

BICD110: Cell Biology Winter 2018

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, cells in development and disease.

Instructor Professor Elizabeth Villa (evilla@ucsd.edu)

Lectures Tuesdays and Thursday 12:30-1:50 PM Center Hall 119

Office Hours Tuesdays 2:00 - 3:00 PM Pacific Hall 3502
See note about e-mail conduct on page 2.

Instructional Assistants

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Materials The class web site is on TritonEd (<http://triton.ed.ucsd.edu>). All class notices, the syllabus, 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. The lecture slides will be posted to the site after lectures, and the course will be podcasted.

Textbook Molecular Cell Biology (8th Edition, Lodish et al). Recommended, not required.

Grades There will be two midterms and a comprehensive final exam. You have the choice of the following grading scheme (max 1000 points)

Midterm 1	200 pt
Midterm 2	200 pt
Final exam, cumulative	500 pt
Participation	100 pt

Alternatively, you can drop one of the midterms and redistribute the points according to the following scheme:

One midterm (highest grade out of two)	300 pt
Final exam, cumulative	600 pt
Participation	100 pt

This means that there are **NO MAKE UP EXAMS** and, if for ANY reason you miss a midterm exam, the second scheme will automatically be applied.

In order to ensure that everyone has a chance at getting a grade that reflects the effort that they put into the class, the grading will be on a straight percentage basis. The top 5% of scores will be normalized to the next highest score. That score 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

Using this system there is no upper limit to the number of A's in the class as there is when a standard curve is used.

Problem Sets This course covers a lot of different concepts, and requires you to understand them and apply them. To help achieve this, problem sets will be assigned, but not submitted for a grade. Problem sets will be posted on the class web site. The questions will refer to material covered in class and section, and will often mimic those given on exams. Students who take the time to do these problems regularly (*i.e.* not wait until right before an exam) are virtually guaranteed to be ready to perform well on the exams.

Participation: Attendance in lecture and discussion is expected. iClicker questions will be asked (randomly) in lectures. Please register your iClicker in TED. Participation during discussion will also be noted. The 100 points of participation will come from iClicker answers and from 2-4 quizzes that will be given during discussion, totaling 125 points. All points will be added for a maximum of 100 points. No makeup for quizzes or iClicker questions will be given.

Regrade Policy: The purpose of regrades is to protect you from potential mistakes made by overworked and underappreciated IAs. Requests for regrades must be submitted in writing with a description of the grading error along with your original exam within one week of the exam return date. Please be advised that exams will be photocopied before they are returned to you. Thus, do not alter ANYTHING on an exam for which you are submitting for re-grading. Any inconsistencies will be considered a breach in academic honesty and will be grounds for failure of the course. You can personally deliver these documents to Prof. Villa during her office hours.

Email etiquette: Before e-mailing the instructors, consider carefully whether your question might be already answered in the syllabus, or whether it is best to ask your question in person during office hours. For example, it is difficult to e-mail about concepts that require drawings or demos. If you send an e-mail, make sure to **include BICD 110**. You must send your email from your UCSD address; please make clear who you are. As always, a well-written and professional e-

mail greatly increases the likelihood that you will get a response in a timely manner.

Schedule: The schedule below is **tentative** and will vary to make sure that you learn all the key concepts in cell biology.

Lecture	Date	Topics	Instructor
1	9-Jan	Methods in Cell Biology	EV
2	11-Jan	Membrane Biochemistry	EV
3	16-Jan	Membrane Transport of Small Molecules/Ions	EV
4	18-Jan	Endocytosis	EV
5	23-Jan	Secretory Pathway I	EV
6	25-Jan	Secretory Pathway II	EV
7	30-Jan	Secretory Pathway III	EV
8	1-Feb	The Nucleus	EV
9	6-Feb	Mitochondria	Francisco Piña
	8-Feb	MIDTERM 1 (Lectures 1-7)	
10	13-Feb	Signal Transduction I	EV
11	15-Feb	Signal Transduction II	EV
12	20-Feb	Cytoskeleton I	EV
13	22-Feb	Cytoskeleton II	EV
14	27-Feb	Cytoskeleton III	EV
	1-Mar	MIDTERM 2 (Lectures 8-14)	
15	6-Mar	Cytoskeleton IV	EV
16	8-Mar	Cell Cycle I	John Tat
17	13-Mar	Cell Cycle II	EV
18	15-Mar	TBA	EV
	20-Mar	FINAL	

Adds/Drops/Withdrawals: Use [TritonLink](#) to add into open sections, to waitlist a full section, or to drop the course.

Special Circumstances: You must communicate special needs, including those based on medical conditions or religious beliefs, prior to January 18th. These needs will be taken into account only after they have been discussed with the professor. Students with disabilities are given my full support as long as you work through the Office for Students with Disabilities. Excusal from an exam will be granted by the professor only if proper documentation is provided (e.g., from medical/law-enforcement professionals). **No rescheduling or make-up exams are allowed**, except as noted in:
<http://www.ucsd.edu/catalog/front/AcadRegu.html>

Students with disabilities: If you have been given an Authorization for Accommodation (AFA) letter from the Office of Students with Disabilities (OSD), you must provide the instructor, and the OSD Liaison Lindsay Ward with a copy of the letter before any accommodations will be provided. All exam scheduling will be coordinated by you and the instructor, with involvement from the OSD Liaison as needed. In order to guarantee accommodations, you must follow the guidelines established by the Instructor and/or Liaison. OSD exams will run concurrently with the scheduled exam.

Aid & Collaboration: You are encouraged to work together and form discussion groups to learn all aspects of cryo-EM. However, all submitted assignments must clearly demonstrate independent effort. Collaboration or aid on quizzes and exams is strictly prohibited unless told otherwise.

Academic Integrity: DO NOT CHEAT. All submitted work must be your own. This includes all exams and in-class assignments. Please read the UCSD Policy on Integrity of Scholarship, at:
<http://senate.ucsd.edu/manual/Appendices/Appendix2.pdf>
See page 5 of this syllabus for excerpts. All violations of academic integrity that are noticed by me will be sent to the Office of Academic Integrity without exception. **If you cheat, you can expect an F for the entire quarter, not just the exam/assignment in question.**

Classroom etiquette in lectures and discussions: The following rules are aimed to keep our classroom environment focused on the task at hand for you and your peers. You know these basics already:

- Please arrive on time to lecture and discussion.
- Reading newspapers etc., is not allowed.
- All phones must be off during lectures, discussions, and exams.
- Phones/tablets/computers/ must be out of sight during exam periods.

The bottom line is that we will be considerate of one another at all times in lectures and in the discussions.

Academic Integrity at UCSD

Excerpts from <http://senate.ucsd.edu/Operating-Procedures/Senate-Manual/Appendices/2>

“Integrity of scholarship is essential for an academic community. The University expects that both faculty and students will honor this principle and in so doing protect the validity of University intellectual work. For students, this means that all academic work will be done by the individual to whom it is assigned, without unauthorized aid of any kind. Instructors, for their part, will exercise care in planning and supervising academic work, so that honest effort will be upheld.”

Instructors' Responsibility.

“The Instructor shall state in writing how graded assignments and exams will contribute to the final grade in the course. If there are any course-specific rules required by the Instructor for maintaining academic integrity, the instructor shall also inform students of these in writing.”

Students' Responsibility. “Students are expected to complete the course in compliance with the instructor's standards. No student shall engage in an activity that involves attempting to receive a grade by means other than honest effort; for example:

- No student shall knowingly procure, provide, or accept any unauthorized material that contains questions or answers to any examination or assignment that is being, or will be, administered.

- No student shall complete, in part or in total, any examination or assignment for another person.

- No student shall knowingly allow any examination or assignment to be completed, in part or in whole, for himself or herself by another person.

- No student shall plagiarize or copy the work of another person and submit it as his or her own work.

- No student shall employ aids excluded by the instructor in undertaking course work or in completing any exam or assignment.

- No student shall alter graded class assignments or examinations and then resubmit them for regrading.

- No student shall submit substantially the same material in more than one course without prior authorization.”

Instructional Assistant's (IA) Responsibilities

“A student acting in the capacity of an Instructional Assistant (IA), a category including but not limited to teaching assistants, readers, and tutors, has a special responsibility to safeguard integrity of scholarship. In this role the student functions as an apprentice instructor, under the tutelage of the responsible instructor. An IA shall equitably grade student work in the manner agreed upon with the course instructor. An IA shall not provide a student with any information or collaboration that would aid the student in completing the course in a dishonest manner (e.g., providing access to unauthorized material related to tests, exams, and homework).”