Health Sciences 2240
Introduction to Pharmacology

Course Description

Welcome to Health Sciences 2240, Introduction to Pharmacology. In this course you will be introduced to the names and uses of the major classes of drugs. Although we are not going to go into great depth on drug mechanisms of action or side-effects, we will study the historical context in which they were developed and came to be used as medicines, and where they generally “fit” in clinical medicine. You will notice that we will use examples of medicines that are frequently used or advertised in our culture. You will soon be able to make evidence based “informed” decisions on which medicines to use by acquiring the skills to determine validity and distinguish “manure from minutia.”

Course Prerequisites

Background courses in Medical Terminology (such as HTHS 1101) and/or Anatomy & Physiology (such as HTHS 1105 and 1106, HTHS 1110 and 1111, LS ZOOL 1020, LS ZOOL 2100), though not required, are recommended.

Course Materials


Course Objectives

We will be concentrating our studies on recognizing the names and basic actions of prominent drugs within the most important drug classes. The class work is divided into modules, which are taught sequentially. Key concepts of the science of pharmacology are presented in the first two modules. Module 3 covers some drug categories with overarching application to multiple body systems. Module 4-6 cover drugs by organ systems, with emphasis on medication utilized in diagnosing and treating diseases associated with those organs.

Each module will have: Learning Objectives, Material to Read from the text, Drugs you need to know list, Slides from the Syllabus, a Module Quiz, and a Module Exam.

This class will meet the needs of various groups of students in the following way:

- **Medical Coders.** It is also the purpose of this course to assist students in interpreting the medical record document for purposes of diagnostic and procedural coding. Those enrolled in HAS programs will need to know the names of multiple drugs from the classes of drugs commonly used by health care practitioners. The new ICD-10 codes often ask for not only primary, by secondary diagnoses for
diseases, and drug therapy will often indicate the severity of the problem, and the level of care being rendered.

- **Athletic Trainers.** Those students in Bachelor’s and Master’s athletic training programs will need a good understanding of many varieties of drugs that are used to treat common musculoskeletal injuries as well as on-the-field emergencies. A holistic understanding of human health is better mastered, and the synergy between physical and medical therapies is better understood by students who bring a basic understanding of drug therapy to integrate with more advance physical therapy techniques.

- **Students of Nursing and other Allied Health Professions.** This class will give you a foundation for taking the more advanced pharmacology classes which come early in your professional programs. Before an understanding of choices of drug applications, drug side effects, drug interactions, and therapeutic outcomes can be grasped, students must first be facile with the categories and uses of the major pharmaceuticals.

- **Applicants for Postgraduate Professions.** Those applying to Pharmacy School, Medical or Dental Schools, and Physician Assistant Programs will be better prepared to cope with the voluminous amounts of information they will be required to learn in short order. As with preparatory classes in Human Gross Anatomy and disease (pathophysiology), foundational knowledge in pharmacology will greatly facilitate your transition to the rigors of graduate school, and establish a basis for future training. Successful completion of this class will also strengthen the candidate’s application.

- **For all students.** For anyone who plans on becoming a Mom or a Dad, or just wants to be able to do more, feel better, and live longer .... I promise you that you will be able to favorably effect your life and those that you serve. The understanding of pharmacology will have direct application in your life as well as your future career.

**Course Layout**

The class has ben set up in Canvas in a way that allows you to work at a steady pace that will take you through all the material by the end of the semester. There are set deadlines for all quizzes and exams. A student may “work ahead” if they desire, but getting behind will result in loss of points if quizzes and exams are not taken by the due date.

Each semester we will cover 6 modules which will be worked sequentially. In the layout of each module you are given: lists of drugs you need to learn (Drugs you need to know list), as well as directions for completing your chapter readings and syllabus slides. You may take your exams on the schedule outline in the calendar – or take them early if you want. Neither the quizzes nor the exams are comprehensive... they test on the material in the respective module. You will accrue pints in the class as follows:

1. Completing an open book, 25-point quiz for each module. You will have 120 minutes to take the quiz, which you can do at any computer, 10 – 25 questions, depending on the module. They each have a due date which is listed in the calendar and you may take it twice, with the highest score being counted. The quizzes are
meant to give you practice (that’s why you can do them twice and keep the better score) before you take the exam. Once the quiz is closed, it cannot be reopened. If you miss a quiz, you will lose the points for that quiz... watch the calendar... do not miss quizzes.

2. Module Exams. At the completion of each of the modules (and after the module quiz, hopefully) you will take an exam (dates listed in the calendar) consisting of 50 questions worth 100 points, mostly multiple choice. The exams are based on the stated learning objectives for the module. These objectives encompass the material in your chapter reading assignments and in the syllabus slides. You will have 100 minutes to complete the tests, which should give you plenty of time – should you need more because of a disability please contact me and we will make special arrangements. Unlike the quiz (which is open-book and can be taken at home), the exams are closed-book and must be taken in a testing center under supervision of testing center personnel or your proctor. You are not allowed to view any notes, electronic devices, or extraneous material (including other webpages) during the exams. Any violation of testing policy will result in failing the exam and a report will be sent to the Dean of Students. Don’t let cheating ruin your reputation and your professional career. Treat this material and these exams as competency thresholds necessary to practice your profession, and for the good of your future patients. The best way to excel on the exams is to know the material on the syllabus slides and the drugs you need to know list.

Testing and Exams:

Taking a Test: To take an examination you must be properly enrolled in the class and have your Wildcat user ID or another picture ID. Testing is computerized on Chi Tester. Chi Tester is a software program that we use in our testing centers, and it also enables online students to take tests over the Internet once a password has been entered by the proctor. Please visit the Chi Tester website login with your Weber ID and password, and you’ll find a section marked “For Students” and a “First Time Visitors” link that will connect you to information about the testing program. Make sure you take the correct exams. For example, the first exam is labeled “HTHS 2240 Exam 1 Orrock.” After an exam, the score will be transferred from the Chi Tester testing program (used in the testing center) into the grade book Canvas.

Disputing a Test Question: At the conclusion of each examination, while you are still in the testing center, your score will be immediately available and you will be able to review the questions you missed. This will be the only time you will be able to review any part of the exam. If you would like to discuss a particular question with me, note the “instructor’s number” (not the number on your particular test) and send it in an email from the testing center. You don’t need to try to explain in the email your frustration with the question, just send the number(s). Later, after you get home and look at your material, if you still have a problem with a test question then email me in Canvas, and I will discuss this with you further.

Exam Schedule: To view the due dates for your tests (along with your grades, the course calendar, emails and announcements), students will need to access the Canvas Learning Management System via the WSU student portal. After accessing the website, choose “current
students” a “my courses” a “click here to go to class.” You are encouraged to log into Canvas daily to check for emails and also to keep a close eye on the course calendar page for specific dates when exams and assignments are due. Each module exam can only be taken one time – you cannot retake any of the exams to try to improve your score. Missed Exams: If you miss the due date for an exam you will still be able to take it for one additional week. * By department policy, however, anyone taking an exam late will incur an automatic 10-point penalty. Any and all reason for missing a test deadline are considered “valid,” and notes and/or excuses are not important – what is important is that this policy will give you some leeway to work around your situation, and get you back on track. It is also important that those students who manage to take exams on time have their efforts rewarded. This policy accomplishes both goals.

If you are the type of person who is prone to have “unforeseen” circumstances or events happen to you, then you should plan ahead to take your exams a little earlier versus the absolute last day of the testing period. This will give you a little extra time just in case that “emergency” does come up. Thinking this way is a skill that can be practiced and developed. Planning for contingencies is an “executive decision making skill,” and the behaviors that result from it are just as important to master in college as the skills that allow you to recall content information during an exam. As with quizzes, once an exam is closed it cannot be reopened.

For students who live within a 50 miles of WSU, all exams will be taken at a WSU Testing Center. The most commonly used testing sites are in the Student Services Building, Lampros Hall, the Learning Center (MH 111 in the Dumke College of Health Sciences), and the Davis Campus. It is your responsibility to check the hours of operation for the testing site at which you plan to take the exam. For hours and locations, please visit WSU Testing Center. I am told that they don’t give any exams after posted hours and distribute the final exam one hour prior to closing.

Those of you living outside the 50-mile radius will take online proctored tests (see below). Proctored exams need to be arranged, by you, through WSU online: click on the “FAQ” and then “How do I take TESTS.” Once you read the brief instructional blurb, click on “Learn More about WSU Online Testing.” When you are ready, go to the following link ChiTester to set up a proctor. Don’t delay in getting this done, it is your responsibility to have this all set up in time to meet the testing deadlines!

**Grading**

When computing your final grade your percentage score will be assigned a letter according to the following formula:

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<th>Percentage</th>
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<tbody>
<tr>
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<td>93-100%</td>
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<tr>
<td>A-</td>
<td>90-92%</td>
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<tr>
<td>B+</td>
<td>86-89%</td>
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<tr>
<td>B</td>
<td>83-85%</td>
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<tr>
<td>B-</td>
<td>80-82%</td>
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<tr>
<td>C+</td>
<td>76-79%</td>
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<td>C</td>
<td>73-75%</td>
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<tr>
<td>C-</td>
<td>70-72%</td>
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<td>D+</td>
<td>66-69%</td>
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<td>D</td>
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<td>D-</td>
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Extra Credit

Near the end of the semester there is a 10-point extra credit writing assignment in which you are asked to visit a pharmacy and write about a class of drugs of your choosing; the extra credit assignment information is in the Module 6 folder. Without exception, this writing assignment is the only opportunity for extra credit in this class, so please don’t ask.

Health Sciences Cheating Policy

WSU Health Sciences Department treats all instances of cheating with the utmost level of seriousness and recognizes all WSU students as adults pursuing their education, and as adults, students are considered responsible for their actions. Students are subject to the cheating policies, codes, definitions, and sanctions established by Weber State University (PPM 6-22), by the Ezekiel R. Dumke College of Health Professions, by other departments, and by the Health Sciences Department. The Health Sciences Department has full right to investigate any work given for credit if they suspect a cheating incident has occurred, usually emphasized by extensive test taking time, or any proctor (remote or local) concerns. Specific Health Sciences sanctions typically apply to cheating during a test or cheating on class assignments. For additional definitions of cheating by the Health Sciences Department standards, please see http://www.weber.edu/HealthSciences/resources/cheating.html.

Know, that the cheating policy will be enforced by the Department of Health Sciences and the University as follows:

1. Warning - If a student is suspected of cheating, a warning may or may not be given, in verbal or written form, to the student(s) that his or her conduct is in violation of Weber State University rules and regulations; and that the continuation of such conduct or actions may result in further disciplinary action.
2. Failure of the Course - A student found cheating will receive an "E" (failure) and no credit for the course will be given. In addition, a report of the student's name, class, behavior, action, and resulting disciplinary measures will be sent to the Dean of Students to be included in the University's database; and a report will be sent to the departments connected to the student(s) within the Dumke College of Health Professions and the University.

The simplest and best policy is DO NOT CHEAT! In the world of medicine and healthcare, there is no tolerance for unethical behavior of any kind. It is the Health Sciences Department goal to prepare students for work in the medical field. Therefore, the Department's treatment of unethical behavior is severe and will most likely limit students' chances of pursuing healthcare programs.

Cell Phones

Phones and texting during class, I ask that you leave your cell phones off.
Course Content Disclaimer

You are enrolled in a health science course which is specifically tailored to prepare you for a professional career in the Health Care industry. For that reason, you should not be surprised by presentation of personal and sensitive issues such as AIDS, birth control, reproduction, teenage pregnancy, sexually transmitted diseases, sexual dysfunction, and related issues. We in the Health Sciences Department endeavor to present this information in a professional manner.

Student Services

Any student requiring accommodations or services due to a disability must contact WSU Services for Students with Disabilities (SSD) in Room 181 of the Student Services Center. SSD can also arrange to provide course materials (including this syllabus) in alternate formats if necessary.