of Patient-Centered Care A, B, C, D, E, F, G, H Patient Safety Advocate A, B, C, D, E Member of the Health Care Team A, B, C, D</p> <p>UTEP EDGE Experiences: Creative Activities</p> <p>UTEP EDGE Advantages: Problem-Solving & Critical Thinking</p>
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TEACHING METHODOLOGIES: Please see Blackboard for Course Calendar and Weekly Assignments

Teaching will include any of the following:

- PowerPoint Presentations
- Interactive Class and Online Activities
- Lectures
- Class Discussions
- Case Studies
- Videos
- Quizzes
- Course Content Exams and a Comprehensive Final Exam

GRADING POLICY AND STRUCTURE:

- a. Students must pass this course at a minimum of 75%. Per the College of Nursing policy, achieving less than 75% in the didactic portion of the course results in a course failure. **There is no rounding of grades and fractional points will be dropped upon final course grade.**
- b. All didactic course work is mandatory. Failure to complete a non-graded assignment will result in an incomplete in the course.

- c. Failure to complete an assignment will result in a failing grade at the course manager's discretion.
- d. **Extra credit is not permitted.**

GRADING BREAKDOWN:**GRADING SCALE:**

Exam I	16%	90-100	= A
Exam II	16%	80-89	= B
Exam III	16%	75-79	= C
Exam IV	16%	60-74	= D
Final Exam	20%	<60	= F
Quiz Average	10 %		
Dosage Calculation Exam	3%		
ATI modules (Lesson Complete & Test > 90%)	3%		
Syllabus Acknowledgment	Completed at 100%		
100%			

TECHNOLOGY REQUIREMENTS

Some course content is delivered via the Internet through the Blackboard learning management system. Ensure your UTEP e-mail account is working and that you have access to the Web and a stable web browser. Google Chrome and Mozilla Firefox are the best browsers for Blackboard; other browsers may cause complications. When having technical difficulties, update your browser, clear your cache, or try switching to another browser.

You must have access to a computer/laptop/tablet. Most quizzes and all exams are delivered through Blackboard during the regular class time, on-campus, through Respondus LockDown browser and are password protected. You will need to download or update the following software: **Respondus LockDown Browser**, Microsoft Office, Adobe Acrobat Reader, Windows Media Player, QuickTime, and Java. Check that your computer hardware and software are up-to-date and able to access all parts of the course.

If you do not have a word-processing software, you can download Word and other Microsoft Office programs (including Excel, PowerPoint, Outlook and more) for free via UTEP's Microsoft Office Portal. Click the following link for more information about [Microsoft Office 365](#) and follow the instructions.

IMPORTANT: If a student experiences technology issues during a quiz or exam, that needs to be brought up to the instructor immediately. If you encounter technical difficulties beyond your scope of troubleshooting, please contact the UTEP [Help Desk](#) as they are trained specifically in assisting with technological needs of students. Please do not contact me for this type of assistance. The Help Desk is much better equipped than I am to assist you!

iClicker Cloud

- I will be using a cloud-based student response software by iClicker in class this semester. This will help me understand what you know, give everyone a chance to participate in class, and increase how much you learn when we are in class together. This will also

provide you with feedback on how well you are comprehending course concepts and help you master challenging concepts.

- I will be using this software to keep track of attendance, please refer to the attendance policy on page 3 of the syllabus.
- I have turned on the Attendance GPS location requirement for iClicker in our class.
 - You will need to allow the device you are using to reveal your location in order to successfully check in.
 - If you are not physically in class when you try to join my session, you will not be counted as present.
- If you have any issues with your device's geolocation, refer to the [Attendance Geolocation Troubleshooting Guide](#) or contact the [UTEP Technology Support HelpDesk](#).
- It is your responsibility to regularly check your iClicker grades for any discrepancies and bring them to my attention **within 24 hours**.

COURSE POLICIES:

Academic Regulations

- Review in UT El Paso Undergraduate Student Catalog and the College of Nursing Student Handbook the following policies: Religious Observance, Clinical Compliance, Ethical and Responsible Use of Social Media, Policy on Academic Integrity, Professional Attire and Uniform Guidance, Progression Policy, and Safe & Effective Nursing Practice Policy, Statement on Disability, Cell Phone Policy during Testing and Student Injury in Clinical Policy.

ATI Dosage Calculation Modules

- Students are responsible for completing all assigned ATI modules by the assigned deadline posted on the calendar.
- Students must complete the lesson (report will show minutes), and the test with a 90% or better to get full credit on each module. Students may take ATI tests multiple times to achieve a 90% prior to the deadline. In order to get full credit, the report you upload into blackboard must show both the lesson completed in minutes and the test score with a 90% or better.
- Late ATI report submissions are not allowed, and the student will get a 0 for that assignment.
- **Students who score < 90% on the dosage calculation exam must complete all ATI lessons and tests by the new deadline provided by the course manager (if reports have not been previously submitted on blackboard).** Students who do not complete the required ATI modules and ATI tests with a 90% or better by the end of the course will earn an *incomplete* (I) in the class.

Attendance

- Students are expected to attend all classes and to arrive on time. Students arriving late are asked to enter quietly and unobtrusively. Students are responsible for content and/or announcements presented in class whether present or not.
- Attendance will be tracked using the iClicker software and in-person attendance sheets.
- Students who are unable to utilize the i-Clicker application during class will **ONLY** be granted an override when they notify me immediately during or after class (in the classroom that same day).

- Students whose attendance is not verified will be marked absent for that class period.
- Soliciting another student to log in to the i-Clicker for the student is considered collusion and both students will be referred to OCS.

Audio Recording

- Audio recording of any class information is at the discretion of the faculty. No videotaping is permitted.

Blackboard

- Students are required to subscribe to and **frequently access the course Blackboard site.** This site is the main source of communication between faculty and students. Students are encouraged to access this site on a daily basis. The course syllabus, calendar, assigned readings, and assignment criteria are also posted on this site. Grades will be made available **ONLY** through this site. Course communication during the semester will occur through the **Blackboard course messages.**

Cell Phones

- Set your phone to mute or silent mode before coming to class.
- Cell phones will not be allowed for any use in class (no phone calls, texts, web browsing). Any student with a visible phone in possession during class times will be asked to leave the class and will receive an unexcused absence for that day with all quizzes and/or assignments for that day recorded as a zero.

Communication

- **Office Hours:** We will have office hours for your questions and comments about the course by appointment only. Students must sign up in advance through link provided through blackboard.
- **Blackboard Course Messages:** UTEP course messages is the best way to contact me. I will make every effort to respond to your message within 24-48 hours of receipt, excluding weekends and holidays. Once the semester starts, avoid contacting me via UTEP email. Use the course messages on the blackboard site to message me with any questions related to the course.
- **Discussion Board:** Please post relevant questions regarding course content, class worksheets, etc. on the discussion board. Questions regarding course content and concepts are to be posted on the discussion board inside of Blackboard. Please respond to other students' questions if you have a helpful response. I will also respond to student questions on the discussion board within 24-48 hours of receipt, excluding weekends and holidays.
- **Announcements:** Check the Blackboard announcements frequently for any updates, deadlines, or other important messages.
- Communication is the responsibility of both students and faculty. Faculty will keep students informed of progress and students will inform faculty of any deterrent to their success. Students with questions or concerns should:
 - First go to the appropriate faculty member.*
 - If not resolved, then follow the appropriate chain of command in the sequence as identified below:*
 - Course manager*
 - Undergraduate Program Coordinator Associate*
 - Dean for Undergraduate Education College of*

Course Alignment with UTEP EDGE: This course aligns with UTEP EDGE: a holistic assets-based student success framework that “aims to develop these practices through high-impact experiences, or EDGE experiences.” Through comprehensive preparation and practices (ie: didactic, clinical, simulation), you will have opportunities to connect theoretical perspectives from the course to practice. See Appendix A for course alignment with UTEP EDGE.

Course Drop Policy

- I will not drop you from the course. However, if you feel that you are unable to complete the course successfully, please let me know and then contact the Registrar’s Office to initiate the drop process prior to the drop deadline specified in the calendar. If you do not, you may be at risk of receiving an “F” for the course.

Examinations & Quiz Policies

1. Examinations:

- Examinations are scheduled during the semester and a comprehensive final exam is scheduled at the end of the semester. The questions are derived from lecture objectives and course content presented during lecture as well as reading assignments from the required resources for the course.
- **Any student who is not physically present in the classroom for an exam or quiz will be referred to the Office of Student Conduct and Conflict Resolution (OSCCR) for scholastic dishonesty with a recommendation to receive a zero on the exam or quiz and a reduction in one letter grade for the final course grade.**
- **Unauthorized sharing of passwords via text, email, or any other means for the exam/quiz is PROHIBITED. All students who engage in this form of collusion will be referred to the Office of Community Standards (OCS) for scholastic dishonesty with a recommendation to receive a zero on the exam or quiz and a reduction in one letter grade for the final course grade.**
- All students are expected to take the examinations at the scheduled time. Make-up exams are rarely given and then ONLY when there is a very valid reason (with appropriate documentation) and the course manager has been contacted PRIOR to class time. Failure to do so will result in receiving a zero (0) for the exam. Make-up exams will be different than exams given in class to include fill in the blank and essay type questions. Make-up exams with proper documentation must be completed within 5 business days.
- All cell phones must be turned off during exams and left at the front of the classroom. Items at individual desks are limited to pencils and basic calculators. Calculators that can store information are not allowed. Hats and/or smart devices are not permitted during exams or quizzes. **No one may leave the room during an exam. Any violations will be referred to the Office of Community Standards (OCS) for scholastic dishonesty.**
- All cell phones and other electronic devices are required **to be turned off** and placed in the student’s book bag, purse, etc. **Simply placing the phone on vibrate mode is not acceptable.** If a cell phone, watch, or electronic device placed in the student’s book bag, purse, etc., rings/alarms/vibrates during an exam, the faculty member will permit the student to complete the exam and will refer the student to Office of Community Standards (OCS) for violating policy. The following actions will be reported to the OCS for implementation: First infraction will have a 10-point deduction for the exam grade,

the second infraction **will result in an exam grade of “0”**.

- Content exams and the Final Exam are timed. **No extra time will be given to complete the exam once the timed period is over.**
- The students will be required to display their UTEP student ID card in front of them during the entire exam/quiz time. The student will also be required to sign in and/or sign out on an attendance sheet for all exams. If the student does not bring an ID, the student will be required to show a government issued photo ID. Time loss will not be restored.
- Test items are the property of the faculty, and thus the university; writing down specific test items or answers is NOT permitted and any students found sharing information about quizzes or examinations with other classmates will be referred to OCS.
- Students may review the exam 1-4 during the dates and times determined by the course manager. Exam reviews must be done in one sitting. No multiple reviews of one exam are allowed. **Each exam may be reviewed only up until the date/time specified by the course manager prior to the next exam. The final exam will only be available for a limited review only to those students that have grade concerns.**
- Exam/quiz reviews will take place only during the specified office hours and strict exam security measures will be followed. Security measures including (but not limited to): student will not allow to bring any electronics for exam reviews (phones, tablets, smart glasses, iPad, laptops, etc.), no notes are allowed during exam reviews, student must not write down, take notes, pictures, or recreate any questions after exam reviews. No papers with any exam/quiz information is allowed to exit the room where the review is taking place.
- Academic integrity will be maintained during exams. No materials (books, notes, drug cards etc.) may be utilized during the exam, except for a calculator. **Any violations will be referred to the Office of Community Standards (OCS) for scholastic dishonesty with a recommendation to receive a zero on the exam or quiz and a reduction in one letter grade for the final course grade.**
- Students are required to ensure that their electronic devices are fully charged, capable of running Respondus Lockdown (as per the technological requirements), and have all necessary software updates installed to successfully complete the scheduled quiz or examination. In the event that the quiz/exam cannot be deployed due to equipment or software issues during the assessment, the student will be directed to the University's Technology Support Department (UTEP Library, Room 300). Please note that any time spent resolving technical issues will not be added back and will count toward the total duration of the quiz/exam.
- Students who arrive late during a quiz/examination, will only have the remaining of the time, as specified by the instructor to complete the examination. The remaining time is not based on what the computer displays. When the quiz/time is up, the instructor will either terminate the quiz/examination for all the students or the students will be asked to submit the quiz/examination.
- The Dosage Calculation exam must be passed with a minimum score of a 90 (College of Nursing Policy). If the exam is not passed or the student fails to take the dosage calculation exam, remediation will be required prior to the deadline identified by faculty. **Failure to complete this remediation will result in an "incomplete" for the course.**

2. Quizzes:

- Quizzes may be given at the start of class, during class or at the end of class. Although some quizzes are announced on the course calendar, many of the quizzes will be given

throughout the semester unannounced during scheduled class time. **THERE IS NO MAKE-UP FOR QUIZZES FOR ANY REASON.**

- If a quiz or exam is missed, students will not be allowed to attend another course section to make-up that grade. Due to the limited number of seats in each classroom, students must attend the assigned class for which he/she registered unless prior arrangements were made and confirmed with the course manager.
- The lowest quiz grade will be dropped at the end of the semester as long as the student has participated in class with their audience response card and verified through iClicker or in-person attendance sheets throughout the semester. Students who choose not to participate in class with their audience response card or have more than 3 absences verified through iClicker and/or in-person attendance sheets will **NOT** have a quiz dropped from their final quiz average.
- The average of all the quizzes accounts for 10 % of the overall course grade.
- Each quiz may be reviewed only until prior to the next exam or until the date/time specified by the course manager. No quizzes will be available for review after the provided deadline.
- The students will be required to display their UTEP student ID card in front of them during the entire exam/quiz time. The student will also be required to sign in and/or sign out on an attendance sheet for all exams. If the student does not bring an ID, the student will be required to show a government issued photo ID. Time loss will not be restored.
- Some quizzes may be delivered using the student's electronic device, all required software (refer to the technology requirements section) must be installed and ready to be used by the time the quiz is administered. If a student is not prepared with their electronic device or the device is not functional, or there are technological issues that prevent the student from taking the quiz within the allotted time, a grade of 0 will be assigned for that quiz.
- Students may not leave the room during the duration of a quiz.
- **Any student who is not physically present in the classroom for a quiz will be referred to the Office of Community Standards (OCS) for scholastic dishonesty with a recommendation to receive a zero on the exam or quiz and a reduction in one letter grade for the final course grade.**
- **Unauthorized sharing of passwords via text, email, or any other means for the exam/quiz is PROHIBITED. All students who engage in this form of collusion will be referred to the Office of Community Standards (OCS) for scholastic dishonesty with a recommendation to receive a zero on the exam or quiz and a reduction in one letter grade for the final course grade.**
- Only one attempt is allowed on any quiz. The quiz will remain open until all students have completed it. This does not mean that you can access the quiz again.
- All cell phones must be turned off during quizzes. Items at individual desks are limited to pencils and basic calculators. Scientific calculators or calculators that can store information are not allowed. Hats and/or smart devices are not permitted during exams or quizzes. **No one may leave the room during a quiz. Any violations will be referred to the Office of Community Standards (OCS) for scholastic dishonesty.**
- The "syllabus/course orientation quiz" is pass/fail only and will not count towards the student's grade. A score of 100 will represent a pass score. Multiple attempts are permitted for this quiz. Students who do not complete the "syllabus/course orientation quiz" prior to census day may be subject to an administrative drop.
- Students are required to ensure that their electronic devices are fully charged, capable of running Respondus Lockdown (as per the technological requirements), and have all

necessary software updates installed to successfully complete the scheduled quiz or examination. In the event that the quiz/exam cannot be deployed due to equipment or software issues during the assessment, the student will be directed to the University's Technology Support Department (UTEP Library, Room 300). Please note that any time spent resolving technical issues will not be added back and will count toward the total duration of the quiz/exam.

- Students who arrive late during a quiz/examination, will only have the remaining of the time, as specified by the instructor to complete the examination. The remaining time is not based on what the computer displays. When the quiz/time is up, the instructor will either terminate the quiz/examination for all the students or the students will be asked to submit the quiz/examination.

Guidance on Artificial Intelligence

- Each student is expected to use critical and creative thinking skills to complete tasks and not rely on computer-generated ideas.
- Using AI for brainstorming: Some AI technologies or automated tools, particularly generative AI such as ChatGPT or DALL-E, can be beneficial during the early brainstorming stages of an activity, and you are welcome to explore them for that purpose. However, keep in mind that AI-generated ideas are not your own and may hinder your ability to think critically and creatively about a problem. It is also important to remember that these technologies often “hallucinate” or produce materials and information that are inaccurate or incomplete—even providing false citations for use.
- You are not allowed to submit any AI-generated work in this course as your own. Consider how this will affect your credibility as a professional before doing so. **Any direct use of AI-generated materials submitted as your own work will be treated as plagiarism and reported to the Office of Community Standards (OCS).**

Grievances

- Challenges to grades may be pursued only on the basis of malice, bias, arbitrary or capricious grade determination or impermissible discrimination. In no event shall a challenge be pursued only on the basis of the standards employed in setting grades, so long as those standards are employed impartially. Grievances **MUST** be in **WRITING** and filed through the College of Nursing chain of command. If the student is not satisfied with the outcome after using the chain of command, the student may consult with and/or file a challenge with the Chairperson of the University Student Welfare and Grievance Committee.

Illness Precautions

- Please stay home if you have symptoms of a communicable illness. If you are feeling unwell, please notify your course manager, so that we can work on appropriate accommodation. For clinical practicum, please see *Clinical Practicum Policy*.

Laptops

Use of laptops during class is permitted. If you do use a laptop during class:

- Set your laptop volume control to mute or off before coming to class.
- Do not engage in unauthorized communication or entertainment (web surfing, instant messaging, chat room chatting, DVD viewing, music playing, game playing, etc.) during class unless it is part of the lesson. Such unauthorized use will result in student removal from class that day and possible loss of laptop use for the entire class.

Policy on Scholastic Dishonesty

- Students are expected to be above reproach in all scholastic activities. Students who engage in scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and dismissal from the College of Nursing and/or university.
- Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. It includes, but is not limited to, cheating, plagiarism, and collusion. Cheating may involve copying from or providing information to another student, possessing unauthorized materials during a test, or falsifying research data on laboratory reports. Plagiarism occurs when someone intentionally or knowingly represents the words or ideas of another as one's own. Collusion involves collaborating with another person to commit any academically dishonest act. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. All suspected violations of academic integrity at The University of Texas at El Paso must be reported to the Office of Community Standards (OCS) for possible disciplinary action. To learn more, please visit HOOP: Student Conduct and Discipline.
- Since scholastic dishonesty harms the individual, all students, and the integrity of the College of Nursing and the university, policies on scholastic dishonesty will be strictly enforced. See detailed procedure in the Handbook of Operating Procedures available in the Office of the Dean of Students.

Policy relating to Disability / CASS / Pregnancy

- **Disability:** Nursing is a physically and mentally challenging profession. Nurses are required to think critically and quickly in order to respond to patient care needs. Nurses are also expected to be able to assist patients in transfer, ambulation and in activities of daily living. In order to do this, nurses must be able to lift, bend and be on their feet for extended periods of time. Nursing students are expected to be able to perform these functions. It is therefore the responsibility of the student to inform the course manager of any limitations they may have in completing course expectations. Nursing students with limitations in any of the above abilities are advised to discuss these matters with The Center for Accommodations and Support Services (CASS) to determine if reasonable accommodations could be provided. Written guidelines r/t accommodations from CASS must be submitted to the course manager PRIOR to the start of the course. If you have a disability and need classroom accommodations, please contact CASS at 747-5148, or by email to cass@utep.edu, visit their office located in UTEP Union East, Room 106, or apply for accommodations online via the CASS portal. For additional information, please visit the CASS website at www.sa.utep.edu/cass. *CASS' Staff are the only individuals who can validate and if need be, authorize accommodations for students with disabilities.*
- **Pregnancy:** It is the responsibility of the student to inform the instructor of pregnancy limitations. Written guidelines related to accommodations from The Center for Accommodations and Support Services (CASS) must be submitted to the course manager PRIOR to the start of the course.

Professional Behavior

- Students are expected to behave professionally *at all times* with faculty and peers in any setting in which the student is a representative of UTEP. Bullying, verbal abuse, insubordination, or personal attacks will not be tolerated in any form. Any behavior deemed inappropriate by faculty will result in faculty conference(s), and completion of a SOS plan that addresses the student's areas of needed improvement. Possible activities available to assist the student in attaining the SOS objectives include stress and/or anger management counseling sessions. Any behavior that is disruptive to the classroom may result in removal from the class and/or an administrative withdrawal from the course and/or dismissal from the program.
- The following addresses expectation of infection control, safety, and hygiene applying to classroom and clinical practice settings. Students are expected to be mindful of personal hygiene and cleanliness of clothing and personal baggage. Aseptic techniques should be used when coughing, sneezing, and disposing of personal tissues. Students and faculty must be careful to create an image of cleanliness and health, avoiding personal body odors and excessive use of perfumed chemicals. Hair should be clean and neatly kept, skin should be clean and intact. Open wounds with drainage/swelling/ or lacerations should be cleansed/bandaged for the classroom setting; however, a physician note is needed to be allowed into the skills practice lab or into a clinical rotation in the nursing program. *See Professional Attire and Uniform Guidance Policy.*

Retention: Students Opting for Success (SOS)

- When a student is not progressing in the course as expected or is not successful on an examination, they are required to meet with the instructor as soon as possible to discuss strategies for success. It is the student's responsibility to complete the SOS form and meet with the faculty to discuss. The SOS will identify recommendations for improving the student's success potential and will specify timelines for completion of these recommendations. SOS will be due a week prior to the next exam. *Non-compliance with SOS recommendations jeopardize eligibility to repeat the course in the subsequent semester.*

Student Responsibility.

- Students are responsible for all assigned reading and lecture content. Preparation for class and participation in class will optimize the student's ability to succeed in the course. **Students should read assigned materials prior to the lecture in order to be prepared for each class.**

UTEP Tobacco Policy

- The University of Texas at El Paso (UTEP) appreciates your cooperation as we are a smoke and tobacco-free campus. The policy is part of the university's promotion of respect toward our environment and community. The use of tobacco products (including but not limited to cigarettes, cigars, pipes, water pipes, bidis, kreteks, electronic cigarettes, smokeless tobacco, snuff, chewing tobacco or all other tobacco products) is prohibited in university buildings, grounds, sidewalks, walkways, and university-owned property and applies to all students, faculty, staff, contractors, and visitors. For more information, visit: www.tobaccofree.utep.edu.

Course Resources

Where you can go for assistance: UTEP provides a variety of student services and support. Please refer to the QR code below for a listing of campus resources or visit https://www.utep.edu/advising/student_resources/student-success-resource-hub.html.



UTEP EDGE Experiences in Curricular Settings

NURS 2407: Pharmacology for Nursing

1. **Creative Activities:** Experiences that require students to create or participate in visual, literary, or performing art that integrates and applies what they have learned in a classroom setting.
 - a. **Assessment Through: Simulated Medication practice for Dosage Calculation and Pharmacology Concepts.**
 - i. In these assignments, students are required to:
 1. Identify the different components of the medication labels.
 2. Determine the route and form of the medications.
 3. Analyze and interpret simulated medication orders to ensure accurate dosage calculations.
 4. Demonstrate knowledge of basic pharmacological principles, including drug classifications, mechanisms of action, and indications.

UTEP EDGE Advantages in Curricular Settings

1. **Critical Thinking:** Students will analyze information from multiple relevant sources that reflect contrasting viewpoints and will articulate a well-reasoned conclusion or position.
 - a. **Assessment Through: Didactic Exams, Worksheets and ATI Dosage Calculation Modules.**
 - i. In these assignments, students are required to:
 1. Complete the ATI Dosage Calculation Modules. By completing the modules, students solve multi-step dosage calculation problems.
 2. Through worksheets, students identify potential interactions, discuss priority actions to take before and after giving drugs, discuss life-span considerations, and identify actions, side effects, and adverse effects of different medications.
 3. Through didactic exams, students are presented with different questions where they must apply their understanding of concepts related to pharmacology, pharmacokinetics, pharmacotherapeutics, dosage calculation, and pharmacodynamics of medication therapy.
2. **Problem-Solving:** Students will demonstrate their ability to identify a conflict or issue, analyze possible responses, and develop a plan to apply the most viable solutions.
 - a. **Assessment Through: Didactic Exams, Worksheets, Pharmacology Made Easy and ATI Dosage Calculation Modules**
 - i. In these assignments, students are required to:
 1. Through worksheets, the ATI Pharmacology made easy software, and ATI dosage calculation modules, students are presented with real-life patient scenarios. Students must integrate their pharmacology knowledge and dosage calculation skills to answer questions related to the scenario and analyze given information to determine if it's safe to administer the drug. The students can also discuss and apply information related to drug precautions, contraindications, interactions, and nursing implications in various disorders.

2. Through the didactic exams, students are presented with questions where they are required to problem-solve situations related to drug administration, such as drug reactions, identification of medication interactions, prioritization of interventions related to drug administration, patient teaching, and safe dose calculations.

Appendix B: Topical Outline

General Aspects of Pharmacology

- Drug Regulation, Actions, and Responses
 - Pharmacodynamics
 - Pharmacokinetics
 - Life Span Considerations
- Safely Preparing and Giving Drugs
 - Eight Rights of Safe Drug Administration
 - Types and Interpretation of Drug Orders
 - Preventing Drug Errors
 - Principles of Administering Drugs: Enteral, Parenteral, and Percutaneous

Mathematics in Pharmacology and Dosage Calculation

- Mathematics Review and Introduction to Methods of Dosage Calculation
- Medical Systems of Weights and Measures
- Dosage Calculation and Intravenous Solutions and Drugs
- Medication Orders and Interpretation of Medication Labels
- Dosage Calculation for Enteral Medications, Parenteral Medications, Infusion Therapy, and Special Populations

Anti-Inflammatory Drugs

- General overview of inflammation
- Corticosteroids
- Nonsteroidal anti-inflammatory drugs
- Antihistamines and Leukotriene inhibitors
- Disease-Modifying antirheumatic drugs

Drugs for Pain Control

- General issues related to analgesic drug therapy
- Opioids
- Nonopioid pain-control drugs
 - Acetaminophen
 - Nonsteroidal anti-inflammatory drugs
 - Antidepressants
 - Anticonvulsants
 - Muscle relaxants
 - Migraine medications

Anti-Infectives: Antibacterial Drugs

- General issues related to antibacterial therapy
- Antibacterial drug resistance
- Cell wall synthesis inhibitors
- Protein synthesis inhibitors
- Metabolism inhibitors
- DNA synthesis inhibitors

Anti-Infectives: Antiviral drugs

- General issues in antiviral and antiretroviral therapy
- Antiviral drugs
- Antiretroviral drugs

Anti-Infectives: Antitubercular and Antifungal Drugs

- General overview of tuberculosis and fungal infections
- First-line antitubercular drugs
- Drugs for superficial and systemic fungal infections

Drug Therapy for Diabetes

- General overview of diabetes
- Insulin therapy/Noninsulin antidiabetic drugs

Drug Therapy for Thyroid and Adrenal Gland Problems

- General overview of hypothyroidism and hyperthyroidism
- Types of thyroid hormone replacement drugs
- Types of thyroid-suppressing drugs
- Types of drugs for adrenal gland malfunction

Drugs that Affect Urine Output

- General issues related to diuretic therapy and overactive bladder
- Diuretics: Thiazide, Loop, and Potassium-Sparing
- Types of drugs for overactive bladder

Drug Therapy for Hypertension

- General issues for antihypertensive therapy
- Types of antihypertensive drugs
 - Diuretics
 - Angiotensin-converting enzyme (ACE) inhibitors
 - Angiotensin II receptor blockers (ARBs)
 - Calcium channel blockers
 - Beta blockers
 - Alpha blockers
 - Alpha-beta blockers
 - Central-acting adrenergic agents
 - Direct vasodilators

Drug Therapy for Heart Failure

- General issues in heart failure therapy
- Types of drugs used to treat heart failure
 - Antihypertensive drugs
 - Vasodilators
 - Cardiac glycosides
 - Human B-type natriuretic peptides
 - Positive inotropes
 - Other drugs used to treat heart failure

Drug Therapy for High Blood Lipids

- General issues for antihyperlipidemic therapy
- Types of Lipid-lowering drugs

- Statins
- Bile acid sequestrants
- Cholesterol absorption inhibitors
- Fibrates
- Nicotinic acid agents

Drugs that Affect Blood Clotting

- General issues for anticoagulant therapy
- Types of drugs that affect blood clotting
 - Thrombin inhibitors
 - Clotting factor synthesis inhibitors
 - Antiplatelet drugs
 - Thrombolytic drugs
 - Colony- stimulating factors

Drug Therapy for Asthma and Other Respiratory Problems

- General overview of asthma and COPD
- Types of drugs for asthma and COPD
 - Bronchodilators
 - Anti-inflammatory drugs
 - Combination bronchodilator and anti-inflammatory drugs
 - Mucolytics

Drug Therapy for Gastrointestinal Problems

- General overview of nausea and vomiting
- Antiemetic drugs
- General overview of constipation and diarrhea
- Types of drugs for constipation and diarrhea

Drug Therapy for Gastric Ulcers and Reflux

- General issues for drugs for PUD and GERD
- Types of drugs for PUD and GERD
 - Histamine H2 blockers
 - Proton pump inhibitors
 - Antacids
 - Cytoprotective drugs
 - Promotility drugs

Drug Therapy with Nutritional Supplements

- General overview of vitamins and supplements
- Enteral nutritional supplements

Drug Therapy for Seizures

- General overview of seizures and drug related issues
- Types of antiseizure drugs

Drug Therapy for Alzheimer's and Parkinson's Diseases

- General overview of Alzheimer's and Parkinson's disease
- Types of drugs for Alzheimer's disease
 - Cholinesterase/Acetylcholinesterase inhibitors and Memantine

- Types of drugs for Parkinson's disease
 - Dopaminergic/Dopamine agonists, COMT inhibitors, MAO-B inhibitors, and Anticholinergics

Drug Therapy for Psychiatric Problems

- General issues related to drug therapy for psychiatric problems
- Types of drugs for depression
- Type of drugs for anxiety
- Types of drugs for psychosis

Drug Therapy for Insomnia

- General overview of insomnia
- Drugs for insomnia

Drug Therapy for Eye Problems

- General issues for optic drug therapy and otic therapy
- Types of drugs for glaucoma
 - Prostaglandin agonists
 - Beta-adrenergic blocking agents
 - Alpha-adrenergic agonists
 - Cholinergic drugs
 - Carbonic anhydrase inhibitors
 - Rho kinase inhibitors

Drug Therapy for Osteoporosis, Arthritis, and Skeletal Muscle Relaxation

- General overview of osteoporosis, arthritis, and muscle spasms
- Types of drugs to manage or slow osteoporosis
- Types of drugs to manage arthritis
- Skeletal muscle relaxants

Drug Therapy for Male Reproductive Problems

- General overview of benign prostatic hyperplasia
- Types of drugs for benign prostatic hyperplasia
 - DHT inhibitors and Selective alpha-1 blockers
- Male hormone replacement therapy

Drug Therapy for Female Reproductive Issues

- General overview of menopause
- Types of perimenopausal hormone replacement drugs

See separate course calendar for specific dates for reading assignments and exams.