

Syllabus

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, and the cell cycle.

This syllabus is subject to change, particularly because of campus efforts to contain COVID-19. Any schedule changes will be posted on the course website. Make sure to frequently check the website to keep updated.

Instructor: Dr. Emily Petty (elpetty@ucsd.edu)

Lectures: Tuesday and Thursday 2:00 pm - 4:50pm via Zoom

All educational sessions (lectures and discussions) will be recorded and made available asynchronously.

Please make sure that you check out this website for resources on how to learn remotely: <https://digitallearning.ucsd.edu/learners/learning-remote.html> Links to an external site.

Office Hours: Fridays 10:00am - 11:00am via Zoom and by appointment. Please try to make at least one office hour. I will miss meeting you in person and would like to at least say hello virtually. See note about e-mail conduct below.

Instructional Assistant: **Titus Hartmann** – tnhartma@ucsd.edu

IA Office Hours: Wednesdays 1:00 PM - 2:00 pm [via Zoom \(Links to an external site.\)](#) and by appointment! Link: <https://ucsd.zoom.us/j/98703609992> (Links to an external site.)

Material: The course materials are on Canvas (<http://canvas.ucsd.edu>). All Zoom links and recordings, lecture PDFs and movie files, class notices, the syllabus, and PDFs for section problem sets will be posted here. Please check the course Canvas page regularly for updates, since this will be the main form of distribution of information to the class. Preliminary lecture slides will be posted to Canvas the morning of each lecture and a finalized/corrected version will be available after lectures. Each lecture will be recorded via Zoom and all recordings will be available on Canvas.

Textbook: Molecular Cell Biology (8th Edition, Lodish et al). Recommended, not required. An eBook is available as a purchasing option for this course via RedShelf or VitalSource. Please see UCSD Bookstore for details.

Grades: *I understand this is a challenging time and that you may have challenges with accessing the course material, adapting to online-only learning, and taking online quizzes and exams. My goals are to teach you the course material, fairly test your knowledge of this material, and grade you accordingly, while keeping these challenges in mind.*

There will be one mandatory midterm and a comprehensive final exam each worth 30% of your final grade. The remaining 40% will come from lecture study guide assignments and discussion problem sets.

- Midterm (mandatory) 30%
- Final exam, cumulative 30%
- Study guide assignments 20%
- Weekly Problem sets 20%

100-98 A+

97.5-91.5% 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 on Gradescope will be assigned each week and must be completed the following Sunday at 11:59pm. Problem set answers will be covered in each Tuesday Discussion section. The questions will refer to material covered in class, and will often mimic those given on exams. Students who take the time to do these problems regularly are virtually guaranteed to be ready to perform well on the exams.

Lecture Study Guides: One of the most commonly cited issues among UCSD students transitioning to online only course work is increased difficulty in keeping up with the material. Summer courses are double the pace of the standard quarter so there is even less time to catch up if you fall behind. Therefore, instead of the standard participation credit, you will be asked to write/draw/diagram a study guide based on each lectures' material to be turned in for credit by 11:59pm the day after each lecture. Each will be worth 25 points and will account for 20% of your final grade, in total. The purpose of this assignment is to help you stay regularly connected with the material and help the us determine which concepts may need to be revisited in lecture/discussion.

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 via email with a description of the grading error within one week of the exam. Any inconsistencies will be considered a breach in academic honesty and will be grounds for failure of the course.

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 email, 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.

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 Friday August 9. 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>Links to an external site.

Students with disabilities: 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 (OSD), prior to eligibility for requests. Receipt of AFAs in advance is necessary for appropriate planning for the provision of reasonable accommodations. Please note that instructors are unable to provide accommodations unless we are first authorized by OSD. For more information, contact the OSD at (858) 534-4382 (voice), osd@ucsd.edu, or visit osd.ucsd.edu.Links to an external site.

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>Links to an external site.

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.**

NOTE: Students suspected of AI violations on exams will be invited to Zoom follow-up meetings where they will be asked to (in real time, on video) justify their answers (before the graded exams or solutions are released). If the instructor is not convinced during the meeting, or the student refuses to participate, the student will be submitted to the Office of Academic Integrity for AI violations.

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
1	8-4	Introduction; Methods in Cell Biology; Membrane Biochemistry Reading: Lodish Ch 1, 4, 7
2	8-6	Membrane Transport of Small Molecules/Ions; Endocytosis Reading: Lodish Ch. 11, 14
3	8-11	Protein Sorting; Secretory Pathway I Reading: Lodish Ch .13, 14
4	8-13	Secretory Pathway II; The nucleus Reading: Lodish Ch. 14, Ch. 15
5	8-18	Midterm (online, mandatory)

- 6 8-20 Signal Transduction I

 Reading: Lodish Ch 16
- 7 8-25 Signal Transduction II

 Lodish Ch: 16
- 8 8-27 Cytoskeleton 1

 Reading: Lodish Ch. 17, 18
- 9 9-1 Cytoskeleton 2

 Reading: Lodish Ch. 17, 18
- 10 9-3 Cell Cycle

 Reading: Lodish Ch. 19

Sat. 9-
5 *FINAL - online*

Academic Integrity at UCSD

Excerpts from <http://senate.ucsd.edu/Operating-Procedures/Senate-Manual/Appendices/2Links to an external site.>

“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,
- No student shall complete, in part or in total, any examination or assignment for another
- No student shall knowingly allow any examination or assignment to be completed, in part or in whole, for himself or herself by another
- 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
- 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).”