

Pharmacology 203 General Pharmacology
3 credits CRNs 64246, 64248 and 64403 (online)

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EFFECTIVE DATE: Spring 2017

**Don't take it to
the table 'til
you read the
label.**

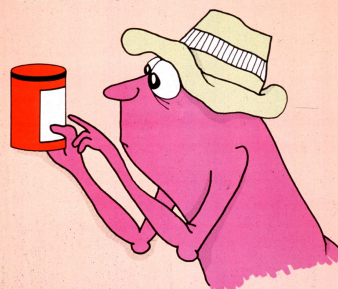


Image from the National Library of Medicine Archive

WINDWARD COMMUNITY COLLEGE MISSION STATEMENT

Windward Community College offers innovative programs in the arts and sciences and opportunities to gain knowledge and understanding of Hawai'i and its unique heritage. With a special commitment to support the access and educational needs of Native Hawaiians, we provide O'ahu's Ko'olau region and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment — inspiring students to excellence.

CATALOG DESCRIPTION

This course is intended for students in nursing and allied health fields. It covers a wide range of drugs with emphasis on sites and mechanism of action, toxicity, fate and uses of major therapeutic agents.

*Prerequisites: Grade of "C" or better in ZOOL 141 and ZOOL 142.
Recommended Preparation: College level chemistry.*

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Activities Required at Times Other Than Class Times

1. Self study
2. Assignments
3. Extra credit

STUDENT LEARNING OUTCOMES

The student learning outcomes for the course are as follows:

1. Describe the basic mechanisms of drug action.
2. Demonstrate knowledge of the terminology and special concepts useful in the study of pharmacology.
3. Describe how differences between individuals govern their response to drugs.
4. Define how drugs are processed and biotransformed by the body.
5. Identify frequent complications and side effects associated with the major drug classes.
6. Describe significant interactions between drugs
7. Use information from the pharmacokinetics of a specific drug to determine dosing schedules and best route of drug administration.
8. State the therapeutic uses for each major drug group.

Additionally, WCC recognizes four General Education Learning Objectives that can only fully be achieved by completing a variety of courses. PHRM 203 strives to fulfill outcomes related to the following General Education Learning Objectives. To learn more about these objectives, go to the WCC home page and search for General Education Mission Statement or General Education Student Learning Outcomes, or click [HERE](#).

1. Critical Thinking and Creativity
2. Communication
3. Information Literacy
4. Global and Cultural Awareness

COURSE CONTENT

Concepts or Topics

- Pharmacokinetics
- Pharmacodynamics
- Drug discovery and development
- Regulatory controls
- Drug label information
- Drug hazard warnings
- Uses and abuses of pharmaceuticals
- Medication errors
- Patient education

Skills or Competencies

1. Identify the use of a given drug
2. Identify warnings for a given drug
3. Pronounce generic names covered in class
4. Recognize stems and what they mean
5. Identify the class of a given drug
6. List & explain variables affecting therapeutics
7. Conduct online searches for drug label information

COURSE TASKS

INSTRUCTIONAL METHODS FOR THE ONLINE COURSE REQUIRE A HIGH DEGREE OF SELF-MOTIVATION:

1. Lecture –understand PowerPoint lecture material.
 - a. You will have options, you may choose to:
 - i. Read the assigned text book chapters (required)
 - ii. Listen to the recorded audio OR videos of the lectures (these are optional)
 1. Most students find it most helpful to listen to the recorded materials, then read the text.
2. Interactive sessions – may include pronunciation drills of drug names.
3. Self-study – assigned reading, memorizing drug names (using flash cards or other techniques), completing SLO practice sets in the Lulima tool called Assignments, Tests and Surveys.
4. Quizzes and Examinations – complete quizzes online as well as midterm(s) and a final exam.
 - a. Quizzes are online in Assignments, Tests and Surveys (ATS).
 - You may take these anywhere with a hardwired internet connection (**NO WIRELESS DEVICES**, this is a course policy).
 - No proctor required
 - 10 matching items, see START HERE announcements in Lulima for details
 - b. Exams (midterm and final) are online in ATS.
 - Must be taken in a proctored testing center.
 - You must **notify the instructor a minimum of two weeks prior to the exam, which testing center you will be using**. If you are using a non-UH testing center, it is the student's responsibility to provide contact information and follow through to ensure that the testing center receives test instructions.

This course is semi-self-paced through the corresponding University of Hawaii academic semester. It is **STRONGLY** recommended that you follow the chronological order of topics as listed in the general schedule of lectures found in this syllabus. This will make it easier for you to keep up with the frequent quizzes.

The course materials that are cataloged in the “Course Index” of the PHRM 203 Laulima website will be available to you for the duration of the semester (except timed items such as extra credit). This allows you to return to materials if you want to review them, or to cover them in a different order. **AGAIN**, it is strongly recommended that you keep to the schedule posted.

Understand that **IT IS NOT EASIER** to take PHRM 203 online than it would be to take the course in the traditional classroom setting. In fact, unless you are very organized and self-motivated, you may find it very difficult to continually make the effort not only to memorize all the drug names, but to also learn about the kinetics and dynamics we cover.

If any student emails me a question or a concern, I make a practice of availing all other students of my reply (with identifying information redacted). I generally check my UH Email a few times a day and normally respond within 48 hours at the latest. Most questions will be addressed within 24 hours, except on Sundays and Holidays. All replies are made through the email in Laulima or posted as announcements. **Check the announcements often.**

Students are expected to check their email daily during the week and login at least three times/week during the Spring or Fall semesters and at least five times/week during the Summer Sessions. If you don't respond to emails or login over a prolonged period (one week), then I will assume you intend to drop the course.

What makes a successful online student?

- Writing and computer skills are critical for success,
- You must have reliable and essentially unlimited access to a computer and the internet.
- You must be willing to speak up **IMMEDIATELY** if problems arise. I most certainly do not have ESP and won't know if you don't email me. You cannot let things slide and hope for the best.
- You must be self-motivated and highly disciplined. It is completely on you to keep up and stay on track.

ATTENDANCE

Attendance is required to PHRM 203, whether you are taking it face-to-face or online. It is absolutely essential that you log on to the PHRM 203 Laulima site **a minimum of three times per week** to read all the lecture and assigned materials. If there are public discussions, it is essential that you read these as well. Your participation **ON A WEEKLY BASIS** is not only **required**, it is an essential aspect of the online course process. All students are expected to do the assigned work and to notify the instructor, by email, when emergencies arise.

ASSESSMENT TASKS AND GRADING

EXAMINATIONS

ALL TIMES, FOR QUIZZES, EXAMS, OR ANY OTHER MATERIAL, INCLUDING DUE DATES, ARE HAWAII STANDARD TIME. MAKE SURE YOU ARE AWARE OF TIME DIFFERENCES IF YOU ARE NOT IN HAWAII FOR THE TERM!

Quizzes are worth 10 points each. Total value may be as high as 250 points. For the summer session, quizzes may be grouped per the schedule and be worth 20 points each since they will cover two lectures. Quizzes are open for two days and you have one opportunity to take the quiz in ATS. They are timed, depending on the material – 5 minutes for drug names; 10 minutes for quizzes that require matching phrases.

The quizzes are an assessment of the student's ability to recall drug names from the previous reading assignment and lecture. Quizzes are online. They are timed, generally 10 questions, and matching. **Each quiz will only be available during the week matching the schedule. Details will be provided in the START HERE announcements. There are no make-up or retakes on quizzes. Quizzes will only be reset if there is a DOCUMENTED issue with Laulima, if you are using a wireless device, do not (DO NOT) ask for a reset.**

The midterm exam will be worth 300 points. The final exam will be worth 500 points. Exams are multiple-choice, and based predominantly on the Student Learning Objective (SLO) questions you will find in ATS. 75% of exam questions are verbatim from the SLO questions; the remaining 25% consist of a mix of new and rewritten questions. Each question will be worth 1- 2 points.

These exams require the student to demonstrate knowledge and understanding of information and concepts presented in lecture, reading assignments, worksheets and other handouts, as well as information presented from internet resources.

Online participants are required to schedule a time to take the proctored midterm and final at their home campus Learning Resource/Testing Center. You must notify the instructor of your testing center choice. If you are NOT taking the exams at a UH Testing Center, you MUST NOTIFY THE INSTRUCTOR THREE (3) WEEKS PRIOR TO THE EXAM WITH THE TESTING CENTER INFORMATION (INCLUDING EMAIL ADDRESS AND CONTACT NAME). Failure to timely request an alternative testing center location may result in the test not being available. It is the student's responsibility to inform the instructor of any changes in testing center details. Click on the following link to go to the list of [UH testing centers](#). In order to take the exam, you will need to bring a photo ID. The exams will be available for two days each, per the schedule, and are timed in Lulima for the same duration as a normal class exam. All exams are CLOSED BOOK and NO NOTES or SMART DEVICES are allowed. Watch the START HERE announcements for instructions.

ASSESSMENTS AND ASSIGNMENTS

There is a simple assignment during the 1st week of class worth a total of 10 points. You are asked to complete an Introduction forum posting, which must be free of extraneous formatting text (you must use the Lulima pasting tools if you copy from a word processing program).

The total for all examinations and activities (quizzes, assignments and exams) will be **approximately 1000 points**.

There may be approximately ten (10) extra credit opportunities worth 10 points each. There is no "make up" or "late" work accepted for the extra credit assignments. You will have access to the materials needed to complete the extra credit through a link at the bottom of the "Course Index" in Lulima and they will be announced in the weekly START HERE announcement. Make sure to check Assignments, Tests and Surveys for due dates as NO LATE WORK IS ACCEPTED. All submissions will be through Assignments, Tests and Surveys in Lulima. Reminders about the extra credit assignments will appear in the START HERE announcements. Some of the EC are "fussy," if you can't figure it out, DON'T DO THAT EC.

Examples of potential extra credit opportunities:

1. Reading an assigned topic and completing a questionnaire.
2. Listening to an assigned recorded interview and completing a questionnaire.

METHOD OF GRADING

GRADING SCALE

Percentage	Grade
90-100	A
80-89.9	B
70-79.9	C
60-69.9	D
59 OR BELOW	F

Grades are based on a percentage of the total points (EC is added in separately) so the student may use the above grading scale as a **guide** to evaluate their performance throughout the class. **The points total varies each semester.** Lulima does not separate out the extra credit points from the point total and so gives you a false sense of your grade. MIDTERM GRADES ARE NOT CALCULATED FOR THE STUDENT. It is your responsibility to keep track of your progress. A points tally sheet is provided (link is accessed from our Lulima start page), but you must edit it to reflect the activities offered during the semester you take the course.

If you miss an examination because of an illness or legitimate emergency, you must contact the instructor **within 48 hours** to arrange a time to take a make-up exam. The instructor may request that the student present evidence of the illness or emergency that caused the student to miss the exam. If the student misses an exam for any other reason, the student may be prohibited from taking a make-up exam, thus failing to receive any points for the missed exam. While make-up exams will cover the same content area as a missed exam, the exam format and specific questions may be different. **No retests will be given for any reason. Quizzes may not be retaken, taken late or made up.**

Make up exams will be given at the Library Resource Center or your home campus Testing Center by arrangement. You will need a photo id in order to take the exam. Some testing centers require an appointment, it is up to you to establish the guidelines for the testing center you will be using.

ACADEMIC DISHONESTY

Students involved in academic dishonesty will receive an "F" grade for the course.

Academic dishonesty includes cheating on exams and plagiarism. See page 15 of the 2015-2017 WCC course catalog for a description of the University's policies concerning academic dishonesty and student conduct code.

LEARNING RESOURCES

ONLINE PARTICIPANTS ARE REQUIRED TO HAVE ACCESS TO A COMPUTER AND PRINTER.

Additional technical requirements:

1. Ability to access and use Laulima.
 - a. There is a specific Laulima website for this course which contains course information, announcements, lecture outlines, assignments, links to other websites, the syllabus and other learning resources.
 - i. You MUST have the ability to access and use online resource materials through the course website in Laulima including the lecture materials and recorded resources (videos and audio recordings).
 - b. You automatically have access to the PHRM 203 online course website when you enroll.
 - c. To access the PHRM 203 Laulima site, go to <https://laulima.hawaii.edu/portal> and log in using your UH username and password. Once in, click on the PHRM 203 tab.
2. Ability to navigate and use the internet.
3. Ability to navigate and use common word processing and presentation software such as Microsoft Word and PowerPoint.
4. Must have Adobe Reader, QuickTime player and a compatible audio player (such as Flip4Mac if you are using an Apple) installed on your computer.
5. You must have access to a hard internet connection (NOT WIRELESS) while taking the quizzes. Quizzes will NOT be reset if Laulima times you out or your wireless connection drops you.

Required text: PHARMACOLOGY Connections to Nursing Practice, 2nd or 3rd edition. Adams & Urban. Pearson. 2013 (2nd Edition) or 2016 (3rd Edition).

Required: Most recent edition of Nurse's Drug Guide. Pearson produces a good one, but any one will suffice.

These texts are available:

1. At the WCC bookstore
2. Online, at Pearson's website a hard cover text or eText
 - a. The text book: <http://www.mypersonstore.com/bookstore/product.asp?isbn=9780132814423>
 - b. The Drug Guide: <http://www.mypersonstore.com/bookstore/product.asp?isbn=0132964899>

Assigned reading will be posted weekly in the START HERE announcement.

Lecture notes (copies of PowerPoint presentation slides) will be provided in the **"Course Index" of the PHRM 203 Laulima site (see the left side navigational menu on our start page)**. They will be organized in folders containing resources for each lecture including the PowerPoint slides (as PDFs), any handouts or background materials (usually as PDFs), audio of the lecture (as WMA files), short videos covering power points (MOV files), a drug list if appropriate (a PDF), a set of SLO review questions (PDF) and a fact sheet that summarizes the information from the lecture (a PDF). The hard copy of the SLO review questions is OLDER than the version

online in Assignments, Tests and Surveys (ATS). Always use the ATS version to study for exams. Links to the lecture notes, drug lists and SLO questions will be in the weekly START HERE announcement.

Online flash cards are available at StudyBlue <http://www.studyblue.com/#>. To use, go to <http://s.tudy.it/tw23frp> join and use the class code 284977 to access the cards. Either link should take you to their website. Additional online flash cards are available through FlashCardMachine (<http://www.flashcardmachine.com>) and the specific links are embedded in the “Course Index” pages for each lecture.

The weekly START HERE Announcement will have links to these resources organized to get you through the material in a logical manner. There may be additional resources in the START HERE announcements and topical information including administrative instructions. You will find Camtasia recordings of the lectures in the START HERE announcements.

In addition, we use a number of online resources in our study of pharmaceuticals. You should become familiar, at a minimum, with these listed here (the links will not work in the PDF version of the syllabus, you will need to use your browser to search for these):

1. Drugs.com
 - a. www.drugs.com/pro
2. Food and Drug Administration (FDA)
 - a. [FDA \(www.fda.gov\)](http://www.fda.gov)
 - b. For [Health Professionals](#)
 - c. [Drug Shortages](#)
 - d. [MedWatch](#)
 - e. [Recalls](#)
 - f. [Medication Errors](#)
 - g. More [Medication Errors](#)
 - h. [Continuing education](#) on Medscape
3. Drug Enforcement Administration (DEA)
 - a. [Controlled Substances Act](#)
 - b. [Drug disposal days](#)
 - c. [Drug fact sheets](#)
4. National Institutes of Health (NIH)
 - a. [Clinical Trials](#) Information (clinicaltrials.gov)
 - b. [Dailymed](http://dailymed.nlm.nih.gov/dailymed/about.cfm) (a drug database, <http://dailymed.nlm.nih.gov/dailymed/about.cfm>)
5. Institute for Safe Medication Practices (ISMP)
 - a. [Error Prone Abbreviations](http://www.ismp.org/tools/errorproneabbreviations.pdf) (<http://www.ismp.org/tools/errorproneabbreviations.pdf>)
 - b. [Drug Name Suffixes](http://www.ismp.org/tools/drugnamesuffixes.pdf) (<http://www.ismp.org/tools/drugnamesuffixes.pdf>)

Course “Geography” and Procedures, Access and Navigation

To get started with the course, go to [Laulima](#). You will need your student ID and password to log into [Laulima](#). If you don’t know your ID number or have forgotten your password, contact Tech. Services by clicking on the “Student Help” tab on the Laulima log in page. If you are new to the system, this “Student Help” tab also has information, including videos, on using Laulima.

PHRM 203 is divided into 6 “Units” (Introduction, Nervous System, Endocrinology, Cardiovascular, Microbiology & Parasites, and finally “Other”). Each unit covers several chapters in your text and from 2-11 lectures. Endocrinology is the shortest unit, while the Nervous System is the largest. In Laulima, under the “Course Index” navigation tab, you will find links with the names of each of the units. When you click on the link, a page will open and you will find links to the resources described in the previous section. A calendar is available to print in Laulima (See the Administration section at the top of the Course Index home page), but you will need to pay attention to the “Announcements” in Laulima and read all emails to learn of any changes to the schedule, including due dates, assignments, or changes to materials. **Read the weekly START HERE Announcement!**

The weekly START HERE Announcement will identify, in order, all the tasks you need to complete for the week. The START HERE announcements are posted on the FRIDAY PRECEEDING the relevant week. It will tell you which lectures are being covered as well as any assignments, changes in assignments, due dates and hints for upcoming exams. **Read the weekly START HERE Announcement!**

On the general course schedule, at the end of the syllabus, you will find the assigned textbook reading. You should keep your *Nurse's Drug Guide* handy as you study so that you may quickly look up relevant information. You should allot a minimum of 45 minutes per chapter. Some of the end-of-chapter questions from the book are adapted for exam questions. Make sure you take a look at those questions.

After reading, or scanning, the assignment, and listening to the audio of the lecture (while studying the PowerPoints), you should now be ready to answer the SLO review questions. The audiotapes are approximately 1 hour in length and recorded from Face-to-face lectures. The videos are generally less than 15 minutes each. The Camtasia's generally are 30-60 minutes. You do not need to listen to the audio and watch the video; you may choose one. Depending upon how much information you need to review, the SLO questions should take 30-60 minutes per lecture to complete.

Actually learning the material and memorizing the drug names, classes and important details should occupy the rest of your time. Expect to spend a minimum of 2 hours per lecture performing these tasks.

Lastly, take the quiz by going to the "Assignments, Tests and Surveys" link on the PHRM 203 Lulima site. The quizzes are 10 matching "questions" and are timed (5 minutes). If you have memorized the drug names, that is plenty of time. The quizzes are only available during the week of the matching lecture per the schedule, so if you choose to do the materials out of order, **MAKE SURE YOU DON'T MISS THE RELATED QUIZ**. For the purposes of this course, a week starts on Monday and ends on Sunday at midnight (Hawaii Standard Time). The total points from the quizzes will be at least $\frac{3}{4}$ of the midterm, so these easy points should not be thrown away by missing quizzes.

If you find that you have any trouble keeping up with assignments or other aspects of the course, make sure you let your instructor know as early as possible. As you will find, building rapport and effective relationships are key to becoming an effective professional. Make sure that you are proactive in informing your instructor when difficulties arise during the semester so that I can help you find a solution. **You may contact your instructor through the email link on our Lulima Home Page (just click on my name), or by posting a Chat message.**

Additional Information

STUDENT RESPONSIBILITIES

The student is expected to attend lectures, participate in all course activities, and complete all quizzes, examinations and course assignments on time (**no late work accepted**).

Any changes in the course schedule, such as lecture order, examination dates, deadlines, etc., will be announced ahead of time on the course website ("Announcements" in Lulima). It is the student's responsibility to be informed of these changes. It is also the student's responsibility to be informed about deadlines critical to making registration changes (e.g., last day for making an official withdrawal).

It is the student's responsibility to be aware of all due dates and important administrative dates (e.g., last day to withdraw).

It is the student's responsibility to keep track of their scores. Midterm grades will not be calculated.

It is the student's responsibility to inform the instructor of their selected UH testing center at least two weeks prior to any exam and three weeks if the testing center is outside of the UH system.

HOW TO SUCCEED IN THIS CLASS

Although you will be given lecture outlines, you will not succeed in this class without listening to lecture audio recordings and taking detailed notes. Science courses at WCC generally require **a minimum of two to three hours of independent study time for each hour in class**. **Just because this course is online, you should not expect to devote less than the 8-10 hours per week expected of students in a face-to-face section.** It is your responsibility to allocate the appropriate amount of time needed for study and be realistic about all personal and professional commitments that may cut into your study time.

Do not make the mistake of assuming that because the materials are online, it will somehow be easy to catch up. IT

WON'T BE. Create a schedule for yourself and STICK TO IT.

As part of your studies, you will need to understand a veritable *mountain* of medical and anatomical terms, most of which will probably be foreign to you (e.g., cholinergic receptors, agonists and antagonists, hyperlipidemia, and post-synaptic potential). One way to learn these vocabulary words is to make flash cards to quiz your self. Online versions of PHRM 203 drug name flashcards are available for your use, too (see the “Resources” section above). Flash cards are most helpful to learn the drug names, uses, and warnings. You will have handouts listing important abbreviations used in class that you are also expected to learn.

Answering the “SLO Review” questions located at the end of each lecture can be a helpful way to learn new vocabulary and concepts. Be warned: Merely knowing the *definitions* of vocabulary words or the names of drugs will be of little use if you do not know the pharmacology. This means, that in addition to vocabulary, you will be expected to have a firm understanding of the basic physiological mechanisms regulating drug pharmacokinetics and pharmacodynamics.

HOW TO FAIL THIS CLASS (As in: how to not do well and get a poor grade).

1. Purchase the textbook and drug handbook, but don't bother reading them until just before an exam. *Trust me, you won't retain a thing. To read why, check out this link: http://msun.edu/grants/eoc/pdf/Principles_of_Memory.pdf*
2. Don't log in frequently. *Funny thing about Lulima, it tracks your participation, so I can see how often you log on....*
3. Wait until the last day to participate in any online discussions. *It's too late.*
4. Forget about deadlines, thinking that if you miss a quiz, an exam or an assignment (including extra credit) that either the task will go away or I'll let you make it up. *The due dates for the online course will not change once the semester starts. Make sure you are clear on when things are due. Track due dates in Assignments, Tests and Surveys (ATS).*
5. Ignore emails from the instructor advising you to drop the class if you are failing.
6. Don't get familiar with the syllabus, Lulima and the grade book.
7. Put off the easy things to improve your grade like the quizzes and extra credit. *Once those opportunities pass, they are gone. Emergencies can happen at any time and if you aren't prepared, you won't have a cushion to keep you afloat.*

DISABILITIES ACCOMMODATION STATEMENT

If you have a physical, sensory, health, cognitive, or mental health disability that could limit your ability to fully participate in this class, you are encouraged to contact the Disability Specialist Counselor to discuss reasonable accommodations that will help you succeed in this class. Ann Lemke can be reached at 235-7448, lemke@hawaii.edu, or you may stop by Hale 'Akoakoa 213 for more information.

GENERAL LECTURE SCHEDULE (SUBJECT TO CHANGE)

Drug lists are included with each lecture, starting in the 4th week with the PNS lecture.
 “Week” indicates actual instructional weeks and does not account for holidays; lecture order may change.

General Schedule for 16 Week sections

Section	Week	Lecture	Chapter in 2 nd Ed. of the text, 3 rd Ed in START HERE Announcements....
Introduction and Background Basics	1.	Introduction	<ul style="list-style-type: none"> Chapter 1 (Intro) Chapter 2 (Drug Regulations) Chapter 3 (Drug Administration) Chapter 8 (Substance abuse)
		Therapeutics	<ul style="list-style-type: none"> UNIT 2 (see video overview) Chapter 6 (ADRs) Chapter 7 (Medication Errors)
	2.	Kinetics	Chapter 4
		Dynamics	Chapter 5
Nervous System	3.	CNS Basics & Neurotransmitters	<ul style="list-style-type: none"> Chapter 16 Chapter 21
		Peripheral Nervous System	<ul style="list-style-type: none"> Chapters 17 & 18 for cholinergic lecture Chapters 19 & 20 for adrenergic lecture
	4.	Autocoids	Chapters 47 & 48
		Pain and Inflammation	<ul style="list-style-type: none"> Chapter 29 (Severe Pain & Migraines) for Opioids Chapters 44 & 75
	5.	Sedatives Hypnotics, Antidepressants, Antipsychotics	Chapters 22-24.
		Anesthetics	Chapter 30 (Anesthetics)
	6.	Neurodegenerative Diseases	Chapters 25-28
		Endocrine (Unit 10 in text)	<ul style="list-style-type: none"> Chapter 67, 68 & 70-72 for 1st lecture Chapter 69 (Diabetes mellitus) for 2nd lecture.
Endocrine	9.	CV1: Hypertension	Chapter 31, 33-37 (scan, read as needed)
Cardiovascular	10.	CV2: Angina	Chapter 38 - 40
		CV3: Lipids	Chapter 32, 41.
		Micro1: Bacterial basics, UTIs, BPH, Acne	Chapters 49, 52 & 53
Antimicrobials	11.	Micro 2: Protein Synthesis Inhibitors	Chapter 51
		Micro 3: Cell wall synthesis inhibitors	Chapter 50
	12.	Micro 4: Quinolones, Antiprotozoals	Chapters 54 & 56
		Micro 5: Antiparasitics, Antifungals	Chapters 55 & 56
	Other	13.	Respiratory Tract Drugs
Antivirals			Chapters 57 & 58
14.		Gastrointestinal Drugs	Chapters 61 - 63
		Cancer	Chapters 59 & 60
15.	Herbs, Supplements & Vitamins	Chapters 15 & 64	

SUMMER SCHEDULE, NEXT PAGE...

General Schedule for 10 Week (SUMMER) sections

Section	Week	Lecture	Chapter in the 2 nd edition of the text
Introduction and Background Basics	1.	Introduction	<ul style="list-style-type: none"> Chapter 1 (Intro) Chapter 2 (Drug Regulations) Chapter 3 (Drug Administration) Chapter 8 (Substance abuse)
		Therapeutics	<ul style="list-style-type: none"> UNIT 2 (see video overview) Chapter 6 (ADRs) Chapter 7 (Medication Errors)
		Kinetics	<ul style="list-style-type: none"> Chapter 4
Nervous System	2.	Dynamics	<ul style="list-style-type: none"> Chapter 5
		CNS Basics & Neurotransmitters	<ul style="list-style-type: none"> Chapter 16 Chapter 21
	3.	Peripheral Nervous System	<ul style="list-style-type: none"> Chapters 17 & 18 for cholinergic lecture Chapters 19 & 20 for adrenergic lecture
		Autocoids	<ul style="list-style-type: none"> Chapters 47 & 48
		Pain and Inflammation	<ul style="list-style-type: none"> Chapter 29 (Severe Pain & Migraines) for Opioids Chapters 44 & 75
	4.	Sedatives Hypnotics, Antidepressants, Antipsychotics	<ul style="list-style-type: none"> Chapters 22-24.
		Anesthetics	<ul style="list-style-type: none"> Chapter 30 (Anesthetics)
	5.	Neurodegenerative Diseases	<ul style="list-style-type: none"> Chapters 25-28
		MIDTERM	
	Endocrine	6.	Endocrine (Unit 10 in text)
Cardiovascular	CV1: Hypertension		<ul style="list-style-type: none"> Chapter 31, 33-37 (scan, read as needed)
Antimicrobials	7.	CV2: Angina	<ul style="list-style-type: none"> Chapter 38 - 40
		CV3: Lipids	<ul style="list-style-type: none"> Chapter 32, 41.
	8.	Micro1: Bacterial basics, UTIs, BPH, Acne	<ul style="list-style-type: none"> Chapters 49, 52 & 53
		Micro 2: Protein Synthesis Inhibitors	<ul style="list-style-type: none"> Chapter 51
		Micro 3: Cell wall synthesis inhibitors	<ul style="list-style-type: none"> Chapter 50
Other	9.	Micro 4: Quinolones, Antiprotozoals	<ul style="list-style-type: none"> Chapters 54 & 56
		Micro 5: Antiparasitics, Antifungals	<ul style="list-style-type: none"> Chapters 55 & 56
		Respiratory Tract Drugs	<ul style="list-style-type: none"> Chapters 47 & 48
	10.	Antivirals	<ul style="list-style-type: none"> Chapters 57 & 58
Gastrointestinal Drugs		<ul style="list-style-type: none"> Chapters 61 - 63 	
			<ul style="list-style-type: none"> Chapters 59 & 60
			<ul style="list-style-type: none"> Chapters 15 & 64
COMPREHENSIVE FINAL LAST DAY OF CLASSES			

Due dates for extra credit assignments and other assorted schedule information and deadlines pertinent to class will be posted in the weekly START HERE announcements in Lualima. All schedules for this class are subject to change. Make sure to frequently check your UH email, or the Lualima PHRM 203 website, for announcements.

Updated on 12 December, 2016