

## Syllabus BICD 110 Cell Biology 2012

### Time:

9:30-10:50 pm, Tue & Thur  
January 10 - March 15

### Place:

Warren Lecture Hall 2001

### Instructor:

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

### Office Hour:

Thursday 2-3pm Pacific Hall 2130

### Teaching Assistants and Discussion Sections:

Aaron Louie	email: <a href="mailto:mr.microbiota@gmail.com">mr.microbiota@gmail.com</a>
Aaron Burkenroad	email: <a href="mailto:aburken@ucsd.edu">aburken@ucsd.edu</a>
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Risa Broyer	email: <a href="mailto:rmayyam@ucsd.edu">rmaruyam@ucsd.edu</a>

Registration for sections will be online. The procedure is outlined at:

<http://sections.ucsd.edu/overview.shtml>

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 TED (<http://ted.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 (6<sup>th</sup> Edition, Lodish et al)

**Prerequisites:**

BIBC 100 or BIBC 102

**Exams and Grading:**

Midterm (Feb 14 in class)

Final (March 20 8am-11am 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 TAs. 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.

Date	Subject	Reading
Jan 10	Methods in Cell Biology	p78-81 p92-101 p166-174 p182-184 p191-192 p194-198 p204-206 p209-210 p310-311 p382-385 p388-394
Jan 12	Membrane Biochemistry	p409-420 p.427-432 p456-457 Fig.11-15 Fig.11-16

Jan 17	Membrane Transport of Small Molecules/Ions	p437-444 p447-457 p465-473
Jan 19	Endocytosis (clathrin/dynamin)	p579-581 p598-600 p606-612 p1023 Fig 14-20 Fig 14-22
Jan 24	Secretory Pathway I:ER	p533-540 p542-556 p621-622
Jan 26	Secretory Pathway II: Golgi	p579-597
Jan 31	Secretory Pathway III: Golgi and Lysosome (mitochondria) (peroxisome)	p600-604 p557-564 p567-569
Feb 2	The Nucleus	p341-347 p569-575
Feb 7	Signal Transduction I	p311-313 p623-640 p646-657
Feb 9	Signal Transduction II	None
<b>Feb 14</b>	<b>Midterm In Class</b>	

Feb 16	Signal Transduction III	p672-697
Feb 21	Cytoskeleton I: Actin	p713-723
Feb 23	Cytoskeleton II: Actin	p723-728 p745-751
Feb 28	Cytoskeleton III: Microtubules	p757-768
Mar 1	Cytoskeleton IV: Motors	p731-738 p769-781
Mar 6	Cell Cycle I: Cell Cycle Oscillator	p847-863
Mar 8	Cell Cycle II: Checkpoint controls	p884-892 p903-904
Mar 13	Cell Cycle III: Cancer	p1119-1138
Mar 15	TBA	
<b>Mar 20</b>	<b>Final</b>	<b>8am-11am location TBA</b>