

**Biochemistry - Membranes & Metabolism**  
**CHEM 3812-1**  
**WINTER, 2011**

Instructor: Dr. Scott D. Pegan  
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**Text:** Lehninger: principles of biochemistry, 5th ed.  
supplemental: Voet & Voet, Biochemistry as well as Stryer, Biochemistry

You are required to know everything that is discussed in class and assigned in the textbook.

**Topics to be covered:**

amino acids and proteins (chapter 3)  
carbohydrates (chapter 7)  
lipids (chapter 10)  
biological membranes and transport (chapter 11)  
bioenergetics (chapter 13)  
glycolysis, gluconeogenesis, and the pentose phosphate pathway (chapter 14)  
principles of metabolic regulation: glucose and glycogen (chapter 15)  
citric acid cycle (chapter 16)  
fatty Acid Catabolism (chapter 17)  
oxidative phosphorylation (chapter 19)

**Lectures:** 11-11:50 am, MWF, Boettcher Center Auditorium 102 (See Adjoining Lecture Schedule)

**Mini-Seminars:** A Group style research project with accompanying presentation. Dates will be announced after the first exam

**Clickers:** This is a clicker enable course. Clicker points will be based on participation in the question being given on that particular day. Individuals with approved absences will receive only half of points for that day. See <http://portfolio.du.edu/click> for clicker details.

**Exams:** There are 3 X 1 h midterm exams during the quarter, plus a 2 h cumulative final exam. Lowest midterm score or missed midterm will be dropped. Remaining exams are worth 100 points.

**THERE WILL BE NO MAKEUP EXAMS.** The only exceptions to the no-makeup policy will be for members of a university team or group, e.g. athletic team or music group scheduled to be away from campus at the time of the exam, and members of the U.S. Armed Forces with conflicting obligations. You must inform your instructor of this prior to the exam and make arrangements at that time for a makeup exam.

Exam 1: Jan 28, 2009  
Exam 2: Feb 14, 2009  
Exam 3: Feb 28, 2009  
FINAL: Mar 12, 2009

Grading:	Midterm Exams	200 points
	Final Exam	50 points
	Mini-seminar	100 points
	Clicker	50 points

The assignment of a letter grade to a given numerical grade will depend on the overall class performance. However, if everybody does well, grades will not be curved down.  
**Also, note that points will be deducted from your final grade for disruptive behavior.**

Office Hours: 9-10 Tuesdays, SGM 251