## BICD100 Genetics SP23 Syllabus Professor Reinagel CLT 0125 Tue/Thu 2:00-3:20PM

Week	Lectures	Topic	Exams	
1	April 4,6	Mendelian genetics: single trait crosses		
2	April 11,13	Mendelian genetics: multi-trait crosses	HW1, Q1	
3	April 18,20	Sex linkage, Pedigrees	HW2, Q2	
4	April 25,27	Modified Mendelian Ratios	MT1 April 25 <sup>th</sup>	
5	May 2,4	Mitosis and Meiosis; Ploidy	HW3, Q3	
6	May 9,11	Genetic linkage	HW4, Q4	
7	May 16,18	Eukaryotic linkage	MT2 May 18 <sup>th</sup>	
8	May 23,25	Prokaryotic linkage	HW5, Q5	
9	May 30, Jun 1	Population genetics	HW6	
10	June 6,8	Mutations	Q6	
	June 13	FINALS WEEK	Final 6/13 Tu 3:00p	

Instructor: Pamela Reinagel Email: preinagel@ucsd.edu Office: Pacific Hall 3100A or zoom

https://ucsd.zoom.us/j/92589847467?pwd=Z0IwMHIYTHh0cmpsVS9vcWw2d3hFZz09

Office hours: Thursdays 9-10AM or by appointment

## **Instructional Assistants** (subject to change)

Name	Email Address	Section Time	Office Hour Time	Office hour location
Chen, Lydia		Wed	Wed	
	lyc002@ucsd.edu	8AM	10AM	zoom
Ma, Xuan (Sara)		Wed	Mon	
	xuma@ucsd.edu	9AM	11AM	zoom
Amudhan, Sandrine		Fri	Thu	
	samudhan@ucsd.edu	11AM	10AM	zoom
Dean, Evelyn		Fri	Wed	
	edean@ucsd.edu	12PM	11AM	at Roots Dining Hall or on zoom
Lee, Yoanna		Tue	Mon	
	yol044@ucsd.edu	7PM	10AM	zoom
Qin, Laura		Fri	Fri	
	laqin@ucsd.edu	12PM	2PM	zoom
Smith, Taylor		Tue	Thu	
	t4smith@ucsd.edu	8PM	4PM	zoom

All sections meet at PCYNH 240. If office hours are on zoom, the zoom links are on Canvas, and in-person office hours are also available by appointment.

**Scope of course:** This course covers classical genetics, the principles of inheritance. Unlike many other basic courses in Biology, there is not much you will need to memorize. Instead, you will need to learn how to think through problems by applying a few basic principles and logic. In this respect, genetics is more like a math class than other biology classes. I urge you to focus on understanding concepts and principles during lectures, and practice solving problems by

applying those concepts and principles. Resist the temptation to rely on recognizing common patterns or standard answers, because those won't always generalize to new problems.

**Text:** There is no textbook for this course. Any readings will be provided as PDF file handouts on the course website. However, if you like to use a textbook, any edition of any introductory Genetics textbook should cover all the topics covered in this class. For example, Klug et al, Essentials of Genetics is widely available. There are also many free online genetics textbooks.

**Podcasts:** The audio and video recording as well as any slides that are projected will be available on Canvas with a short delay after each class.

**Lecture notes:** All the required content will be covered in the lectures. Much of the lecture will be done on the board, not in PowerPoint. There generally *will not* be slides available prior to lecture, but any slides that are projected will be posted after class, along with photos of the boards and/or board summary notes to supplement the podcast materials.

## Grading

	Number	Points Each	Total Points
Homework – due online Mondays	5	6	30
Quizzes – in class on Thursdays	5	6	30
Midterms – in class	2	10	20
Final exam – during finals week	1	20	20
			100

Policy for missed classes, assignments, or exams: If you miss a class, use the podcasts to catch up the missed materials. If you have a sports team event, religious observance, or any other <u>qualifying excuse in advance</u> to miss an assignment, quiz, or midterm exam, submit documentation to your Instructional Assistant well in advance. If a <u>qualifying unanticipated emergency</u> such as accident or illness causes you to miss an assignment, quiz, or midterm exam, take care of yourself first, and submit official documentation to your Instructional Assistant as soon as possible afterwards. Approved cases will have the assignment, quiz or midterm exam excused, and the other assignments, quizzes or midterm exam will be used as the basis of that entire component of the grade. No make-up assignments quizzes or midterms will be given, but you are highly encouraged to complete the missed assignment or self-test the missed quiz or midterm for the sake of the practice and feedback. No student can be excused from the final exam. If you have a conflict with the final exam date and time, you should drop this course. If you miss the final because of a qualifying unanticipated emergency or illness, the make-up will be an oral exam with the professor, by default in the following Fall quarter.

Support: if you need additional help or special accommodations for this course or in general, please notify the professor and your IA as early as possible. Campus resources include: Office of Academic Support and Instructional Services (OASIS) https://oasis.ucsd.edu/
Teaching + Learning Commons https://commons.ucsd.edu/
Office for Students with Disabilities https://osd.ucsd.edu/
Counseling and Psychological Services (CAPS) https://caps.ucsd.edu/

Academic integrity policy: All homework assignments, quizzes, and exams must be your own independent work. Collaboration with others, or use of ChatGPT or similar tools, are not allowed unless the assignment specifically allows them, and then only with disclosure. If a student is found to have cheated, such as copying another student's answers during a test or obtaining an advance copy of an exam or answer key, they will be given a grade of 0 (F) in the course and also referred to academic integrity office for possible disciplinary action. There will be no exceptions. Don't cheat. If you are struggling, talk to your IA or the professor. We are here to help.