GENETICS 0350 Syllabus
Spring 2021 (2224)
324 Cathedral of Learning

Instructor **Dr. Deborah Chapman**
102 Life Sciences Annex
(412) 624-0774
dlc7@pitt.edu
Office Hours: Sunday 2-3 pm (Zoom)
Individual meetings: Monday's 3-4 pm – sign up on Calendar in Canvas (Zoom)

Teaching Assistant **Leah Cabo**
lfc13@pitt.edu
Office hours: Tu 4-5 pm, W 11-12 pm

Undergraduate TAs
Michael Kail MAK454@pitt.edu
Anna Kaley AMK321@pitt.edu
Amelia Milner ALM452@pitt.edu
Office hours: TBD

Lecture: **Tu/Th 2:30-3:45 pm**
Room: 324 Cathedral of Learning

Recitation:

SEC1210 (10425)	W 9-9:50 am
SEC1220 (10750)	W 10-10:50 am
SEC1240 (17826)	W 1-1:50 pm
SEC1230 (10751)	W 2:00-3:50 pm

*Only attend the recitation for which you are registered!

You must be registered for the lecture **and** the recitation section

Course Description: An understanding of genetics is essential for any student interested in biology and is required in many professions including academic and industrial research, medicine, genetic counseling, agriculture, law, and forensics. Knowledge in genetics also help us make decisions about our own heath and about how to live our lives ethically. The goal of this course is to provide students with an overview of genetics from the work of Mendel to the current understanding of the gene at the molecular level to how these genes are organized and interact at the genomic level and in populations. Lectures will introduce basic concepts and terminology as well as emphasize the importance of the experimental approach to understand genetics. A problem-based approach will be used to encourage students to develop their critical thinking skills.

Prerequisites: Minimum of a C in Foundations of Biology 2 (BIOSC 0160 or equivalent) and General Chemistry 2 (CHEM 0120 or equivalent).

This course must be completed to obtain the B.S. degree in all Biological Sciences majors and is a prerequisite for many higher level Biological Sciences courses, including: Evolution (BIOSC 1130), Developmental Biology (BIOSC 1520), Virology (BIOSC 1730), Immunology (BIOSC 1760).

Course Learning Objectives
After completing this course, you will have the skills and knowledge to:
- Take upper level biology classes that require a knowledge of basic genetics.

- Join graduate programs that expect a background in genetics.
- Become a member of a laboratory in academia or industry investigating a specific aspect of genetics and understand the basic concepts being studied.
- Begin training for professions such as medicine and public health with a good background in genetics that can be expanded appropriately for these occupations.
- Read and understand articles in popular media that talk about genetics, such as ones on human disease and genetically modified food, and explain what they mean to your family and friends.

Required Textbook: Goldberg *et al.* ***Genetics: From Genes to*** **Genomes** (7th Edition) is available through Canvas as an ebook with an opt out feature, i.e., you will be charged for this unless you opt out before add/drop on January 21st. If you are opting out and getting your own textbook, there are various formats, some with added features; you do not need those features (such as Connect); however the ebook may be the cheapest route.

Communication:

The Instructor and TA may contact you via your official Pitt e-mail. You must read this regularly. The official Pitt e-mail communication policy can be found here.

Canvas:

The Canvas site for this course can be found on your my.pitt page. It will be used to post announcements and a variety of materials related to the course, including lecture slides, grades, etc., and will be used to administer Quizzes. If you have any problems entering the site or if this course is not listed, you must contact the help desk (624-HELP). Some items found on Canvas: Modules for each course section: pdf of the slides used for lecture. Videos from the web and from the textbook.
(I will add: Suggested reading and text book problems to attempt).

Discussions: use this feature to ask any non-personal questions about anything in the course. Questions are not anonymous so it you wish to remain so you can send the question to the Instructor using e-mail and the question will be posted on Discussion.

Get Help!

Office hours **(on-line via Zoom).**
Standard office hours will be communal, so all participants will be present in the same Zoom meeting or classroom.
Times will be finalized (and updated) on Canvas.

Individual meeting with Dr. Chapman**:** If you would like one-on-one time with the Instructor, I have attempted to make a sign up on Canvas Calendar.

Questions regarding course information should be asked on Discussions on Canvas or in communal office hours.

Recitations will be led by the TA with help from UTAs. In-class problems will only be available for answer during recitation. If you do not attend recitation, you will miss out on those points.

Quizzes: These are ~30 minute (timed) questions administered in class the last 30 minutes of the class period on Canvas. Students must come to class to take the Quizzes – **Students must bring a laptop to do the Quizzes**. The date of Quizzes has been indicated on the Front page of Canvas for the course and in the Calendar.

There are 8 quizzes scheduled – the top 7 grades will count toward 85% of your final grade. There will not be a cumulative final. However the final quiz (Quiz 8) will be held during our final exam period (30 minutes).

Final Grade:

Quizzes:	**85%**
Top Hat in class questions:	**5%**
Top Hat recitation questions:	**10%**

In-class (and recitation) problems:

Questions will be posed randomly during class and recitation via **Top Hat**
Students are allowed to discuss these questions with fellow students in the class. Credit will be given for both attempting the question and for getting the correct answer. Questions will only be available during the class or during recitation.

Missed Quizzes:

No make ups will be given; the possibility of missing an in-class Quiz is covered by including the top 7 out of 8 quizzes in the final grade calculation.

COVID statement:

During this pandemic, it is extremely important that you abide by the public health regulations the University of Pittsburgh's health standards and guidelines, and Pitt's Health Rules. These rules have been developed to protect the health and safety of all of us. Universal face covering is required in all classrooms and in every building on campus, without exceptions, regardless of vaccination status. This means you must wear a face covering that properly covers your nose and mouth when you are in the classroom. If you do not comply, you will be asked to leave class. It is your responsibility have the required face covering when entering a university building or classroom. For the most up-to-date information and guidance, please visit coronavirus.pitt.edu and check your Pitt email for updates before each class.

If you are required to isolate or quarantine, become sick, or are unable to come to class, contact Dr. Chapman as soon as possible to discuss arrangements.

Academic integrity and student code of conduct:

Quizzes: will be conducted in class with no access to any resources. Student's laptops must remain on during the Quiz only and must only be accessing the Quiz and no other resources. No calculators are allowed; if they are needed, that feature will be activated on Canvas and can be used within the Quiz. Students must remain in their seat for the full period of the Quiz even if they have completed it. If you complete it with time still remaining, you must close your laptop while you wait for everyone else to finish.

In-class problems are only available during class. These can and should be discussed with other students, Instructor, TA or UTA in lecture and recitations.

Cheating/plagiarism will not be tolerated. Students suspected of violating the University of Pittsburgh Policy on Academic Integrity (http://www.as.pitt.edu/faculty/policy/integrity.html) will be required to participate in the outlined procedural process as initiated by the instructor. Violation of the Academic Integrity Code requires the instructor to submit an Academic Integrity Violation Report to the Dean's Office.

Disability Resources and Services:

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and Disability Resources and Services (DRS), 140 William Pitt Union, (412) 648-7890, drsrecep@pitt.edu, (412) 228-5347 for P3 ASL users, as early as possible in the term. DRS will verify

your disability and determine reasonable accommodations for this course. Contact the instructor to determine exactly how the accommodations will be made, which will be made for Quizzes only.

Please note that the questions in this course require careful reading and assessment and are likely more reading intensive than many other biology courses.

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How to succeed in this class

Prepare for lecture
- Read suggested sections of the textbook and go over posted slides prior to and after class. *Identify things you do not understand*.

Come to lecture
- Pay attention, take notes, *identify things you do not understand*
- Participate in class, ask questions, answer questions, do problems in groups

Study after class
- Review what was taught in class, read lecture notes, review in-class problems, reread section of textbook: *identify things you still do not understand*
- Do additional suggested problems in textbook, read the introductory section in the chapter from the solutions manual (posted on Canvas in the same Modules section as the lecture slides) and read the answers to the suggested problems.

Recitation
- During recitation: participate, answer questions, ask questions, do problems in groups, answer in-class problems.
- After recitation: review questions, identify those you did not get correct, *identify things you still do not understand.*

Get help: Ask about things you do not understand
- Come to office hours
- Ask questions on Discussion board

Quizzes
- Prepare by going over all lectures notes. Review each slide: the title will allow you to recall what is on each slide. Note…Rereading the lecture slides over and over does not work – you must actively try to remember what is on the slides, and to do that you have to understand the information displayed on the slide.
- Redo all in-class lecture questions.
- Redo all recitation problems.
- Review textbook sections and problems.
- Quiz taking strategy: this could be different for different people; e.g., one strategy would be to read all the questions first quickly, another would be to just start with the first one and answer if you are certain, if not leave it and go to the next, another would be to answer all first time and then come back to the ones you are not certain about. Consider how you will manage the time available. Be aware of how many questions will be on the quiz and how much time you have to take them before you take the quiz. Be aware that some questions can be answered in seconds, some may take a minute or more. It is therefore not always as simple as allotting a specific amount of time per question – Read all the questions to start and plan.
- Never finish a quiz or exam early, always use all of the time available, you never know when you may remember something new. If you have time available, reread all the questions and all of the answers as many times as time you have left.
- After the Quiz, review which questions you got incorrect and attempt to identify the correct answer.