

BICD 110: Cell Biology, Winter 2022

Instructor: Sinem Beyhan, Ph.D.

sbeyhan@health.ucsd.edu (Please put BICD 110 in the subject line)

Lectures: Tue and Thu 2:00-3:20 pm, through Zoom and in PETER 108 (when available).

Zoom links are provided through CANVAS. The lectures will be recorded and posted according to the schedule of lectures below. If you run into technical issues with the CANVAS website, please contact EdTech directly at <https://ucsd servicedesk.service-now.com/its>

Dr. Beyhan's office hours: Mon 2:00-3:00 pm and Thu 10:00-11:00 am (Starts on Jan 10th, Zoom links are provided through CANVAS).

Discussion sections and IA office hours: (Starts on Jan 10th, Zoom links for discussion sections and IA office hours are provided in a separate document "Zoom links for sections and IA office hours")

Section	Days	Time	IA	
A01	Mon	6:00-6:50 pm	Emily DeFrancesco	edefranc@ucsd.edu
A02	Mon	7:00-7:50 pm	Hayden Guss (Head/Grad IA)	hguss@ucsd.edu
A03	Mon	8:00-8:50 pm	Hayden Guss (Head/Grad IA)	hguss@ucsd.edu
A04	Wed	12:00-12:50 pm	Rakesh Nemmani	rsnemman@ucsd.edu
A05	Wed	10:00-10:50 am	Kevin Tran	k1tran@ucsd.edu
A06	Wed	1:00-1:50 pm	Shaghayegh Ghahremani-senan	sghahrem@ucsd.edu
A07	Tue	8:00-8:50 am	Jaycee Fallatt	jfallatt@ucsd.edu
A08	Fri	3:00-3:50 pm	Alex Zhou	azhou@ucsd.edu
A09	Fri	4:00-4:50 pm	Dingding Ma	dima@ucsd.edu
A10	Wed	8:00-8:50 pm	Adam Moussa	ammoussa@ucsd.edu

Attendance is not mandatory; however, we strongly encourage you to attend sections and office hours. Please ask questions!

Course description: This is an upper division course on structure and function of a eukaryotic cell. Lectures will cover methods of cell biology research, membrane structure and function, protein synthesis and sorting, vesicular trafficking, cytoskeleton structure, cell cycle and cell death.

Required materials:

1. **Textbook:** (Recommended, but not required) Molecular Cell Biology (9th Edition, Lodish et al). 8th and 7th Editions are also good.
2. **Electronics:** A computer or a tablet connected to a high-speed internet will be required to be able to complete the course assignments and participate in exams.

Discussion sections: Each week a set of review questions will be assigned. These will not be graded; however, they are very useful for weekly reviewing the material. Answers to these questions will be discussed in sections, and will NOT be posted online.

Evaluation:

1. **Quizzes:** There will be quizzes at the last 15-min of each lecture. Of note, the quizzes will be available to complete for at least 24 hours. Out of the 15 total graded quizzes (30 points), top 12 of them will be averaged and added to your total score (30% of your grade).
2. **Exams:** Midterm will be on Thursday, Feb 10th, during the scheduled lecture time.
Final exam will be on Thursday, March 17th, 3:00-6:00 pm.

The exams will be weighted one of the two ways whichever is most beneficial to the student: 30% Midterm+40% Final exam or 70% Final exam

All exams are open book and open notes. Final exam is cumulative. There is no rescheduling or make-up exams. Please note that it is required for all students to take the midterm. Failure to take the midterm without a medical excuse will result in losing the 30 points from your total grade.

To be fair to everyone, the final will be offered only at the time scheduled, except under extraordinary, documented circumstances (e.g. documented illness that requires hospitalization), and Dr. Beyhan must be notified of that extraordinary circumstance *prior* to the final exam.

For re-grading of the exams, a written request must be submitted to Dr. Beyhan and the head IA Hayden Guss within one week of receiving the exam score.

Grades:

The class will be graded on a standard scale (not on a curve) so that everyone has the opportunity to achieve a high grade. However, in the event that the class average is below B-, the top 5% of scores will be normalized to the highest score (A). Normalized scores will be used to calculate grades using the following distribution:

100-91.5% A
 91.5-87.5% A-
 87.5-83% B+
 83-79% B
 79-75% B-
 75-70.5% C+
 70.5-66.5% C
 66.5-62.5% C-
 62.5%-50% D
 50-0% F

Academic Integrity

Academic dishonesty undermines the hard work of all students in the class who take responsibility for their learning. Academic dishonesty is incompatible with science and the search for truth. We do not tolerate it. Out of respect and appreciation for your own efforts, nor should you. We encourage you to talk with any of the BICD 110 teaching team if you learn of any incidents of academic dishonesty. Any student violating UCSD's Academic Dishonesty or Student Conduct policies will earn an 'F' in the course and will be reported to their college Dean for administrative processing. Committing acts that violate Student Conduct policies, resulting in course disruption, may be cause for suspension or dismissal from UCSD. Submitting online assignments for someone else will be treated as violations of Student Conduct Policies.

Schedule of Classes:

Week	Date	Lecture
1	Tue, January 4	Introduction to the cell biology
	Thu, January 6	Biomembranes
2	Tue, January 11	Transmembrane transport
	Thu, January 13	Proteins into organelles
3	Tue, January 18	Secretory Pathway-I (ER)
	Thu, January 20	Secretory Pathway-II (Golgi)
4	Tue, January 25	Secretory Pathway-III (Lysosomes)
	Thu, January 27	Signal Transduction-I (Receptor mediated)

5	Tue, February 1	Signal Transduction-II (GPCRs)
	Thu, February 3	Signal Transduction-III (Kinase pathways)
6	Tue, February 8	Review and Q&A
	Thu, February 10	MIDTERM
7	Tue, February 15	Cytoskeleton-I (Microfilaments)
	Thu, February 17	Cytoskeleton-II (IFs and Microtubules)
8	Tue, February 22	Cytoskeleton-III (Motor proteins)
	Thu, February 24	Cell Cycle
9	Tue, March 1	Cell Division and Cancer
	Thu, March 3	Cell Death Pathways
10	Tue, March 8	Immunology
	Thu, March 10	Review and Q&A
	Thu, March 17	FINAL EXAM (3:00 - 6:00 pm)