AUSTIN COMMUNITY COLLEGE
PHARMACOLOGY FOR HEALTH PROFESSIONS (ONL)
HPRS 2300

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Office Hours: EVC Building 9000 Room 9212
See website for current office hours

Additional staff contact information:
Students with questions about the course should contact their instructor. For other questions regarding the Allied Health Science Department (ALHS), students may contact:
Gaston Gomez, Administrative Assistant for ALHS
Phone: 512-223-5870
Email: ggomez1@austincc.edu

Course Time: - Online Videos or at the main campuses library -
- Available alternatively through video podcasts/video-streaming online

*The more time spent in this course, the better your chance for success.*

Course Overview

I. INTRODUCTION/COURSE DESCRIPTION:

A study of drug classifications, actions, therapeutic uses, adverse effects, methods of administration, client education, and calculation of dosages. This course is designed for Surgery Technicians, Nursing and Emergency Medical Service students. Skills: G

Prerequisites:
1. Human Anatomy or Human Physiology or Anatomy & Physiology: 4 credit hours with a grade of C or better
OR
pass the pre-Pharmacology assessment examination (equivalent of BIOL 2404)
2. TASP/THEA math: minimum score of 230
   OR
   COMPASS math: minimum score of 39
   OR
   Developmental math course higher than MATD 0330 with a grade of C or better

Note: TASP/THEA (TSI) exempt students need to provide proof of a Math course or Math Assessment.

Students not meeting the pre-requisites may be withdrawn from the course during the first week of the semester. Course Type: W

**Student Readiness:**
Skill: G, which is reading, writing, and math.

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**II. PLAN OF INSTRUCTION:**

**Mandatory:**

1. Orientation: Students must complete a mandatory orientation for this course. Failure to complete the orientation may result in the student being dropped from the course during the first week of the semester. Access orientation information by logging in to BlackBoard at [https://acconline.austincc.edu/](https://acconline.austincc.edu/) and reading the course announcements.


3. **ITV STUDY GUIDE:** Pharmacology for Health Care Professionals. (Instructor packet) –HPRS230028R1D - 28th Edition

4. **PHARMACEUTICAL DOSAGE CALCULATIONS WORKBOOK, 8TH EDITION (YELLOW PACKET), ISBN# HPRS 2300D8**

5. VIDEO TAPES of the lectures are available in the RVS, RRC, RGC, NRG, CYP, EVC, SAC and PIN Learning Resource Centers for all students to use.

6. Technological requirements: High speed, broadband internet access is required. This is available to students at ACC campuses.
7. Technological expectations: Students should be able to utilize ACC’s on-line Blackboard site. Blackboard may be accessed at: https://acconline.austincc.edu/

**Recommended:**

1. Medical Dictionary (*Taber’s Cyclopedic*)
3. Internet access for literature searches for assignments and checking of grades on blackboard.
4. Website: [www.library.austincc.edu](http://www.library.austincc.edu)
5. Support services link: In addition to any help students may receive from their instructor, students can also obtain help with their distance learning course at: [http://dl.austincc.edu/students/resources.php](http://dl.austincc.edu/students/resources.php)

**III. SCAN COMPETANCIES:**

Recently, the U.S. Department of Labor established the Secretary's Commission on Achieving Necessary Skills (SCANS) to examine the demands of the workplace and whether the nation's students are capable of meeting those demands. The Commission determined that today's jobs generally require competencies in the following areas:

**Resources:** Identifies, organizes, plans, and allocates resources.

**Interpersonal:** Works with others.

**Information:** Acquires and uses information.

**Systems:** Understands complex interrelationships.

**Computers:** Works with a CD-ROM for understanding dosage calculations.

**IV. LEARNING ACTIVITIES:**

1. ONL/Lectures on the video tapes/streaming/podcasts, the packet information, review questions, self-tests, and practice quizzes will include most of the information necessary to prepare for the
examinations. However, additional research may be necessary from resources other than lecture and the textbooks in order to answer review questions and practice quizzes.

2. **Review of anatomy and physiology** is necessary where applicable to specific body systems in order to understand pharmacodynamics and pharmacokinetics.

3. **Review questions** are provided to be a general guideline for information required on examinations.

4. **Review the self-tests** at the back of your study packet. These self-study tests are samples of the kinds of questions and concepts that will be evaluated by the examinations. However, you should not rely strictly on these self-tests in preparation for your exams.

5. **Review practice quizzes** that are online.

6. **Dosage calculations** will be covered in 2 class sessions. The Learning Lab will offer workshops and one-on-one tutoring to students. Workshop (Saturday) times will be scheduled and times posted on blackboard during or after the first week of classes. Student must sign up online through an ACC computer at the learning lab, library, media services, or a computer center. The web address is [http://www.austincc.edu/health/workshops/pharm/register.php](http://www.austincc.edu/health/workshops/pharm/register.php). The student must sign up in order to attend. If problems occur while registering, please call 223-5870 for assistance.

7. It is required to watch the tapes (programs) in the Library (Media Services) or through the Internet at home or on-campus, i.e. Video Streaming.

8. **Check Blackboard Weekly for Announcements. It is your responsibility to check this often as things may change during the semester.**

9. There will be a discussion board, or a student forum placed on the blackboard on-line site for the course.

**Directions to access Discussion Board or Coffee Break Room:**

You will notice that there is a tab, called: “Discussion Board” or “Communication”. When you click on it, it will take you to the coffee break room where you can chat amongst yourselves. You can start chatting with each other by clicking on “add new thread”. You are not to discuss any exam material on this board at all. This is only to ask other students general questions, due dates, and other miscellaneous information pertaining to the course. I will not be participating in this
coffee break room, it is strictly for you, but I will check it periodically to see the content that is discussed. If you have specific questions that cannot be answered by another classmate or is not responded to, please email me directly. If you are email directly from blackboard, please include your email on the document of the email.

My email is: respinos@austincc.edu and indicate the type of class that you are in.

**Coffee Break Room**

This is a forum designated for students to interact with one another in a less formal environment. Students may post questions that their classmates may be able to answer in order to successfully complete this course. I will not be posting to this forum. It is solely for student interaction. When using any BlackBoard communication tool, students are expected to respond to each other in mutually respectful tones and to limit their discussions to topics appropriate to the class and a learning environment.

**Audio**

There is an AUDIO PORTION to the course in each of the units. This contains important announcements and information regarding the unit of study. Course updates will also be discussed.

V. **COURSE RATIONAL:**

This course is designed to help the Health Science student to become familiar with drug use and therapy needed for their practice as a health care professional. This course is also designed to help students solve basic and advanced dosage calculation problems needed in the health arena.

VI. **COURSE OBJECTIVES:**

**UPON COMPLETION OF THIS COURSE, THE STUDENT SHOULD BE ABLE TO:**

1. Define the basic terminology associated with Pharmacology.
2. Define the legislative laws regulating Pharmacology.
3. Interpret the use of common pharmacological equivalents and abbreviations.
4. Compute basic and advanced dosage calculation problems.
5. Describe normal physiological conditions within the body.
6. Describe the pathophysiology of certain disease processes.
7. Discuss the mechanism of action of major classifications of drugs.
8. State the uses of major drug classifications in treating certain disease processes.
9. State the side effects associated with each major classification of drugs.
10. Discuss appropriate patient teaching in regards to specific drug therapy Classifications.
11. Apply the drug therapy information used to treat certain disease processed.

VII. TESTING REQUIREMENTS:

A. **Six unit examinations** are required. A grade must be recorded for each of the six unit exams in order to receive a final course grade.

B. **Three dosage calculations** exams are required, with a minimum-passing grade of 80% on each to attain the PASS requirement for the course. Two additional exams will be available, if needed, after the first three have been taken. Failure to attain 80% on three of the five available calculations will result in a FAIL on this course requirement. This will result in a failing grade of “F” for the entire course. **These exams will be submitted online through BlackBoard at an ACC Testing Center.**

C. **All unit exams** are online and are to be taken in the testing center on or before their due dates. **All dosage calculations exams** are to be taken in the testing center on or before their due dates. The exams will be available in all of the testing centers (RVS, NRG, RGC, CYP, PIN, EVC, SAC, SMG, RRC, and FBG).

D. Regardless of the circumstances, if a unit lecture exam is missed, a make-up exam will be offered at the end of the semester. This make-up exam can only be taken at the ACC EVC Testing Center. **This exam is not online.** The exam will
be comprehensive, covering material from ALL units; and will replace the missed exam. See schedule for details of date.

E. **No retakes** on any unit or dosage exams will be allowed.

F. For students who do poorly on a test and want to improve their in-class lecture exam points, there will be an optional comprehensive make-up exam. **This exam is not online.** The grade made on this exam will replace the lowest grade and will be included when calculating course grade as stipulated in the course syllabus under the "grading." If a student takes the comprehensive make-up and the score is lower than the lowest test grade, the comprehensive make-up exam will be still be used in determining the student's final course grade. Make-up exam will be given at EVC testing center at the end of semester. No exceptions.

G. Students will be given only one opportunity to exercise this make-up exam option. If a student misses two exams, the make-up exam will replace the missed exam and the other exam will become a zero.

H. **Basic calculators may be used** on the dosage calculations exams.

I. All 5 calculations exams are of equal difficulty. Each exam will cover the entire dosage calculations worksheet/workbook, and dosage calculations section in purple packet. Each exam is different only by the questions asked and numbers used. Each exam covers the same amount of material.

J. **Students will complete blackboard-BB (on-line) quizzes by their due dates for part of the course grade. BB on-line quizzes will not be accepted late. There is a 20 minute time limit for each quiz. It must be submitted by 11:55pm in order to be accepted. No exceptions.**

K. The six theory unit exams represent 600 points or 83% of course grade. Blackboard quizzes, **including pre-quiz over orientation information** will represent 98 points or 15% of course grade. There will be two homework assignments worth 2%. The homework must be submitted online through BlackBoard. No late work will be accepted. Please check schedule for details.

L. If using US mail to submit extra credit, send to: Austin Community College, Eastview Campus, 3401 Webberville Rd Austin, Texas 78702, **Attention: Dr. Espinosa** If using intercampus mail at EVC, please use the homework drop box located on the second floor of the health science building. Please
stamp it and place it in the box. Be sure to include your name and mine on your assignment.

M. **It is the student’s responsibility to keep up with dates that exams are scheduled.** Refer to the attached proposed class and testing schedule.

VIII. GRADING:

A. The **final course grade** will be determined by an average of the unit exams and the “pass/fail” rating on the dosage calculations exams.*

B. Grading grid for this course is as follows:

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>720-644</td>
<td>A</td>
<td>with a “pass” on dosage calculations</td>
</tr>
<tr>
<td>643-572</td>
<td>B</td>
<td>with a “pass” on dosage calculations</td>
</tr>
<tr>
<td>571-500**</td>
<td>C</td>
<td>with a “pass” on dosage calculations</td>
</tr>
<tr>
<td>499-428</td>
<td>D</td>
<td>with a “pass on dosage calculations</td>
</tr>
<tr>
<td>&lt;428</td>
<td>F</td>
<td></td>
</tr>
</tbody>
</table>

*Pass on the dosage calculations exams is defined as an 80% on three of the five dosage exams available to the student. This average is not a part of the final course grade . . . only a pass/fail grade is derived from these exams.

C. Student must attain a passing point accumulative on the unit exams and blackboard on-line quizzes in order to successfully complete the course.

D. Instructions on checking grades on Blackboard: Please see attached.

Remember the grades will be entered 7 days from the last due date for that particular examination. (No earlier.)

**The minimum grade that will be accepted for credit in any of the Health Science programs at Austin Community College is “C”.

IX. COURSE POLICIES:

1. **Discipline Policies**

   Students are responsible for withdrawing themselves from class. Students who do not progress satisfactorily, and do not keep up with the deadlines are responsible for their withdrawal. If the
student is failing and does not withdraw, the student will be assigned an F. No retroactive withdrawals.

**See current course schedule for final withdrawal date.**

Incompletes are given at the discretion of the instructor if the student has completed the first four lecture exams of the course with passing average with two attempts on dosage calculations.

The student needs to keep up with the schedule and test due dates, as this is very essential in order to become a responsible health practitioner.

My class notes will NOT be available to the students for copying.

Remember, Pharmacology is a whole new language. A new language requires a lot of time and effort to learn.

2. **Academic Dishonesty**
   Acts prohibited by the college for which discipline may be administered include scholastic dishonesty, including but not limited to cheating on an exam or quiz, plagiarizing, and unauthorized collaboration with another in preparing outside work. Academic work submitted by students shall be the result of their thought, research or self-expression. Academic work is defined as, but not limited to tests, quizzes, whether taken electronically or on paper; projects, either individual or group; classroom presentations, and homework.

   The penalty for academic dishonesty is an automatic failing grade of "F" in the course. If the student withdraws from the course after the offense, the instructor will re-instate and the failing grade given as stated.

3. **Students with Disabilities**
   Each ACC campus offers support services for students with documented physical or psychological disabilities. Students with disabilities must request reasonable accommodations through the Office for Students with Disabilities on the campus where they expect to take the majority of their classes. Students are encouraged to do this three weeks before the start of the semester.
X. **OTHER MISC. INFORMATION:**

This class is relatively fast pace so the student should study every day and not just before the exam.

**Student Concerns:** Any student who has a complaint involving the course should first attempt to resolve the matter with the instructor directly involved. If the student is unable to resolve the complaint with the instructor, the student must follow the procedure stated in the student handbook in an attempt to resolve the matter.”

Remember, not everybody knows everything there is to know about drugs and Pharmacology, therefore, there will be times when reference books are needed and questions asked will be answered next class period, if there is even an answer.

**Instructor response times:**
Students should expect a response to emails from the instructor within 24-48 hours if the message is sent during the work week (Monday through Friday). If you have not heard back from the instructor after 48 hours, please re-send the email.

Grades for assignments should be posted with 7 days of the instructor’s receipt of the exam/assignment. If you have taken an exam or submitted an assignment and do not see your grade posted on BlackBoard after 7 days, please contact the instructor.

*Please check BlackBoard online for grades.*

**Dosage Calculations Exam Reviews:** For students wanting to see what kinds of problems missed on their dosage exam, the student will need to contact the instructor via email to obtain a form that will list the types of problems missed. This form will be given to the learning lab specialist by the student at the instructor designated campus for review.

Check fliers for dates of available individual dosage calculations specialists. The specialist will review dosage calculations with the student.**
XI. HINTS FOR SUCCESS IN PHARMACOLOGY FOR HEALTH PROFESSIONS:

- Keep up with assignments. Do all assigned reading and practice calculations according to schedule. Playing “catch-up” is very difficult. Watch all Video Lectures!

- Get help early with dosage calculations if needed. Workshops and individual tutoring is available in the Learning Lab for students having difficulty.

- Answer all review questions in detail. This will provide the majority of information needed for the unit exams.

- Practice all on-line quizzes, as this may represent very important concepts for Blackboard quizzes and unit exams.

- Plan to take exams early and do not wait until the last date. Remember . . . emergencies do happen at the most inopportune times. Exams must be taken on or before their due dates . . . NO EXCEPTIONS!

- Allow sufficient time to take exams. If you read slowly, allow ample time to read and understand exam questions before attempting to answer.

- Complete the two homework assignments by their due dates.

- Be sure to have essential equivalents memorized before attempting the dosage calculations exams. It is impossible to convert dosage problems if the proper equivalents are not known.

- REMEMBER . . . You have an instructor who is willing to help you if you need some extra assistance. If office hours are not convenient, the instructor can refer you to someone that should be able to help with the problem you may be having with the course.

- Student needs to practice the self-test questions at the end of workbook packet purchased for the course. Working through this will give the student “concepts” that will be beneficial in preparing for the exam.

XII. IMPORTANT INFORMATION NEEDED FOR TAKING UNIT EXAMS

1. Go to the testing center at any campus with your current ACC ID.

2. Ask for the HPRS 2300 –dosage or lecture exam you wish to take.
3. For the Unit Exams #1-6, you will take these **online** on a computer through blackboard as the primary option. If a computer is not available, you will be given a Red Scan-tron by the testing center as a back up. This method should only be used when the online option is not available.

4. On Exams II-VI: is where you will start to match the drugs to the appropriate classification and answer general (multiple choice, matching and true/false) questions.

5. All answers, such as, bonus, listings, or calculations should be submitted through the online exam. Exam #1 will include 2 dosage problems and the work for these problems should be included on your scratch paper provided by the testing center.

6. **“Important”**
   I recommend when you receive your exam that you attempt the drug matching section first, which is usually the first page of the exam. Once you have completed the drug portion of the exam, continue answering the general questions until you finish the exam.

7. Exam #1 does not have any drugs to match. Do not forget to answer the Bonus questions on all Exams.

**Note:** The student for Exams #2-6 needs to spend ample time learning the generic or brand name of the drug and be able to match the drug to the appropriate classification because this represents anywhere from 15-30 points one each exam. Drug classification is very essential component in this course.

**XIII. EXAMPLES OF A LEARNING TOOLS:**

Instruction for Processing Drug Cards:  *Beneficial for exam preparation!
- These sets of cards are to help you study the drugs for the matching section on each exam #2-6.
- These cards are not to be turned in.
- Buy about 200 3x5 note cards and include on 1 side on the card the following:

  Side 1: 
  1) Drug "Brand" name 
  2) Drug MOA

  Side 2: 
  1) Generic Name 
  2) Classification of Drug

Use this to learn the drugs and their classification. This makes a good study tool.
XIV. COURSE MATERIAL EDITS--READ PRIOR TO EACH EXAMINATION—ALSO AVAILABLE UNDER AUDIO PORTION OF EACH UNIT

Unit 1:
Exam #1 correction:
The lecture says to read about pregnancy safety categories on page 83. The textbook has changed. Please define these categories by using pages in your current textbook or internet.

Unit 2:
Exam #2 information: The lecture tape says that there is going to be a short answer on the exam. That has been changed to a multiple choice question for less points.

Video # 10: Atrovent is discussed as a steroid on the video, it actually belongs to the drug class of anti-cholinergics. It is not a steroid.

Unit 3
Exam #3 information: The lecture tape says that there is going to be an essay question on Cancer. That essay question has been changed to a multiple choice question.

Unit 4:
Exam #4 information: The classification of blood pressure chart will be provided on the examination for your use. Practice the quiz online on interpreting blood pressure results.

Unit 5:
Exam #5 information: The lecture tape says that there is going to be a calculations problem on the exam. That has been changed. There will not be a calculation problem.

Video#22: The diagnoses of GAD, one had to be worried about 2 or more life events for a period of at least 6 months. This is correctly stated in the packet and mentioned in error on the video.

Unit 6:
Exam #6 information: There will be no short essay question on the exam.

Video #25 and 26: There are miscellaneous medications discussed in this video. These drugs are not associated with diabetes. They were not
discussed in detail in the course, but will be seen in clinical practice. This is where I choose to discuss these medications.

**Important!!!!**
Starting with Unit 2-6: Both names of the drugs will be provided on the exam regardless what the video tape series mentions. The students job will be to match the drug (brand or generic) given to the appropriate classification.

**Study Packet changes:**
I have inserted several more notes and drug names that are not mentioned on the tapes. You are responsible for the additional information that is not found on the tape in an effort to keep current with the drug information. Also, additional references have been added to your appendix of your packet to supplement your homework assignments. You may have to use additional reference books to find your answers, when applicable.
These are required homework assignments for this course.

The first assignment is on unapproved abbreviations that are causing errors in the hospital. Please use your packet appendices to answer the homework assignment. You will find this on BlackBoard in the Assignments folder in a sub-folder titled "Homework Assignments." Please submit your answers by the deadline listed in the class schedule. Do not wait until the last minute to do this homework assignment.

The second homework assignment is on general and local anesthetics. The due date is also posted on the class schedule. To complete the assignment, refer to appendices pages toward the back of your packet, as well as outside resources. This assignment is also located in the "Homework Assignments" sub-folder in the Assignments folder on BlackBoard.

These assignments may only be submitted through BlackBoard. These assignments can be saved and resumed later. However, be sure to click Submit once you have completed the assignment to ensure that it is graded and not considered late. Assignments can be submitted beginning today. Students are NOT allowed to submit assignments via email or fax. Assignments submitted after the due date are considered late and will not be graded - NO EXCEPTIONS!