

General information

Course description	This course will explore structure, function, regulation, and transmission of genetic material to connect genotype with phenotype in cells, organisms, and populations. We will also discuss fundamental concepts of genetics in the context of development, health, and technology.
Time & location	<u>Lectures:</u> Tuesday & Thursday, 3:30 PM - 4:50 PM Tata Hall 3201 (Kavli) Podcasts <i>via</i> Canvas <u>Discussion section (D01):</u> Friday 9:00 AM - 9:50 AM Remote
Professor	Vu Q. Nguyen, Ph.D qn001@ucsd.edu <u>Office hour:</u> Monday 10 AM – 11 AM or by appointment Bonner 3206/Zoom
Assistants	Kendrick Nguyen - TA ken020@ucsd.edu <u>Office hour:</u> Wednesday 3:30 PM – 4:30 PM Bonner 3206/Zoom Donald Le - UIA dol030@ucsd.edu <u>Office hour:</u> Wednesday 12:00 PM – 1:00 PM Bonner 3206/Zoom Ryan Wittenberg - UIA rwittenberg@ucsd.edu <u>Office hour:</u> Tuesday 11:00 AM – 12:00 PM Bonner 3206/Zoom
BioConnect tutors	Eric Thai K3thai@ucsd.edu Keilyn Durante kduartelemus@ucsd.edu

Course format

Course materials	<u>Textbook</u> : <i>Genetics: from Genes to Genomes</i> , Goldberg & Fischer, 8 th Edition. Register through Canvas for access to eBook and Connect platform for \$50. Registration instructions will be provided on first day of class. <u>iClicker</u> : physical or mobile app.		
Communication	You are highly encouraged to use <u>Piazza</u> on Canvas for general course- and science-related questions. Instructors will monitor forums regularly and strive to answer within 24 hours excluding weekends.		
Assessment	<ul style="list-style-type: none"> • <u>Reading</u>: weekly SmartBook (SB) assignments <i>via</i> Connect; lowest (2) scores will be dropped. • <u>Problem sets</u>: weekly assignments <i>via</i> Connect; select questions will be addressed in lecture and section; lowest (2) scores will be dropped. • <u>Lecture attendance</u>: assessed weekly <i>via</i> iClicker activity; lowest (2) scores will be dropped. • <u>Exams</u>: (3) midterms covering specific sections of lecture material + (1) cumulative final; lowest score among 4 will be dropped. 		
Grading	Item	Points	100% points
	Reading	3 (x10)	3 (x8) = 24
	Problem set	5 (x10)	5 (x8) = 40
	Attendance	2 (x10)	2 (x8) = 16
	Midterm# 1	40	40 (x3) = 120
	Midterm# 2	40	
	Final (Midterm# 3 + cumulative)	40 + 40	
	Total		
Grading scale	Letter	% Range	Point cutoff
	A+	100 - 97	194
	A	96 - 93	186
	A-	92 - 90	180
	B+	89 - 87	174
	B	86 - 83	166
	B-	82 - 80	160
	C+	79 - 77	154
	C	76 - 73	146
	C-	72 - 70	140
	D	69 - 60	120
F	Below 60	Below 120	

Tentative schedule

Week	Date	Topic	Assignment	Due date
1	April 2	Genes & genomes	SmartBook Problem set	April 8, 5:00 PM
	April 4			
2	April 9	Gene expression & regulation	SmartBook Problem set	April 15, 5:00 PM
	April 11			
3	April 16	Genome integrity	SmartBook Problem set	April 22, 5:00 PM
	April 18			
4	April 23	MIDTERM# 1 (covers Weeks 1-3)		April 29, 5:00 PM
	April 25	Genome replication & transmission	SmartBook Problem set	
	April 26	Last day to drop <u>without</u> "W"		
5	April 30	Linkage, recombination, and gene mapping	SmartBook Problem set	May 6, 5:00 PM
	May 2	Sex chromosomes		
6	May 7	Chromosomal aberrations	SmartBook Problem set	May 13, 5:00 PM
	May 9	Developmental genetics		
	May 10	Last day to drop <u>with</u> "W"		
7	May 14	The genetics of cancer	SmartBook Problem set	May 20, 5:00 PM
	May 16	Tools of genetics		
8	May 21	MIDTERM# 2 (covers 4/25 - 5/14 lectures)		May 27, 5:00 PM
	May 23	Mendelian genetics	SmartBook Problem set	
9	May 28	Extensions to Mendel's laws	SmartBook Problem set	June 3, 5:00 PM
	May 30	Quantitative genetics		
10	June 4	Population & evolutionary genetics	SmartBook Problem set	June 7, 5:00 PM
	June 6	Course review		
	June 10 3:00 PM - 5:59 PM	FINAL EXAM: MIDTERM# 3 (covers 5/16 - 6/4 lectures) - 50% CUMULATIVE - 50%		

Campus Health

Keeping our campus healthy takes all of us. You are expected to follow the [campus safety requirements](#) and pursue personal protection practices to protect yourself and the others around you.

Campus Policies

- [UC San Diego Principles of Community](#)
- [UC San Diego Policy on Integrity of Scholarship](#)
- [Religious Accommodation](#)
- [Nondiscrimination and Harassment](#)
- [UC San Diego Student Conduct Code](#)

Diversity and equity statement

It is important to me to make sure that how I teach this course and how we accommodate different student needs reflects the differences of race, ability, sexual orientation, age, and gender identity that enrich our classroom experience and campus. If you have any concerns related to diversity and equity in the course, please contact me.

If you find yourself in an uncomfortable situation, ask for help. The university is committed to upholding policies regarding nondiscrimination, sexual violence, and sexual harassment.

Resources for Support and Learning

Learning and Academic Support	
<p><u>Ask a Librarian: Library Support</u> <i>Chat or make an appointment with a librarian to focus on your research needs</i></p> <p><u>Course Reserves, Connecting from Off-Campus and Research Support</u> <i>Find supplemental course materials</i></p> <p><u>First Gen Student Success Coaching Program</u> <i>Peer mentor program that provides students with information, resources, and support in meeting their goals</i></p> <p><u>Office of Academic Support & Instructional Services (OASIS)</u> <i>Intellectual and personal development support</i></p>	<p><u>Writing Hub Services in the Teaching + Learning Commons</u> <i>One-on-one online writing tutoring and workshops on key writing topics</i></p> <p><u>Supplemental Instruction</u> <i>Peer-assisted study sessions through the Academic Achievement Hub to improve success in historically challenging courses</i></p> <p><u>Tutoring – Content</u> <i>Drop-in and online tutoring through the Academic Achievement Hub</i></p> <p><u>Tutoring – Learning Strategies</u> <i>Address learning challenges with a metacognitive approach</i></p>
Support for Well-being and Inclusion	
<p><u>Basic Needs at UCSD</u> <i>Any student who has difficulty accessing sufficient food to eat every day, or who lacks a safe and stable place to live is encouraged to contact: foodpantry@ucsd.edu basicneeds@ucsd.edu (858) 246-2632</i></p> <p><u>Counseling and Psychological Services</u> <i>Confidential counseling and consultations for psychiatric service and mental health programming</i></p>	<p><u>Community and Resource Centers Office of Equity, Diversity, and Inclusion</u> <i>As part of the Office of Equity, Diversity, and Inclusion the campus community centers provide programs and resources for students and contribute toward the evolution of a socially just campus (858).822-.3542 diversity@ucsd.edu</i></p> <p><u>Get Involved</u> <i>Student organizations, clubs, service opportunities, and many other ways to connect with others on campus</i></p>
<p><u>Triton Concern Line</u> <i>Report students of concern: (858) 246-1111</i></p> <p><u>Office for Students with Disabilities (OSD)</u> <i>Supports students with disabilities and accessibility across campus</i></p>	<p><u>Undocumented Student Services</u> <i>Programs and services are designed to help students overcome obstacles that arise from their immigration status and support them through personal and academic excellence</i></p>