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 nmargarit@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**