

BIOL 830P- 05 Pharmacology
Spring 2023 COURSE SYLLABUS

Course Description	Topics are studied which are not assigned or covered in other courses in the department. The format of this course will vary depending on the topic of instruction and the needs of students. Topics in Botany Topics in Fresh Water Biology Topics in Vertebrate Biology Topics in Invertebrate Biology Topics in Nebraska Flora Topics in Physiology Total Credits Allowed: 18.00
Course Information	This course is designed to provide students with a basic understanding of principles of pharmacology and to enhance critical thinking and assessment skills. Major topics to be covered include receptor pharmacology, pharmacokinetics, pharmacodynamics, drug metabolism and interactions. Focus will be given to understanding pharmacology principles that relate to the treatment of cardiovascular, renal, pulmonary, and endocrine diseases.
Instructor	Surabhi Chandra, Ph.D. Associate Professor Department of Biology, University of Nebraska - Kearney Office: BHS 201B Phone: 308-865-8695; Email: chandras2@unk.edu
Office Hours	Virtual appointments may be conducted by phone, Zoom, or Canvas
Course Texts	Katzung, B.G. and Trevor, A.J. Basic and Clinical Pharmacology. 15th Ed/2018. McGraw-Hill. ISBN-13: 978-1259641152. Available as an e-book via the library.
Required Readings	Textbook, according to schedule provided in the syllabus. Supplemental readings may be assigned by faculty.
Computer	You will need to have an up-to-date browser, operating system, and some additional software on your computer in order to take this class. Some of the documents in this course will be available in PDF form. If you do not have Adobe Acrobat Reader software on your computer, you can download it from https://get.adobe.com/reader/ <ul style="list-style-type: none">• Other material: Webcam (for taking online quizzes and tests)

Course Learning Objectives:

1. Describe basic concepts of medical pharmacology as it relates to principles of physiology.
2. Explain mechanisms of therapeutic physiologic effects for major drug classes.

Course Format, Access, and Attendance

Course Format: Because this is a web-based course and conducted entirely online, it is extremely important that you **regularly check your UNK email and Canvas**. In this course students will demonstrate their level of achievement by completing tests, participating in discussion boards, and submitting assignments, which will be completed online.

Course Access: After accessing the course on Canvas, use the links on the left of the screen for pages, syllabus, lecture notes, discussions, quizzes, assignments, or additional resources.

Attendance: Since this is an online course, “attendance” refers to checking announcements, reading the content, doing the activities, and submitting the assignments by the deadline. It is required that you should be logging in the course at least 3-4 times a week. The instructor can check if you have been accessing the course regularly or not. You are advised to allot specific times on several days of the week (MWF or TTh) towards this course similar to a regular in-class course. Print a copy of the schedule on the last page and paste it at a prominent place to keep track of deadlines.

Course Design

The course is outlined in the form of modules as mentioned below. Each module will entail reading the textbook chapters, watching the lecture videos, reading additional resources, participating in a quiz and a discussion board. In addition to the quizzes, there will be four lecture exams. The details on these will be provided as per their schedule.

Modules: There will be 7 modules in this course (schedule on the last page) which are categorized based on the content covered.

Lecture Videos: The lecture videos will be posted on Monday of each week. The content covered in these will be primarily from the textbook.

Quiz: Topics covered in the quiz will be announced on Canvas (Schedule on the last page). Content would include chapters covered in the week and additional reading materials as provided. Quizzes will open on Friday @ 8 am and due by Tuesday @ midnight. These will typically include multiple choice questions, true/false, and fill in the blank types of questions. *Two of the lowest scores* from these quizzes will be dropped at the end of the semester.

Exam: These exams will be in two parts: multiple choice/true-false/fill in the blank questions (online and timed), and take-home exams (essay/short answer questions, not timed). The exams will include content from textbook chapters as well as some extra referencing based on content covered. The multiple choice/true-false/fill in the blank exam questions (online and timed) will be administered in Canvas, while the take-home exams will be submitted through the Canvas turinitin. More information will be provided with the specific assignments.

Course Communication

Announcements:

Announcements will be posted on Canvas. Please make sure to check them regularly, as they will contain important information regarding assignments, or class concerns.

Discussion Board:

Discussion Board will be used as a means of online communication between students and the instructor.

Original Post- Each module in this course will have a discussion board. Please read the material assigned and respond to the question posted. The length of the post must be minimum of 150-200 words with critical and thoughtful explanation of the topics. Support your post with relevant peer-reviewed articles. Original post is due by Friday @ midnight.

Reply to Postings- There will be a minimum of 2 responses that you are required to provide on other students' postings. These responses should not be limited to one word such as “bravo”, “nice” or use internet lingo (LOL, ROFL etc.). Typical responses should be at least 2-3 sentences after carefully analyzing the post and providing your inputs. Responses are due by Sunday @ midnight.

Grading - Each original post will be worth 7 points and responses will be 3 points (1.5 points each). Points will be deducted if original posts and responses are submitted within an hour of each other. Discussion boards are meant for interaction, hence continued participation is encouraged.

Coffee House: Since this is an online course, it is normal to have questions regarding assignments, tests, and lecture material. You can post these questions in the COFFEE HOUSE forum under Discussion Board. This will be an open forum where you can help each other.

****Format for Quizzes and Tests

Quizzes and tests will be given through Canvas. To take quizzes or tests through Canvas, you are required to have the Respondus lockdown browser downloaded, and you will need a web camera for your

computer: <https://download.respondus.com/lockdown/download.php?id=477439341%20>. There is more information on Canvas about Respondus. Unfortunately, this software will NOT work on a Chromebook or Linux computer, so you will need to prepare for this.

All quizzes and tests will be taken using the Respondus Lockdown Browser. Once you have it downloaded, you will use this to enter Canvas. You will open this browser, and it will take you to Canvas to take your quiz. You will need to complete the quiz or test in the time allotted. More information will be available on Canvas in the Announcement section.

Grading:

1. Quizzes- 10 points each; top 8 scores of 10 quizzes	80 points
2. Discussion Board- 10 points each for 7 discussions + Intro (5 points)	75 points
3. Lecture Exams- 100 points each for 4 exams	400 points

Total	555 points

Grading Scale:

○ 100 – 90%	-	A grades (>98% = A+; 97-92% = A; 91-90% = A-)
○ 89 – 80%	-	B grades (89-88% = B+; 87-82% = B; 81-80% = B-)
○ 79 – 70%	-	C grades (79-78% = C+; 77-72% = C; 71-70% = C-)
○ 69 – 60%	-	D grades (69-68% = D+; 67-62% = D; 61-60% = D-)
○ 60% and lower	-	F grade

Class Policies

Instructor Expectations

Email	The instructor will typically respond to email within 24 hours or less if sent Monday – Friday. The instructor may respond to weekend emails, but it is not required of them. If you receive an out of office reply when emailing, it may take longer to return emails. The instructor will give students advance notice, if possible, when they will be out of the office.
Feedback	Feedback is meant to be constructive and help the student continue to build upon their skills. The types of feedback you may receive are descriptive feedback, evaluative feedback, and motivational feedback. Feedback is a tool that you as a learner can use to understand the areas that you are succeeding in and what you can do to improve in areas you are not.
Grading	Exam and quiz scores will typically be finalized within one week after the exam/quiz date. Students will have two academic days from the date the grades are posted in Canvas to receive further clarification from the instructor (if needed) prior to finalization of the exam/quiz scores. Grades for each assessment will be entered as final after these two days and cannot be changed thereafter. Written manuscript summaries will typically be graded no more than two weeks after the due date.

Student Expectations

Technology	Students are responsible for: <ul style="list-style-type: none"> • Setting their <u>Canvas Notification Preferences</u> to “Notify me right away” (by email) for appropriate course activities (at a minimum: <u>Announcements</u>). This is the primary means through which Course Directors & Instructors can communicate with the entire class. • <u>Checking their lopers email at least once daily</u>. This expectation continues throughout their career as graduate students at UNK.
Assignments	Weekly reading assignments are expected to be completed as assigned.

Communication	Class members are expected to follow common courtesy in all communication to include email, discussion boards, and Canvas. All electronic communications sent should follow proper English grammar rules to include complete sentences. This is a professional course, and you are expected to communicate as professionals.
Contributions	Students are expected to offer individual contributions on all assignments and assessments including the research manuscript summaries, discussion board posts, exams, and quizzes. Anything other will be considered cheating and the appropriate action, as described below in Academic Integrity and Professional Conduct, will be taken.
Email	All email correspondence between student/instructor and peer/peer will be conducted in a professional manner following email etiquette. <ul style="list-style-type: none"> View the following link for more information on email etiquette: http://metropolitanorganizing.com/etiquette-professional-organizing-services/essential-email-etiquette-tips/

Other Course Policies

Late Work: Late work will not be accepted. If you have an extenuating circumstance, please contact me before the assignment/work is due to make alternate arrangements. I will require documentation in such cases.

Dropping the Class: To avoid getting an F for the course, it is your responsibility to officially withdraw from the course prior to the deadline. Withdrawing from a class is done through your secure student account in MyBlue.

Receiving an Incomplete: An incomplete ("I") is issued only if circumstances beyond your control (for example, hospitalization during finals week) prevent you from completing the required work for the class by the end of the semester. The circumstances preventing you from finishing the class must have arisen *after* the withdraw deadline. An incomplete grade will give you an *extension* to complete outstanding work only; it is *not* an opportunity to "start over" in the class. A contract must be signed detailing a timeline for completing the work, and all outstanding work must be completed within one year or the "I" grade *automatically* converts to a failing "F" grade. The conversion of an incomplete grade to a failing grade is university policy and is not within the control of instructor.

Ethics and Behavior

You should be following the highest ethical, academic, and professional standards. The University's Academic Integrity policy is listed in Article VI of the Student Handbook. UNK Student Handbook or (<http://www.unk.edu/offices/reslife.aspx?id=2402>). Use of proper language and maintaining appropriate decorum is expected during the course. Discussion boards will be moderated, and any use of abusive/foul language will be dealt strictly and can result in expulsion from the university.

UNK Student Code of Conduct

Please review the student code of conduct (http://www.unk.edu/offices/reslife/Student_Handbook/). Anyone caught cheating will fail the course.

Academic Honesty Policy

Academic honesty is essential to the existence and integrity of an institution of higher education. The responsibility for maintaining that integrity is shared by all members of the academic community. To further serve this end, the University of Nebraska at Kearney has a policy relating to academic integrity.

[Graduate Academic Integrity Policy](#)

UNK Academic Calendar- Spring 2023

Please take a note of the deadlines for dropping or withdrawing from the course
https://www.unk.edu/offices/registrar/academic_policies_handbook/Academic_Calendar.php

Last day to withdraw from one or more full-semester course for the term: April 21

Reporting Student Sexual Harassment, Sexual Violence or Sexual Assault

Reporting allegations of rape, domestic violence, dating violence, sexual assault, sexual harassment, and stalking enables the University to promptly provide support to the impacted student(s), and to take appropriate action to prevent a recurrence of such sexual misconduct and protect the campus community. Confidentiality will be respected to the greatest degree possible. Any student who believes they may be the victim of sexual misconduct is encouraged to report to one or more of the following resources:

- **Local Domestic Violence, Sexual Assault Advocacy Agency** 308-237-2599
- **Campus Police (or Security)** 308-865-8911
- **Title IX Coordinator** 308-865-8655

Retaliation against the student making the report, whether by students or University employees, will not be tolerated.

Students with Disabilities

It is the policy of the University of Nebraska at Kearney to provide flexible and individualized reasonable accommodation to students with documented disabilities. To receive accommodation services for a disability, students must be registered with the UNK Disabilities Services for Students (DSS) office, 175 Memorial Student Affairs Building, 308-865-8214 or by email unkdso@unk.edu

Students Who are Pregnant

It is the policy of the University of Nebraska at Kearney to provide flexible and individualized reasonable accommodation to students who are pregnant. To receive accommodation services due to pregnancy, students must contact the Student Health office at 308.865.8218. The following links provide information for students and faculty regarding pregnancy rights. <https://thepregnantscholar.org/title-ix-basics/>
<https://nwlc.org/resource/faq-pregnant-and-parenting-college-graduate-students-rights/>

UNK Statement of Diversity & Inclusion

UNK stands in solidarity and unity with our students of color, our Latinx and international students, our LGBTQIA+ students and students from other marginalized groups in opposition to racism and prejudice in any form, wherever it may exist. It is the job of institutions of higher education, indeed their duty, to provide a haven for the safe and meaningful exchange of ideas and to support peaceful disagreement and discussion. In our classes, we strive to maintain a positive learning environment based upon open communication and mutual respect. UNK does not discriminate on the basis of race, color, national origin, age, religion, sex, gender, sexual orientation, disability or political affiliation. Respect for the diversity of our backgrounds and varied life experiences is essential to learning from our similarities as well as our differences. The following link provides resources and other information regarding D&I: <https://www.unk.edu/about/equity-access-diversity.php>

Veteran Services

UNK works diligently to support UNK's military community by providing military and veteran students and families with resources and services to help them succeed. Veterans Services assists with the GI Bill

process and acts as a liaison between the student and the Veterans Administration. If you need assistance or would like more information, please contact Lori Weed Skarka at 308-865-8520 or unkveterans@unk.edu.

Additional Resources

******Tech Support:** Available through email at unkhelpdesk@unk.edu or phone 308-865-8363.

******Learning Commons (Tutoring):** The UNK Learning Commons offers support for this course! The Learning Commons, located on the 2nd floor of the Calvin T. Ryan Library, offers Subject Tutoring, the Writing Center, Success Coaching, and Language Support. These services are available to all UNK students in-person and on Zoom. The Learning Commons can help you with course content for select subjects, time-management skills, getting organized for class, and any type of writing project. To get the most out of your time with the Learning Commons, visit early and often! Contact the Learning Commons at 308-865-8905, unklearningcommons@unk.edu, or stop by in person. Website: www.unk.edu/lc

Course Outline and Weekly Schedule (tentative)

Week	Dates	Topic/ Instructor	Assignment – Due Date/Time (CST)
1	Jan 23-27	Basic Principles (Chap 1-2)	Quiz 1 (Jan 27-Jan 31)
		Introduction Discussion Board	Initial post: Jan 27
2	Jan 30-Feb 3	Basic Principles (Chap 3-4)	Quiz 2 (Feb 3-7)
		<u>Basic Principles Forum (Chap 5)</u>	Initial post: Feb 3 Response: Feb 5
3	Feb 6-10	Autonomic Drugs (Chap 7-8)	Quiz 3 (Feb 10-14)
4	Feb 13-17	Autonomic Drugs (Chap 9-10) contd.	Quiz 4 (Feb 17-21)
		<u>Autonomic Drugs Forum (Chap 6)</u>	Initial post: Feb 17 Response: Feb 19
		EXAM 1 (Chap 1-4, 7-10)	Feb 20 - Feb 27
5	Feb 20-24	Cardiovascular-Renal Drugs (Chap 11-13)	NO QUIZ
6	Feb 27-Mar 3	Cardiovascular-Renal Drugs (Chap 14-15)	Quiz 5 (Mar 3-7)
		<u>Cardiovascular-Renal Drugs Forum</u>	Initial post: Mar 3 Response: Mar 5
7	Mar 6-10	Smooth Muscle Drugs (16, 18)	Quiz 6 (Mar 10-14)
8	Mar 13-17	SPRING BREAK	
9	Mar 20-24	Smooth Muscle Drugs (19-20)	Quiz 7 (Mar 24-28)
		<u>Smooth Muscle Drugs Forum</u>	Initial post: Mar 24 Response: Mar 26
		EXAM 2 (Chap 11-16, 18-20)	Mar 27- Apr 3
10	Mar 27-31	CNS Drugs (22, 24)	NO QUIZ
11	Apr 3-7	CNS Drugs (29-31)	Quiz 8 (Apr 7-11)
		<u>CNS Drugs Forum (Chap 25-26)</u>	Initial post: Apr 7 Response: Apr 9
12	Apr 10-14	Blood and Inflammation (35, 36)	Quiz 9 (Apr 14-18)
		EXAM 3 (Chap 22, 24, 29-31, 35, 36)	Apr 17 - Apr 24
13	Apr 17-21	Endocrine Drugs (38, 41)	NO QUIZ
		<u>Blood, Inflammation, Endocrine Forum</u>	Initial post: Apr 7 Response: Apr 9
14	Apr 24-28	Chemotherapeutic (43-44)	Quiz 10 (Apr 28-May2)
15	May 1-5	Chemotherapeutic (51, 54)	NO QUIZ
16		EXAM 4 (Finals)- Chap 38, 41, 43, 44, 51, 54)	May 8- May 15
		<u>Chemotherapeutic Drugs Forum</u>	Initial post: Apr 28 Response: Apr 30

***All assignments are due @ midnight CST for the specific deadline