

BICD 100 Genetics B00
Summer Session I 2021
General Course Information

Course description and goals: an introduction to the principles of heredity emphasizing diploid eukaryotic organisms. Through this course, students will:

- develop an understanding of the nature of genetic variation and how it leads to phenotypic variation
- develop skills in the interpretation and analysis of data from genetic experiments
- learn about ways the genetics is used as tool to study biological processes and solve “real world” problems

Instructor: Professor Laurie Smith; lsmith@ucsd.edu

Instructional Assistants:

Madison Chew (m2chew@ucsd.edu)

Natasha Horne (nhorne@ucsd.edu)

Amy Kung (amkung@ucsd.edu)

Lectures: M,T,W,Th 12:30-1:50pm – join link available at ZoomLTI on Canvas (**password Mendel2021**). In these class sessions we will review, augment, and apply material introduced through assigned readings. Occasionally there will be standard lectures, on topics not covered in readings. Attendance in real time is strongly encouraged since participation in the interactions taking place is a great opportunity to reinforce and learn to apply genetics concepts, but attendance will not be taken and participation not scored. Class recordings will be posted immediately following class in the appropriate weekly module.

Discussion sections: All students are enrolled in a discussion section that meets twice/week and is led by an Instructional Assistant. These sessions will view and build on your problem solving and data analysis skills, providing further support for exam success. Attendance will be taken and active participation is expected e.g. asking and responding to questions, participating in polls. Points earned via attendance and participation in the discussion section you are enrolled in will count towards your final grade (more info below in grading section). You can miss one discussion section of the 10 without a point penalty. Links for all discussion sections are available on Canvas through ZoomLTI.

Exams: there will be 2 exams of equal weight, each covering 1/2 of the course material:
Midterm on material through July 14th on Friday July 16th 12:30 – 2:30pm
Final exam on material from July 15th to the end on Friday July 30th 11:30am – 2:30pm
Both exams will be administered through Gradescope on Canvas

Office hours: held every Tues (Natasha) and Thurs (Amy) 5-6pm, Wed. 7-8pm (Madison) and Fri. 5-6pm (Prof. Smith), on Zoom - join links available in “Office Hours Info” document in the General Course Information module. If you cannot make it at any of these times and would like to set up a different time, please email the instructor or your IA. Office hours are an excellent opportunity to get your questions answered and find support for completion. You don’t need to have a question to benefit from participation – you can just join and listen what questions other students have and the responses to those. All office hrs are open to all students regardless of who is hosting the OH.

Textbook: P. Meneely et al., Genetics: Genes, Genomes and Evolution (first and only edition). This book will be a vital resource, because class time will concentrate on applying and augmenting information in the assigned readings rather than repeating it. Some assigned homework problems will also be in this book. You will need the book to do well in this class!

Access to a digital version of this book is available now to all enrolled and waitlisted students via the Redshelf module on Canvas. If you are still enrolled in the class as of **July 3rd** and have not “opted out” by then, your UCSD student account will be charged **\$49.41** for access for the remainder of the qtr (180 days altogether). This is much lower than the price for any physical copy of the book I know of! If you choose to opt out: go into the Redshelf module on Canvas and click View Course Materials. Scroll down to the gray opt-out button and follow the prompts. If you are opting out because you want to buy a physical copy of the book instead, be sure to get the US edition (ISBN 978-0-19-871255-8 for paperback; 978-0-19-879536-0 for hardback) because all reading and homework problem assignments are based on this edition; I don’t have access to any other edition (e.g. the European edition available on Amazon) that would allow me to translate assignments to other editions. For any questions about billing for Redshelf access, contact the UCSD Bookstore at textbooks@ucsd.edu. For technical issues related to Redshelf access go to <https://solve.redshelf.com/hc/en-us>.

Entrance quizzes: To benefit from class sessions focused on developing problem solving and data analysis skills, students will need to do assigned readings in advance. Reading assignments are specified in the Course Calendar. To provide guidance on what you should be gleaning from reading assignments, and reward your reading efforts, you will take an “entrance quiz” on each reading assignment, due by 12:15pm shortly before the class sessions where the background is needed. There will be two entrance quizzes in weeks 1, 2 and 4, and one in weeks 3 and 5 when we have exams. Every student gets two attempts of 1 hr each, to give you time to hunt for info needed to answer the questions if you want to take that approach. The higher of your two scores is the one you keep.

Homework: A homework assignment will be posted each week in the appropriate weekly module on Canvas. Completed homework will be submitted via Gradescope and will be due each week on the day indicated on the course calendar (not the same every week because of exams on two Fridays). The homework gives you further opportunity to develop the problem solving and data analysis skills you will need for success on the exams. If the strategy for answering a question or solving a problem on the homework is eluding you, come to office hours for input! You may use input from IAs, the instructor, and other students to complete your homework, but the work submitted must be your own, e.g. your wording on short answer questions should not duplicate that of other students or the key from SP2021. *Exam problems will be very similar to homework problems, so mastery of homework is vital for success on exams!*

Grading: your final grade will be determined by what percentage of the total available points (500) you earn. Points are available as follows:

- 75 points (15%) for entrance quizzes (8 quizzes; 8-10 points each)
- 80 points (16%) for homework (5 weekly problem sets; 16 pts each)
- 45 points (9%) for discussion section attendance/participation (5 pts/session with one “free” absence)
- 150 points (30%) for midterm exam
- 150 points (30%) for final exam
- 500 points total

These guidelines will be used to assign grades:

>425 points (85%) A (A-, A or A+)

>375 points (75%) B (B-, B or B+)

≥300 points (60%) C (C-, C or C+)

>250 points (50%) D

If necessary, these cutoffs will be adjusted downward so that at least 65% of students receive an A or a B, but they will not be adjusted upward for any reason.

Academic integrity:

The aim of your instructor and IAs is to foster all students' ability to excel with integrity, and we expect that the work on all credit-bearing assignments will be your own. All exams and quizzes are open book, open note, and open device - you are free to consult readings and notes as you wish, however you may not give or receive help on quizzes or exams. If Prof. Smith has a good reason to think you have **received or given** assistance from another person on a quiz or exam, she will file a report with the UCSD Academic Integrity Office (AIO). A student confirmed to have engaged in academic dishonesty will receive an F as their final grade, in addition to the disciplinary actions determined as appropriate by the AIO.