

Syllabus BICD 110 Cell Biology 2016

Time:

11-12:20 pm, Tue & Thur
January 6 - March 10

Place:

Galbraith Hall 242

Instructor:

Jim Wilhelm
Cell and Developmental Biology
2123A Pac Hall
Phone: 534-9541
Email: jwilhelm@ucsd.edu

Office Hour:

Pacific Hall 2130
Tues 1-2pm

Instructional Assistants and Discussion Sections:

Jay Schmalz	email: jschmalz@ucsd.edu
Anastasia Vavilina	email: avavilin@ucsd.edu
Michael Hayes	email: mihayes@ucsd.edu
Jonathan Yu	email: jwy012@ucsd.edu
Megg Garcia	email: mgg008@ucsd.edu
Chandni Patel	email: c7patel@ucsd.edu
Kyle Begovich	email: kbegovic@ucsd.edu
Jusik Yang	email: juy028@ucsd.edu

Sections will discuss research papers that have been assigned 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

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. My lecture notes will be posted to the site. I plan to podcast the course as well, but I make no guarantees as to the quality of the recording.

Text:

Molecular Cell Biology (7th Edition, Lodish et al)

Prerequisites:

BIBC 100 or BIBC 102

Exams and Grading:

Midterm (Feb 9 in class)

Final (March 17 11:30 am-2:30 pm location TBA)

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.

The exams will be weighted one of two ways whichever is most beneficial to the student:

40% Midterm + 60% Final

OR

100% Final

This exam system allows students who do poorly on the midterm to repair their grades with sufficient hard work. However, since the purpose of the midterm is to provide a guide to how you are doing in the course, it is a requirement that ALL students must take the midterm in order to avail themselves of the possibility of counting the final 100%. Failure to take the midterm, without a valid medical excuse, will result in only the 40% midterm/60% final formula being used.

Makeup Exams:

There will be no makeup exams for the midterm - the final will be 100% of your grade **with a valid medical excuse**. In the event of a medical emergency that prevents your taking the final (i.e. a doctors note), an oral makeup final will be given.

Regrade Policy:

The purpose of regrades is to protect you from 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 me (Wilhelm) at the lectures or during my office hours.

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, cells in development and disease.

<u>Date</u>	<u>Subject</u>	<u>Reading</u>
Jan 5	Methods in Cell Biology	p77-80 p88-90(GTPases) p93-102 p106-109 p172-180 p188-191 p198-199 p201-205 p212-218 p321-323 p408-411 p415-417 p419-430
Jan 7	Membrane Biochemistry	p443-454 p462-469 p492-494 Fig.11-16
Jan 12	Membrane Transport of Small Molecules/Ions	p473-481 p483-494 p502-510

Jan 14	Endocytosis	p627-629 (clathrin/dynamin) p646-648 p654-660 p1042 Fig 14-20 Fig 14-22
Jan 19	Secretory Pathway I:ER	p577-584 p587-601 p671-672
Jan 21	Secretory Pathway II: Golgi	p627-646
Jan 26	Secretory Pathway III: Golgi and Lysosome	p646-652 (mitochondria) p601-610 (peroxisome) p612-614
Jan 28	The Nucleus	p365-370 p615-621
Feb 2	Signal Transduction I	p323-325 p673-692 p699-713
Feb 4	Signal Transduction II	None
Feb 9	Midterm In Class	
Feb 11	Signal Transduction III	p721-747
Feb 16	Cytoskeleton I: Actin	p773-783

Feb 18	Cytoskeleton II: Actin	p783-790 p808-815
Feb 23	Cytoskeleton III: Microtubules	p821-833
Feb 25	Cytoskeleton IV: Motors	p793-800 p833-848
Mar 1	Cell Cycle I: Cell Cycle Oscillator	p873-890 p897-898
Mar 3	Cell Cycle II: Checkpoint controls	p906-913 p923-924 p892-896
Mar 8	Cell Cycle III: Cancer	p1113-1114 p1118-1143
Mar 10	TBA	
Mar 17	Final	11:30am-2:30pm location TBA