

Adv Intro to Genetics: Honors

Meet Times: T/Th 12:30pm-2:00 pm

Room: BUR 112

Uniques: 48580-48595

What are the required materials?

The textbooks: We will use the two required textbooks for both BIO315H and BIO325H: Hartwell Genetics, 5th ed. and Brooker, Biology, 4th ed.

How
to get
them:



A convenient and less expensive way to get the correct editions of both textbooks is to purchase them through McGraw-Hill's Connect, which comes with a year's access to both eBooks as well as online resources. This option also allows you to order a looseleaf copy of the text for a reduced price, if you wish. The links to our Connect access

Brooker Text:

[http://
connect.mheducation.com/
class/jmoonfall17brooker](http://connect.mheducation.com/class/jmoonfall17brooker)

Hartwell Text:

[http://
connect.mheducation.com/
class/jmoonfall17hartwell](http://connect.mheducation.com/class/jmoonfall17hartwell)



What is this course about?

To prepare you for upper division courses, BIO 315H will begin your journey with a survey of introductory concepts in Molecular and Cell Biology, served with a healthy dash of Genetics.

Genetics not only examines the transmission of traits, but the impact of inheritance mechanisms on populations and beyond!

Moreover, many topics debated in society today have their basis in Genetics: genetically modified organisms, stem cell research, genetic testing, cancer biology, gene therapy - just to name a few.



Therefore, a background in

Genetics and Introductory Biology will support your career in Biology, if you decide to pursue that major, but will be applicable to your day to day life.

What are the required materials? (continued)

The cost: The Brooker and the Hartwell texts cost \$85 each (\$170 total) for one year of online access. The loose-leaf upgrade is available within Connect for \$25/ea book. Compare to the national price for both texts: \$445 before markup!]

Note: There is a two-week free "Courtesy Access" option available during registration if you are waiting on financial aid or aren't sure you are going to stay enrolled. Simply purchase when the courtesy access expires.

In-Class Response System
SquareCap: We will be using SquareCap in class, which allows you to respond to instructor questions, ask anonymous questions using the "Ask and Vote" feature, and get immediate feedback. The cost for the semester is \$8. Like the textbook access, you may use Squarecap free for the first two weeks. Log in and create an account at www.squarecap.com



Prerequisites

Biology 315H is the first course in a two-semester sequence (BIO 315H and BIO 325H) that integrates important concepts in general biology with a rigorous analysis of upper-division genetics. This course sequence is intended for students who entered UT with a score of 5 on the Advancement Placement Biology exam, but is also open to students of the College of Natural Sciences Dean's Scholars, Health Science Scholars or Polymathic Scholars program who completed one year or more of biology in high school.

What is expected of me in this class?

- Complete the reading assignments and quizzes
- Attend class and participate!
 - Look over the Learning Objectives for each class
 - Practice the assigned and extra Homework Problems. You have the answers and explanations in the Solutions Manual.
 - Attend Discussion Sections and work on assigned problems - these are your examples of exam questions!
 - Review the material covered in Lecture (see Lecture slides)

What happens in Lecture?

- You will prepare for every Tuesday and Thursday by doing the assigned reading and practice problems, as needed.
- Every class meeting has specific Learning Objectives associated with it. We will focus on these Learning Objectives during Lecture Class time.
- During class, I will talk about key aspects of the Learning Objectives, and you will solve problems and answer questions using Squarecap.
- You will have the opportunity to ask your peers, your TA, and me questions about the material.
- Note that while web-enabled devices are required for the course (to use Squarecap), I expect you to stay focused on the class content. If you use the device for unapproved activity (texting, surfing, shopping!) will receive a warning. A second violation will result in the loss of remaining Squarecap points for the semester since you will no longer be allowed to use your device to class.

Food for thought: there is strong evidence that *writing* (not typing) your notes is a much more effective way to retain new information.

CHEM 1050

SECTIONS 3 AND 4

 Instructor: Erika (aka Prof. Erika Merschrod, PhD)



The textbook is free and integrated into the course shell.



Tutorials: 1-1:50 | Mon: Group 1 | Tues: Group 2 | Wed: Group 3 | Thurs: Group 4 | Fri: office hours |



YOU BELONG IN THIS CLASS!

All students deserve a safe learning environment, and your contributions are important.

YOU HAVE A RIGHT TO ACCOMMODATIONS!

Accommodations are changes that instructors must make to improve our course delivery and/or assessment tools.

CALENDAR

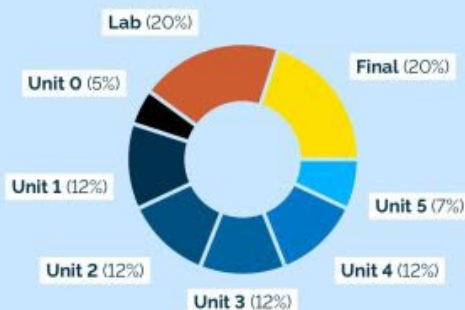
The class deadlines are flexible.

*Lab deadlines are subject to change.

GRADING SCHEME



-  open book
-  oral or written
-  untimed



OPTIONAL ASSIGNMENTS



ONLINE RESOURCES

- Short guided readings with audio and video
- Worked examples and problem sets
- Learning Guides and Math Refreshers
(completing these counts as an optional assignment for that unit.)

NEED HELP?



"INSTRUCTIONAL CONTINUITY" (SNOWSTORMS AND COVID)



2022

Class Lab Key Dates

Jan 17 Labs start*

Jan 24 Unit 0 quiz

Feb 3 Unit 1 quiz

Feb 17 Unit 2 quiz

Feb 21 Midterm

Feb 25 Break

Mar 2 Drop date

Mar 10 Unit 3 quiz

Mar 31 Unit 4 quiz

Apr 7 Unit 5 quiz

Before:

BOL 303
Receptors of Biological Membranes
1st Edition
By Greg Paik
© 2019
1st Edition
1st Edition

Course Overview
This course is designed to provide students with a solid foundation in the study of receptors and their role in cellular signaling. The course will cover the structure, function, and regulation of various types of receptors, including G-protein coupled receptors, ion channels, and enzyme-linked receptors. Students will also learn about the role of receptors in disease and drug development.

Course Learning Goals
After completing this course, students will be able to:
1. Describe the structure and function of various types of receptors.
2. Explain the role of receptors in cellular signaling and disease.
3. Apply knowledge of receptor function to drug development and other biomedical applications.

Course Materials
Main textbook and other associated materials are provided in the third page.

Evaluation
A. Midterm Exam 30%
B. Final Exam 40%
C. Lab Report 10%
D. Class Participation 20%

BOL 303 Spring 2019

Lab Report Assignment
The purpose of this assignment is to provide students with a hands-on experience in the study of receptors. Students will be assigned to a lab group and will be responsible for conducting experiments, analyzing data, and writing a lab report. The lab report should be submitted by the end of the semester.

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BOL 303 Spring 2019

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