BICD 110 Cell Biology Fall 2013 (783866)

Welcome!

Time and Place:
Warren Lecture Hall 2001
Tues & Thurs 11:00a-12:20p
Sept 26-Dec 5 2013

Instructor:
Emily Grossman, Ph.D
H&SS 1145C
Office Hour Tuesday 4-5p
egrossma@ucsd.edu

Teaching Assistants and Discussion Sections:

Sara Choi	ssc013@ucsd.edu	Monday 5-5:50p, Monday 6-6:50p
Kripa Guram	kguram@ucsd.edu	Monday 7-7:50p
Nicole Margarit	nmargari@ucsd.edu	Wednesday 7-7:50p
Renee Chen	rwchen@ucsd.edu	Friday 1-1:50p
Thanh-Thanh Nguyen	thn040@ucsd.edu	Friday 2-2:50p

Sections:
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 and include quizzes on these. The material covered in the sections is required and will be tested on exams. Sections will start Week 2.

Class Web Site:
The class web site is on TED (http://ted.ucsd.edu). All class notices, the syllabus, and PDFs for section reading 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.

Book:
Molecular Cell Biology (Lodish *et al.*, 7th edition)

Prerequisites:
BIBC 100 or BIBC 102

Exams, Marking scheme:
Participation (Literature quiz during section) – 10%
Midterm (Thurs Oct 31st in class) – 40%
Final (Wed Dec 11th 11:30-2:30p Location TBA)– 50%

Regrades are only accepted within the first week of exam return and must be handed in to Dr. Grossman. Each exam must have a written statement describing the question or area where you feel a mistake was made.

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.

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.

Course Schedule:
Lecture 1 (Thurs 9/26): Introduction to Methods, Eukaryotic Cell Organelles
Recommended Reading: Chapter 9

Lecture 2 (Tues 10/1): Membrane Structure and Membrane Proteins
Recommended Reading: Chapter 10

Lecture 3 (Thurs 10/3): Membrane Transport and Electrical Properties
Recommended Reading: Chapter 11

Lecture 4 (Tues 10/8): Endocytosis
Recommended Reading: p627-629, p646-648, p654-660, Fig 14-20, Fig 14-22

Lecture 5 (Thurs 10/10): Secretory Pathway I: ER
Recommended Reading: p577-584, p587-601, p671-672

Lecture 6 (Tues 10/15): Secretory Pathway II: Golgi
Recommended Reading: p627-646

Lecture 7 (Thurs 10/17): Secretory Pathway III: Golgi and Lysosome
Recommended Reading: p646-652, p601-610, p612-614

Lecture 8 (Tues 10/22): The Nucleus
Recommended Reading: p365-370, p615-621

Lecture 9 (Thurs 10/24): Signal Transduction I
Recommended Reading: p323-325, p673-692, p699-713

Lecture 10 (Tues 10/29): Signal Transduction II
Recommended Reading: p721-747

Thurs 10/31: Midterm

Lecture 11 (Tues 11/5): Cytoskeleton I: Actin
Recommended Reading: p773-790, p808-815

Lecture 12 (Thurs 11/7): Cytoskeleton II: Microtubules
Recommended Reading: p821-833

Lecture 13 (Tues 11/12): Cytoskeleton III: Molecular Motors
Recommended Reading: p793-800, p833-848

Lecture 14 (Thurs 11/14): Cell Cycle I: Cell Cycle Oscillator
Recommended Reading: p873-890, p897-898

Lecture 15 (Tues 11/19): Cell Cycle II: Checkpoint Controls
Recommended Reading: p906-913, p923-924, p892-896

Lecture 16 (Thurs 11/21): Cell Cycle III: Cancer
Recommended Reading: p1113-1114, p1118-1143

Lecture 17 (Tues 11/26): Extracellular Matrix
Recommended Reading: p927-950

Thurs 11/28: THANKSGIVING NO CLASS

Lecture 18 (Tues 12/3): Development and Stem Cells
Recommended Reading: p979-994

Lecture 19 (Thurs 12/5): Review for Final

Final (**Wed 12/11**): 11:30-2:30p Location TBA