

Structural Biochemistry - BIBC 100
Spring 2010
Warren Lecture Hall 2001
Tues/Thurs 11 AM– 12:20 PM

Dr. Stephanie Mel
 email: smel@ucsd.edu
 Phone: (858) 822-0603

Office: 4070E York Hall
 Office hours: Thursdays 1 – 2:30 PM

Following is a list of topics in the order that they will be covered during the course. The corresponding chapter from the 5th edition of Lehninger is listed. **You are only responsible for material covered in class, not for all of the material in each chapter.** I also include many figures from other books in my lectures. All of the class powerpoints will be available on WebCT. This class will not be podcast.

Topic	Lehninger 5th ed. References
1. Introduction - Amino acids, Peptides, Proteins	Chapters 2/3
2. Three Dimensional Structure/Motifs, Methods	Chapters 3/4
3. Protein Denaturation and Folding	Chapter 4
4. Protein Function I: Immune system	Chapter 5
5. Protein Function II: Hb and Mb	Chapter 5
6. Protein Function III: myosin	Chapter 5
7. Enzymes	Chapter 6
8. Membranes and Membrane Proteins	Chapters 10 and 11
9. Signal Transduction	Chapter 12
10. DNA binding proteins	Chapter 28
11. Membrane Fusion	Chapter 8
12. Influenza	Chapter 11

EXAMS

MIDTERM EXAM: TUESDAY MAY 4 IN CLASS
FINAL EXAM: TUESDAY JUNE 8 11:30 AM – 2:30 PM

NOTE: Check your midterm and final exam schedules NOW. There are no alternate exams offered for this class, even if you have 3 exams on one day. Plan ahead!

Required Text:

Lehninger Principles of Biochemistry, 5th edition*
 D. Nelson and M. Cox
 W. H. Freeman and Company, 2008

*Note that 4th edition is OK for most material

Note interactive website! <http://bcs.whfreeman.com/lehninger/>

Other Interesting/Recommended books:

The Absolute Ultimate Guide to Lehninger Principles of Biochemistry 5th edition – Study Guide and Solutions Manual. By Osgood and Ocorr. W.H. Freeman and Co. 2009
Other editions OK too.

Introduction to Protein Structure, 2nd edition
C. Branden and J. Tooze,
Garland Publishing Co. NY, 1999.

Kinemage Supplement to Branden and Tooze
J.S. Richardson and D.C. Richardson
Garland Publishing, NY
Note interactive website! <http://kinemage.biochem.duke.edu/>

Molecular Biology of the Cell by Alberts et al. Garland Science 4th or 5th edition.

Course Website at WebCT: <http://webct.ucsd.edu/>

Other interesting websites:

National Center for Biotechnology Information (NCBI) –
<http://www.ncbi.nlm.nih.gov/>
Search the Protein Data Bank (PDB):
<http://www.rcsb.org/pdb/home/home.do>
Database links at Harvard University
<http://mcb.harvard.edu/BioLinks.html>

Weekly Sections:

Beginning the second week, TAs will hold weekly sections. They will review lecture material, go over problem sets and papers and review for exams. Attendance is not taken at section but it is highly recommended that you pick a section to attend throughout the quarter.

Problem Sets and Practice Exam questions: Throughout the quarter, several problem sets and practice exam problems will be posted on the website. Answers will be posted several days after the problems are posted.

Review Sessions: Conducted by TAs some evening before each of the exams.

Exam Information: There will be 1 midterm exam, worth 45% of your grade. There is a cumulative final worth 55% of your grade. NOTE: *If your final exam score is better than your midterm score, your course grade will be based on the final exam grade alone.*

Exams must be written in ink. If you choose not to write in pen, you forfeit the opportunity for a future regrade. Regrade requests will be accepted in WRITING ONLY. Regrade requests must be made no more than ONE WEEK after the exam is handed back.

Etiquette during examinations:

1. All books and handbags should be placed at the front or back section of the auditorium for the duration of the exam.
2. Students should sit in alternating seats whenever possible.

3. When time is called during the midterm, anyone who is still writing will automatically receive a zero for that page. THIS WILL BE STRICTLY ENFORCED.
4. At each exam, there will be boxes at the front of the room. **The student is responsible for making sure that his/her exam is placed in the box.** After time is called, all remaining students must immediately put down their pen, come to the front of the room, and place their exam in the box. Before the professor and TAs leave the room, all exams will be counted, and matched to each student's name. If your exam is not in the box at that time, you will receive an F for the exam. If your final is not in the box, you will receive an F for the course.

Cheating: Academic dishonesty is not tolerated. If you are suspected of academic dishonesty, you will be immediately reported to the Academic Integrity Office of the University. This office in turn contacts the Dean of your college. If you are found to be responsible for a violation of academic integrity you will automatically receive an F in the course.