

# Syllabus Fall 2021

## PHRM 201, Introduction to Pharmacology, 3 Credit Hours

### Course Director: Karen Lounsbury, PhD, Professor of Pharmacology

Contact: Formal contact by e-mail [karen.lounsbury@med.uvm.edu](mailto:karen.lounsbury@med.uvm.edu)

Office: HSRF 320 (office appointments will be held in person or remotely through Teams)

Contacts for other Instructors: <https://www.med.uvm.edu/pharmacology/directory>

### Modality, Meeting Pattern, Location

Tu/Th 4:25-5:40 pm in Fleming Museum 101 Classroom

For Fall of 2021, PHRM 201 will be taught In Person for most students in the class, those in the OL1 section are remote.

We will use Blackboard for announcements and posting of materials; remote link access to sessions will be through Teams.

### Technical support for students

Students, please read this technology checklist to make sure you are ready for classes.

<https://www.uvm.edu/it/kb/student-technology-resources/>

Students should contact the Helpline (802-656-2604) for support with technical issues.

### Pre-requisites or co-requisites

Introductory courses in Biology and Organic Chemistry

### Course Description

This course is a Pharmacology survey course that focuses on biochemical and physiological actions of prototype drugs used in the treatment and prevention of human diseases. The course is appropriate for advanced undergraduates who have a strong background in biology and chemistry and have a desire to understand the mechanisms behind current pharmaceuticals. Topics covered include pathologies that require treatment, drug mechanisms

and side effects, and drug metabolism by the body. Several Pharmacology faculty teach sessions in their area of expertise. Students with an interest in pursuing health-related fields are particularly encouraged to take the course. This course is a core requirement for students pursuing the [Pharmacology Minor](#) or the Pharmacology [Accelerated Masters program](#).

### **Course Learning Objectives**

1. Understand the general pharmacodynamic principles that relate to receptor activity and the effects of binding by agonists and antagonists
2. Define the different modes of drug delivery and recognize the importance of drug metabolism as a clearance mechanism
3. Understand the specific uses of drugs to correct pathophysiologic states
4. Compare and contrast the drug mechanisms within the major classes of drugs
5. Recognize the important side effects associated with the major classes of drugs
6. Use specific case-based analysis to make a general diagnosis and specific treatment choice

### **Pedagogy:**

Classes will be taught through lectures and also application sessions using case-based learning. Students will also have the opportunity to solve clinical case scenarios by writing patient assessments and plans for therapy.

### **Required Course Materials:**

All Course materials will be loaded onto Blackboard, including links to recordings of lectures. We will use iClicker/REEF for case-based sessions, [UVM information on iClicker/REEF](#).  
Reference Text: Katzung & Trevor's pharmacology 2018 [Katzung & Trevor's pharmacology \[electronic resource\]](#) (access through Dana Library if off campus)

### **Attendance Policy and Classroom Environment Expectations:**

Students are expected to attend all regularly scheduled classes whether they are in-person or remote. Participation is the emphasis, thus an in-person student who chooses to attend remotely will not be penalized, but the instructor should be informed if a student needs to miss class entirely due to illness or other excused absence.

Each block of material (2-4 lectures) will have a case-based session that uses the previous lectures to apply material at a higher level. These sessions will be preceded by a closed-book readiness quiz on blackboard that will be taken prior to class. Students will be expected to engage in group work in class or remotely in breakout rooms.

“The [Green and Gold Promise](#) clearly articulates the expectations that UVM has for students, faculty, and staff to remain compliant with all COVID-19 recommendations from the federal CDC, the State of Vermont, and the City of Burlington. This include following all rules regarding facial coverings and social distancing when attending class. If you do not follow these guidelines, I will ask you to leave the class. If you forget your mask, you cannot enter the class and should go back and retrieve your mask. The [Code of Student Conduct](#) outlines policies related to violations of the Green and Gold Promise. Sanctions for violations include fines, educational sanctions, parent notification, probation, and suspension.”

### **Grading Criteria/Policies:**

Grades will be based on **6 case study assignments, 6 readiness quizzes and 3 closed-book multiple choice question exams**. Graduate students will have an additional research paper. The final will NOT be cumulative. Exams will be multiple choice. Attendance at all classes and review sessions is highly recommended. Participation by iClicker in case-based sessions will contribute 4% of your grade.

*Include:*

- 3 Multiple choice exams (100 points each) 300 (60%)
- 6 Case study assignments (20 points each) 120 (24%)
- 6 Readiness quizzes (10 points each) 60 (12%)
- 6 Case-based Attendance (3 points each) 20 (4%)
- Graduate Student Paper (50 points)

### **Assessments (Graded Work):**

- **Case Study Assignments:** *Students use class notes and text reference to answer questions related to a specific case. Length expected 2 pages; submit by 11:59 pm on the due date*
- **Readiness Quizzes:** *Students study lecture material and take an 8-10 point quiz on Bb prior to class*

- **Exams:** Exams are multiple choice and approximately 50 questions. Students will have 75 min to take the exams using Blackboard. The Final Exam is NOT cumulative.
- **Graduate Student papers:** Students taking the course for **graduate credit** will be required to focus on primary literature and to present a term paper that integrates class area topics into an in-depth literature review. Students will be able to choose from several area topics presented 4 weeks prior to the due date.

Specifics:

- 1) Papers should be 5-7 pages in length, double-spaced.
- 2) Papers must have at least 10 references with 5 or more from primary basic science literature. The remaining can be from textbooks, reviews or websites.
- 3) Papers will outline the background of the topic and then use specific examples from the literature that helped to develop the current understanding of the topic.

## Recording Class Sessions:

Our class sessions will be audiovisually recorded for students in the class to use for review, and for enrolled students who are in the Online section. In the event that a session recording is not captured, a recording from last years' class may be posted.

Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image.

Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live.

## Research and Citation Help

For help selecting research topics, finding information, citing sources, and more, ask a librarian. You may ask questions by phone, e-mail, chat, or text, or make an appointment for an individual consultation with a librarian.

Howe Library: <https://library.uvm.edu/askhowe>

Dana Medical Library: <https://dana.uvm.edu/help/ask>

Silver Special Collections Library: <https://specialcollections.uvm.edu/help/ask>

## **Course Evaluation:**

All students are expected to complete an evaluation of the course at its conclusion. Evaluations will be anonymous and confidential, and the information gained, including constructive criticisms, will be used to improve the course.

## **UVM COVID 19 Policies:**

General statement regarding potential changes during the semester:

<http://catalogue.uvm.edu/>

The University of Vermont reserves the right to make changes in the course offerings, mode of delivery, degree requirements, charges, regulations, and procedures contained herein as educational, financial, and health, safety, and welfare considerations require, or as necessary to be compliant with governmental, accreditation, or public health directives.

Please visit <https://www.uvm.edu/uvmforward> for updated UVM policies related to COVID 19

## **Green and Gold Promise:**

The [Green and Gold Promise](#) clearly articulates the expectations that UVM has for students, faculty, and staff to remain compliant with all COVID-19 recommendations from the federal CDC, the State of Vermont, and the City of Burlington.

The [Code of Student Conduct](#) outlines policies related to violations of the Green and Gold Promise. Sanctions for violations include fines, educational sanctions, parent notification, probation, and suspension.

## **Intellectual Property Statement/Prohibition on Sharing Academic Materials:**

Students are prohibited from publicly sharing or selling academic materials that they did not author (for example: class syllabus, outlines or class presentations authored by the professor, practice questions, text from the textbook or other copyrighted class materials, etc.); and students are prohibited from sharing assessments (for example homework or a take-home examination). Violations will be handled under UVM's Intellectual Property policy and Code of Academic Integrity.

## **Tips for Success** (optional):

Course-specific study/preparation tips

*Here are a few resources for students on remote/online learning:*

- Checklist for success in <https://learn.uvm.edu/about/support-for-students/checklist-online-credit-courses/>
- Academic support for online courses: <https://www.uvm.edu/academicsuccess/online-learning-student-resources-remote-instruction>
- 30-minute webinar on online learning success (Mar 2020): [https://www.youtube.com/watch?v=Xp\\_MYsqQyvE](https://www.youtube.com/watch?v=Xp_MYsqQyvE)

Helpful resources other than the professor (e.g. [Undergraduate/Graduate Writing Center](#), [Supplemental Instruction](#), [Learning Co-op tutors](#), supplemental course materials)

### **Student Learning Accommodations:**

In keeping with University policy, any student with a documented disability interested in utilizing ADA accommodations should contact Student Accessibility Services (SAS), the office of Disability Services on campus for students. SAS works with students and faculty in an interactive process to explore reasonable and appropriate accommodations, which are communicated to faculty in an accommodation letter. All students are strongly recommended to discuss with their faculty the accommodations they plan to use in each course. Faculty who receive Letters of Accommodation with [Disability Related Flexible accommodations](#) will need to fill out the Disability Related Flexibility Agreement. Any questions from faculty or students on the agreement should be directed to the SAS specialist who is indicated on the letter.

#### **Contact SAS:**

A170 Living/Learning Center;

802-656-7753

[access@uvm.edu](mailto:access@uvm.edu)

[www.uvm.edu/access](http://www.uvm.edu/access)

### **Important UVM Policies**

#### **Religious Holidays:**

Students have the right to practice the religion of their choice. If you need to miss class to observe a religious holiday, please submit the dates of your absence to me in writing by the end

of the second full week of classes. You will be permitted to make up work within a mutually agreed-upon time. <https://www.uvm.edu/registrar/religious-holidays>

### **Academic Integrity:**

The policy addresses plagiarism, fabrication, collusion, and cheating.

<https://www.uvm.edu/policies/student/acadintegrity.pdf>

### **Grade Appeals:**

If you would like to contest a grade, please follow the procedures outlined in this policy:

<https://www.uvm.edu/policies/student/gradeappeals.pdf>

### **Grading:**

For information on grading and GPA calculation, go to <https://www.uvm.edu/registrar/grades>

### **Code of Student Conduct:**

<http://www.uvm.edu/policies/student/studentcode.pdf>

### **FERPA Rights Disclosure:**

The purpose of this policy is to communicate the rights of students regarding access to, and privacy of their student educational records as provided for in the Family Educational Rights and Privacy Act (FERPA) of 1974.

<http://catalogue.uvm.edu/undergraduate/academicinfo/ferparightsdisclosure/>

### **Promoting Health & Safety:**

The University of Vermont's number one priority is to support a healthy and safe community:

#### **Center for Health and Wellbeing:**

<https://www.uvm.edu/health>

#### **Counseling & Psychiatry Services (CAPS)**

Phone: (802) 656-3340

**C.A.R.E.** If you are concerned about a UVM community member or are concerned about a specific event, we encourage you to contact the Dean of Students Office (802-656-3380). If

you would like to remain anonymous, you can report your concerns online by visiting the Dean of Students website at <https://www.uvm.edu/studentaffairs>

### **Final Exam Policy:**

The University final exam policy outlines expectations during final exams and explains timing and process of examination period. <https://www.uvm.edu/registrar/final-exams>