

UConn Faculty Coordinators:

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Instructor Information:

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Course Materials:

Students do not have to purchase a textbook to participate in this course. There are “think about this” questions after each lecture for self-reflection and “Jeopardy-style games” before each of the three exams that students can navigate on their own to gauge their knowledge attainment and to extend their knowledge.

Course Description:

Pharmacists, physicians, veterinarians, dentists, physician assistants, nurses, physical therapists, and others either prescribe drugs, recommend drug therapy, or manage patients who are using drug products. This means that students interested in biomedical careers would benefit from understanding the basic principles of how different drug classes work with the body’s cells and organ systems to help treat diseases or disorders. This can not only support students interested in pursuing biomedical careers but also students interested in summer jobs/volunteer opportunities in community pharmacies, veterinarian offices, hospitals or medical offices. This course is designed to familiarize students with the fundamental concepts of pharmacology, regardless of the health profession they are interested in. The content empowers students to identify how drugs are formulated, how they work in the body, some of the main drug classes, and the main drugs within those classes. We touch upon different careers in pharmacy but there is a guide that goes into much greater depth than we can cover in this course [PPA eBook Pfizer Career Guide 2024 Aug2024.pdf](#)

Course Instructional Map

This is a foundational knowledge course. The foundational objectives are to do one or more of the following: Demonstrate foundational knowledge (pathophysiology, basic drug action, common effects) in the prevention and/ or treatment of commonly encountered conditions.

Objectives: Upon the completion of this course the successful student will be able to:

Course learning objective(s)	How objective(s) is/are taught	How student learning is measured/assessed
Differentiate the active and inactive ingredients in a finished pharmaceutical product and how they are named.	Lecture and Self-Assessment Questions	Multiple Choice Examination
Identify the important pharmacokinetic parameters of a drug and how different dosage forms, liver function, and the kidney function impact the parameters.	Lecture and Self-Assessment Questions	Multiple Choice Examination
Describe how to properly write a prescription in a medical, dental, or veterinarian practice and how to fill it inside a community pharmacy	Lecture and Self-Assessment Questions	Multiple Choice Examination
Identify common generic names of the finished pharmaceutical products covered in this course along with the basic mechanisms of action of their drug classes.	Lecture and Self-Assessment Questions	Multiple Choice Examination
Compare and contrast the roles and responsibilities for different types of pharmacist jobs.	Lecture and Self-Assessment Questions	Essay

Course Requirements and Grading

Summary of Course Grading: How points are earned:

There will be 3 non-cumulative multiple-choice exams in the course, one cumulative final on the drug classes and generic names only, and one essay.

Exam 1: 20 points = 20% of final grade

Exam 2: 20 points = 20% of final grade

Exam 3: 20 points = 20% of final grade

Final Exam: 20 points = 20% of final grade

Essay: 20 points, 20% of final grade

Grade	Letter Grade	GPA
93-100	A	4.0
90-92	A-	3.7
87-89	B+	3.3
83-86	B	3.0
80-82	B-	2.7
77-79	C+	2.3
73-76	C	2.0
70-72	C-	1.7
67-69	D+	1.3
63-66	D	1.0
60-62	D-	0.7
<60	F	0.0

Remediation:

This course does not offer remediation.

Missed and late assessment policy

Students are strongly encouraged to begin assignments well before the deadline to allow sufficient time to address last minute glitches and/or issues that emerge. Students are encouraged to be proactive and plan accordingly. Please contact your course coordinators in advance if you're running into difficulty.

Exams

1. All exams will be administered on HuskyCT using best practices
<https://kb.uconn.edu/space/TL/10731881590/Taking+a+Test+in+HuskyCT>
2. Missed exams without prior approval will result in an automatic failed grade. Requests for a makeup exam will be granted only with prior approval from the course coordinators (Drs Banker-Murphy and White) for extenuating circumstances, emergencies, or exam conflicts. Please notify them as far in advance as possible.
3. Exams will be timed with no backwards navigation.
4. The final exam will cover all the material from exams 1-3 in the course that reside in the clearly marked green shaded tables. A review of the exam preparation Jeopardy games is strongly recommended to refresh your memory of key concepts.

Essay

- Your essay must be 2 pages long (12-point Font Times Roman) with your name, Net ID #, and current major at the top in the heading with the page numbers. You must answer the following questions:
 - Why did you decide to take this course?

- Were you aware of the complexities surrounding drug formulation and how drugs work in the body?
- How are the career options (community, hospital, clinical, industry) for pharmacists similar, how are they different, and how do they relate to the importance of using pharmacologic principles?
- The paper must be turned in by the last day of week 14 (Saturday at 11:30 pm) and submitted under the discussion board section of HuskyCT.

Weekly Time Commitment:

- Establish a comfortable study space to complete course work. Schedule consistent “course work time” into your routine. For a two credit in person course, [University policy](#) stipulates that students should expect to spend up to 6 hours per week for mastery.

Topic Schedule

Session	Date	Topics covered	Instructor
1	Wk 1	Principles of Drug Formulation https://uconn-cmr.webex.com/uconn-cmr/ldr.php?RCID=aa010a6ae49ae086775cce847b583642	White
2	Wk 1	Principles of Prescription Writing and Filling https://uconn-cmr.webex.com/uconn-cmr/ldr.php?RCID=4000d257fa6568b578887d93b0dd95b5	White
3	Wk 2	Principles of Pharmacokinetics https://uconn-cmr.webex.com/uconn-cmr/ldr.php?RCID=41fa7453490c995dd02a6e284b2bd5d9	White
4	Wk 2	Principles of Drug Interactions https://uconn-cmr.webex.com/uconn-cmr/ldr.php?RCID=27ee6c99cc7f0d3fb376b02db6bd9859	White
5	Wk 3	Principles of the Pharmacist Patient Care Process https://uconn-cmr.webex.com/uconn-cmr/ldr.php?RCID=b85d24a16e6d509a5183d5cc5c90464b	White
6	Wk 3	Principles of Homeostasis https://uconn-cmr.webex.com/uconn-cmr/ldr.php?RCID=133dbbad9263bf3f1c990e30885898c0	White
7	Wk 4	Review Game for Sessions 1-6	Hernandez
8	Wk 4	Examination 1 (sessions 1-6)	White
9	Wk 5	Drugs that Lower Blood Pressure https://uconn-cmr.webex.com/uconn-cmr/ldr.php?RCID=f2a31cfaf81c22c2b8a3fb2516931a59	White
10	Wk 5	Drugs that Lower Blood Lipids https://uconn-cmr.webex.com/uconn-cmr/ldr.php?RCID=26ff927bc53aa654baac34d44ebfd544	White
11	Wk 6	Drugs that Impact Bleeding https://uconn-cmr.webex.com/uconn-cmr/ldr.php?RCID=878408353f0bbe9163f3e98f1d6d0ec5	White
12	Wk 6	Performance Enhancing Drugs https://uconn-cmr.webex.com/uconn-cmr/ldr.php?RCID=fbe1a3f48afe07176ab9ff41bbce859d	White
13	Wk 7	Drugs that Impact Gastrointestinal Functioning (Reflux, Ulcers, Gallstones, and Pancreatic Enzymes) https://uconn-cmr.webex.com/uconn-cmr/ldr.php?RCID=16803905610f6d814b9f2de6f0b5aa01	White
14	Wk 7	Drugs that Impact Gastrointestinal Functioning (Nausea, Diarrhea, and Constipation) https://uconn-cmr.webex.com/uconn-cmr/ldr.php?RCID=eb90b9d60021acddb00819424eac9f53	White
15	Wk 8	Review Game for Sessions 9-14	Hernandez
16	Wk 8	Examination 2 (sessions 9-14)	White
17	Wk 9	Drugs that Impact Blood Glucose https://uconn-cmr.webex.com/uconn-cmr/ldr.php?RCID=cf57dade4436c709e017b19ca4cc9569	White
18	Wk 9	Drugs that Impact Inflammation https://uconn-cmr.webex.com/uconn-cmr/ldr.php?RCID=60295ba22ab9774df95bca0dbfd98ef2	White

19	Wk 10	Drugs that Impact Pain Sensation https://uconn-cmr.webex.com/uconn-cmr/ldr.php?RCID=60295ba22ab9774df95bca0dbfd98ef2	White
20	Wk 10	Drugs that Impact Allergy, Cough and Cold, and Asthma https://uconn-cmr.webex.com/uconn-cmr/ldr.php?RCID=bf61bd2470c89488043ab12c51e79959	White
21	Wk 11	Drugs That Impact Sleep https://uconn-cmr.webex.com/uconn-cmr/ldr.php?RCID=17c7dd6717a3e7425c8d06bda499bf57	White
22	Wk 11	Drugs That Impact Anxiety, Depression, and PTSD https://uconn-cmr.webex.com/uconn-cmr/ldr.php?RCID=0a1e48418af4d00909c63ac8835f1358	White
23	Wk 12	Drugs that Impact Bacteria, Viruses, and Fungus Webex meeting recording: Pharmacology Course https://uconn-cmr.webex.com/uconn-cmr/ldr.php?RCID=a7016ffa683769227d7acc33b4235b15	Hernandez
24	Wk 12	Drugs That Impact Cancer https://uconn-cmr.webex.com/uconn-cmr/ldr.php?RCID=fa62b40fedc7f9862d110f0e52469ad0	Hernandez
25	Wk 13	Review Game for Sessions 17-23	Hernandez
26	Wk 13	Examination 3 (sessions 17-23)	White
27	Wk 14	Recorded Panel on Pharmacology in Clinical Practice https://uconn-cmr.webex.com/uconn-cmr/ldr.php?RCID=1d551d14a7ac343914de7f2c1a973276	White and Hernandez
29	FINALS	Cumulative Final Examination and Final Essay Due	White

Resources/Policies

Academic Integrity

You are responsible for acting in accordance with the [University of Connecticut's Student Code](#) and the [Policy on Academic, Scholarly, and Professional Integrity and Misconduct](#). Review and become familiar with the expectations. In particular, make sure you have read the section that applies to you on Academic Integrity. Students in this course are expected to maintain the highest standards of intellectual honesty. Any cheating on an examination will result in a zero grade for that examination.

Student Authentication: Students will have to validate that they are completing course work. This will be done through the recording feature during the examinations which will be compared versus a picture that the student will submit of their Student ID in the first week of classes and the NetD and login that they use to access course content and the examinations.

Student Expectations: To uphold the principle of academic and scholarly integrity in all aspects of their intellectual development and engagement at the University, students are expected to:

- be responsible for their own work and their own actions related to all academic and scholarly endeavors.

- assume they are to do independent work and seek clarification prior to collaborating with others or using outside resources.
- understand and abide by the standards, protocols, and guidelines to which they must adhere in research, creative, or professional activities.

If students witness or become aware of a violation of academic or scholarly integrity, they are encouraged to communicate this to the appropriate university representative (e.g., faculty, staff, advisor).

A cumulative record is maintained of all academic or scholarly integrity violations and such a record will be reviewed and considered as part of subsequent incidences.

Avoiding Plagiarism: As a student, it is your responsibility to avoid plagiarism and meet University expectations related to [academic integrity](#). The University of Connecticut Library recommends the following resources for students to understand and avoid plagiarism:

[Understanding Plagiarism](#), a tutorial from UConn Library

[Citing Sources](#), a UConn guide to introduce citing MLA, APA styles and more

[Citation Machine](#), interactive citation tool for MLA and APA styles

[KnightCite](#), interactive citation tool for MLA, APA, and Chicago styles

[Assignment Calculator](#), interactive tool that provides a timeline for writing

[Research QuickStart](#), guidance on common questions and needs in the research process

[Research Now](#), guides to help you develop your research skills

Copyright: Copyrighted materials within the course are only for the use of students enrolled in the course for purposes associated with this course and may not be retained or further disseminated.

Student Use of AI in the Course

You may use AI programs e.g. ChatGPT to help streamline the learning process to extract key points or explain difficult concepts in more understandable terms to aid incomprehension or organize a study schedule for more efficient use of your time. However, you should note that the material generated by these programs may be inaccurate, incomplete, or otherwise problematic. Beware that use may also stifle your own independent thinking and creativity.

You may not submit any work generated by an AI program as your own. If you include material generated by an AI program, it should be cited like any other reference material (with due consideration for the quality of the reference, which may be poor).

Any plagiarism or other form of cheating will be dealt with severely under relevant UConn policies.

Student Recording of Course Content

Students may not record any class activity without written permission from the instructor, *except as necessary as part of an approved accommodation*. Please remember that the unauthorized recording or sharing of course content may be considered a violation of the law, University policy, and/or The Student Code.

Resources for Students Experiencing Distress

The University of Connecticut is committed to supporting students in their mental health, their psychological and social well-being, and their connection to their academic experience and overall wellness. The university believes that academic, personal, and professional development can flourish only when each member of our community is assured equitable access to mental health services. The university aims to make access to mental health attainable while fostering a community reflecting equity and diversity and understands that good mental health may lead to personal and professional growth, greater self-awareness, increased social engagement, enhanced academic success, and campus and community involvement.

Students who feel they may benefit from speaking with a mental health professional can find support and resources through the [Student Health and Wellness-Mental Health](#) (SHaW-MH) office. Through SHaW-MH, students can make an appointment with a mental health professional and engage in confidential conversations or seek recommendations or referrals for any mental health or psychological concern.

Mental health services are included as part of the university's student health insurance plan and also partially funded through university fees. If you do not have UConn's student health insurance plan, most major insurance plans are also accepted. Students can visit the Student Health and Wellness-Mental Health located in Storrs on the main campus in the Arjona Building, 4th Floor, or contact the office at (860) 486-4705, or <https://studenthealth.uconn.edu/> for services or questions.

Extended Absence

If life circumstances/illness are affecting your ability to focus on courses and your UConn experience, and an extended absence may be necessary, students should email the course coordinators to request support.

Students with Disabilities

The University of Connecticut is committed to protecting the rights of individuals with disabilities and assuring that the learning environment is accessible. If you anticipate or experience physical or academic barriers based on disability or pregnancy, please let me know immediately so that we can discuss options. Students who require accommodations should contact the Center for Students with Disabilities, Wilbur Cross Building Room 204, [\(860\) 486-2020](tel:8604862020) or <http://csd.uconn.edu/>.

Course instructors will refer a student requesting accommodations to the CSD if formal notification has not been received regarding accommodations from the CSD.

If a faculty member or other teaching professional believes an approved accommodation constitutes a fundamental alteration of the class objectives or program technical standards, and if the CSD agrees that the accommodation as approved would constitute a fundamental alteration of the class objectives or program technical standards, then the CSD will work with the student and faculty member to find a suitable solution.

Processes and procedures defined by CSD for students and instructors to follow are available on the [CSD website](#).

Specific to CSD approved exam accommodations:

- If it is determined between the course coordinator and the student that they should take their exams at the CSD, the student is responsible for submitting an exam request through their CSD MyAccess account at least 7 days in advance of the exam in class. Late requests are not guaranteed.
- Once they receive the syllabi, students can begin submitting their requests for the entire semester. We encourage students to proactively submit their scheduling requests as space at the CSD is limited.
- Students should schedule their exams for the same date/time as the class whenever possible. Students must get instructor approval to take an exam on an alternate day/time than the class, prior to submitting their request through MyAccess.
- If a student misses the 7-day cutoff, students may contact the CSD to gain access to a Late Request Form. Once submitted, the CSD will review the request.

Policy against Discrimination, Harassment, and Inappropriate Romantic Relationships

The University is committed to maintaining an environment free of discrimination or discriminatory harassment directed toward any person or group within its community – students, employees, or visitors. Academic and professional excellence can flourish only when each member of our community is assured an atmosphere of mutual respect. All members of the University community are responsible for the maintenance of an academic and work environment in which people are free to learn and work without fear of discrimination or discriminatory harassment. To that end, and in accordance with federal and state law, the University prohibits discrimination and discriminatory harassment, as well as inappropriate romantic relationships, and such behavior will be met with appropriate disciplinary action, up to and including dismissal from the University. Refer to the [Policy against Discrimination, Harassment and Inappropriate Romantic Relationships](#) for more information. To protect the campus community, all non-confidential University employees (including faculty) are required to report assaults they witness or are told about to the [Office of Diversity & Equity](#) under the [Sexual Assault Response Policy](#). The University takes all reports with the utmost seriousness. Please be aware that while the information you provide will remain private, it will not be confidential and will be shared with University officials who can help. Refer to the [Sexual Assault Reporting Policy](#) for more information.