

## Syllabus BICD 110 Cell Biology Fall Quarter 2011

### Time:

MWF, 2–2:50pm  
Sept. 23. – Dec. 7.

### Place:

Peterson Hall 110

### Instructor:

Sylvia Neumann  
The Scripps Research Institute  
Office at UCSD: HSS (Humanities and Social Sciences Building) 1145B  
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### Office Hour:

Monday 11am – 12pm HSS (Humanities and Social Sciences Building) 1145B

### Teaching Assistants and Tutors

Kathy Deloach email: [kdeloach@ucsd.edu](mailto:kdeloach@ucsd.edu)  
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Registration for sections will be online at [sections.ucsd.edu](http://sections.ucsd.edu). Sections will discuss research papers that have been assigned or go over problem sets. Problem sets will not be graded but will be presented by students. Attendance and presentation are required. **The material covered in the sections is required and will be tested on exams.**

### Class Web Site

<http://www.biology.ucsd.edu/classes/bicd100.FA11>. 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 (6th Edition, Lodish et al)

### Prerequisites:

BIBC 100 or BIBC 102

**Late Adds:** I do not accept late enrollment.

### Exams and Grading:

Midterm (10/24/2011) in class

Final (12/07/2011 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: 2% Sections + 38% Midterm + 60% Final

**OR**

2% Sections + 98% 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 contact me at [sneumann@scripps.edu](mailto:sneumann@scripps.edu) to make an appointment.

**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
1	09/23/11	Introduction, Cells, Molecules of a Cell and Energy Balance	Chapter 9.1
2	09/26/11	Methods in Cell Biology I: Microscopy	Chapter 9
3	09/28/11	Methods in Cell Biology II: other techniques	Chapter 9
4	09/30/11	The Nucleus	Chapter 8.1, 8.2, Chapter 6.6, Chapter 13.6
5	10/03/11	Membranes and Membrane Trafficking	Chapter 10, Chapter 14.1., 14.2
6	10/05/11	Membrane Proteins	Chapter 13
7	10/07/11	The Endoplasmatic Reticulum I	Chapter 3.2, Chapter 13,
8	10/10/11	The Endoplasmatic Reticulum II	Chapter 14

9	10/12/11	The Golgi and Exocytosis	Chapter 14
10	10/14/11	The Plasma Membrane	Chapter 11, Chapter 19
11	10/17/11	Endocytosis	
12	10/19/11	Endosomes and Lysosomes	
13	10/21/11	Mitochondria, Chloroplasts and Peroxisomes	
	10/24/11	<b>Midterm in Class</b>	
14	10/26/11	Signal Transduction I: Receptor Tyrosine Kinases and small GTPases	
15	10/28/11	Signal Transduction II: GPCRs	
16	10/31/11	Signal Transduction III: Signaling during development: WNT, Hedgehog and Notch	
17	11/02/11	Lipids in Health and Disease	
18	11/04/11	Cytoskeleton I: Actin	
19	11/07/11	Cytoskeleton II: Microtubules	
20	11/09/11	Cytoskeleton III: Motors	
21	11/14/11	Cell Cycle I	
22	11/16/11	Cell Cycle II: Checkpoint Controls	
23	11/18/11	Cell Cycle III: Cell Death	
24	11/21/11	Cancer	
25	11/23/11	RNA World	
26	11/28/11	Different Cell Types and their Functions	
27	11/30/11	TBA	