

Syllabus

Time: 11-12:20 pm, MTuWTh

Place: Ledden Auditorium (HSS 2250)

Text: *Molecular Cell Biology* 6th Ed. by Lodish et. al.

See also: <http://www.whfreeman.com/lodish6e> for animations, corrections of errors in the text, and other useful information.

Prerequisites: Structural Biochem. (BIBC 100) or
Metabolic Biochem. (BIBC 102)

Instructor:

Dr. Tinya Fleming
Email: tcfleming@ucsd.edu
(cc: TA; include BICD110 in subject)

Office Hour:

Thursday 12:30-1:30pm
HSS 1145C

Teaching Assistants	Email	Discussion Sections: Time	Place
Semi Han	seh002@ucsd.edu	MW 1-1:50pm	York 3000A
Kendrick Khoo	kkhoo@ucsd.edu	TuTh 2-2:50pm	Centr 218
		TuTh 3-3:50pm	HSS 2321
Wilson Kwan	wkwan@ucsd.edu	MW 3-3:50pm	HSS 1305
		MW 4-4:50pm	HSS 2321
Shokufeh Nourollahi	shnourol@ucsd.edu	TuTh 4-4:50pm	York 4050A
		TuTh 5-5:50pm	York 4050A

TA office hours will be announced in Discussion Sections and posted online.

Sections attendance is expected. Sections meet 2 days a week.

Register for sections online at: <http://sections.ucsd.edu/overview.shtml>

Sections will discuss research papers that have been assigned and/or go over problem sets. Problem sets will not be graded. **The material covered in the sections is required and will be tested on exams.**

Class Web Site: Ted/WebCT (<https://ted.ucsd.edu>)

All class notices, the syllabus, lecture notes and PDFs for section reading/problem sets will be posted here. Please check the web site regularly for updates, since this will be the main form of distribution of information to the class.

Academic Integrity:

DO NOT CHEAT. Integrity of scholarship is essential for an academic community. All academic work will be done by the individual to whom it is assigned, without unauthorized aid of any kind. Friendship and/or love are not excuses to either cheat, or to help cheat. The person giving out answers is as culpable for cheating as the person doing the copying.

Subtle indicators in exams will be included to prevent cheating, and any suspicious activity will merit immediate investigation. If there is case of academic misconduct, there will be severe consequences. You **will** be reported to the Office of Academic Integrity, and you **will** face academic sanctions including, but not restricted to:

- Creation of a disciplinary record (which will be checked by graduate and professional schools)
- Disciplinary probation
- Attendance at an Academic Integrity Seminar (cost \$75)
- Suspension and dismissal from the University

Exams and Grading:

Students requesting accommodations and services due to a disability for this course need to provide a current [Authorization for Accommodation \(AFA\) letter](#) issued by the Office for Students with Disabilities the **first week of class**. Without this prior arrangement, any students wishing to leave the exam room early, for any reason, will have to turn in a finished exam (ie. No bathroom breaks). Please bring only pens and a **photo ID** to the exams.

The exams will be weighted as follows: **40% Midterm + 60% Final**

In order to ensure that it is theoretically possible for everyone to get an A if it is deserved, the grading will be on a straight percentage basis. The average of the top 2% scores will be used to calculate grades based on the following distribution:

100-92%	= A
92-88%	= A -
88-83%	= B+
83-79%	= B
79-75%	= B -
75-71%	= C+
71-66%	= C
66-62%	= C -
62-50%	= D
50- 0%	= F

Extra Credit (up to 5%) will be given for participation and effort in class and *sections*.

Makeup Exams:

There will be *no makeup exams*. If a student misses the midterm due to a **valid medical excuse** (i.e. a doctor's note) the final will be 100% of your grade. If a student misses the final due to a **valid medical excuse** (i.e. a doctor's note), they **may**, at the instructor's discretion, be offered a makeup *oral exam*.

Regrade Policy:

Requests for regrades must be submitted in writing with a detailed explanation of the grading error and include your full name and email address, along with your original exam within one week of the exam return date. Regrades will only be allowed on exams taken in non-erasable ink with no white out or correction tape. Any regrade request will result in the ENTIRE exam being regraded. Any inconsistencies will be considered a breach in academic honesty and will be grounds for failure of the course.

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 dynamics, protein synthesis and sorting, cytoskeleton structure and dynamics, cell cycle and cell death, and importance of cell biology in development and disease.

Course Etiquette:

Turn off all cell phones. No texting or disruptions to the class.

BICD 110: CELL BIOLOGY

Date	Topic	Reading
Aug 1	Introduction: Cells to Biomolecules	p1-6, Ch. 1.2, 1.4, 9.1-9.3
Aug 2	Techniques in Cell Biology	Ch. 3.6, 9.4
Aug 3	Membrane structure and fluidity	Ch. 10-10.1, 10.3, p.456-457
Aug 4	Transport of small molecules	p437-444, Ch. 11.3,11.5-11.6
Aug 8	Protein sorting, Nuclear transport (mitochondria p.557-564)	p533-535, Ch. 8.3, 13.6
Aug 9	Secretory pathway I: ER	Ch. 13-13.3
Aug 10	Secretory pathway II: Golgi	Ch. 14-14.3
Aug 11	Secretory pathway III: Lysosomes and Exocytosis	p600-604, Ch. 13.5
Aug 15	Endocytosis	p598-600, Ch. 14.5, p1023
Aug 16	Signal transduction I: GPCR	p623-628, Ch. 15.3-15.4, 15.6
Aug 17	Signal Transduction II: RTK	p665-667, Ch. 16.3-16.5
4-6pm	Review	LEDDN AUD
<u>Aug 18</u>	<u>MIDTERM</u>	<u>WLH 2001</u>
Aug 22	The cytoskeleton I: Actin	Ch17-17.3
Aug 23	Myosin and Cell motility	Ch. 17.5-17.7
Aug 24	The cytoskeleton II: Microtubules	Ch. 18-18.3
Aug 25	Microtubule dynamics and motors	Ch. 18.4-18.5, p797
Aug 29	Cell Cycle control	Ch. 18.6, 20-20.3
Aug 30	Checkpoint regulation, Cell death	Ch. 20.7-20.8, 21.5, 25.4
Aug 31	Cell-cell communication	Ch. 19.1, p990-992, 23.5
Sept 1	TBA	
12:30-2:30pm	Review	LEDDN AUD
<u>Sept 2</u>	<u>11:30-2:30pm</u>	<u>FINAL</u> <u>TBA</u>