

# Biochemistry 211 – Section 1: Essentials of Biochemistry Fall 2009

Lecture: MWF 2:00-2:50 pm Williams 219

Instructor: Dr. Keri Lee

Phone: 274-3576

E-mail: [kalee@ithaca.edu](mailto:kalee@ithaca.edu)

Class Website: (login @ <http://courses.ithaca.edu>)

Office: CNS 365

Office hours: **M: 9:00 – 9:50am**

**T: 11:00 – 11:50am & 1:10 – 2:25pm**  
**or make an appointment or drop by!**

## Texts:

We will be using Concepts in Biochemistry, 3<sup>rd</sup> ed. by *Rodney Boyer*. (ISBN 0-471-66179-1) There is a companion site for the textbook that you may find helpful ([www.wiley.com/college/boyer](http://www.wiley.com/college/boyer)). It also has the topic list and preliminary information for the student presentations.

## Grading Scheme:

Quizzes (4 @ 25 pts each)	100 points (20%)
Exams (2 @ 100 pts each)	200 points (40%)
Presentation	50 points (10%)
Final Exam	<u>150 points (30%)</u>
Total	500 points

**Final Exam:**  
**Wednesday, December 16<sup>th</sup>**  
**7:30-10:00 am**

## Lectures and Attendance:

Although attendance is not taken during class, you are expected to attend all lectures which will greatly facilitate your success in the course. However, if you miss a lecture, it is your responsibility to find out what material was covered. Please feel free to interrupt lecture if you have questions. I encourage you to ask your questions as many of your classmates may need the same clarification.

## Course Website:

The course is organized through blackboard (access it at <http://courses.ithaca.edu>). You should use your Ithaca email username and password to gain access to blackboard. All courses you are registered in which use blackboard will use the same login. Select the course “Essentials of Biochemistry” from your blackboard homepage to enter our class site. This site will provide you with secure access to your grades, postings and print copies of course documents, etc. It is NOT a replacement for lecture, as lecture notes will not be posted.

## Exams:

There will be 2 exams given during the semester. The exam dates are set in stone, so that you can plan accordingly. Only the material covered on each exam may fluctuate depending on the rate at which material is covered in class. You will be told what material will be covered on each exam. Therefore, **no makeup exams** are offered. Extenuating circumstances need to be brought to my attention within 24 hours of the missed exam. **Valid documentation** must be provided and accommodations are made by my discretion only.

## Re-Grade Policy:

If you feel that your exam was graded unfairly, you may request a re-grade. To be considered for a re-grade, you must submit your concern, **in writing**, to me by the lecture period following the return of exams. Your dispute must explain what question you feel was graded incorrectly and why you deserve more credit. Sign the explanation and turn it in to me with your exam. Please note that I reserve the right to re-grade the **entire exam** when it is handed in for a re-grade. **Warning:** I will be copying a portion of the exams before handing them back to students. If you change your answers after you get your exams back and then submit them for a re-grade, you risk being caught in violation of the academic integrity guidelines. The consequences for this will be severe.

**Quizzes:**

There will be 4 quizzes given during class time throughout the semester. These quizzes are not meant to take the entire class period and will be followed by regular lecture. The dates of these quizzes and the topics covered for each quiz are listed on the detailed schedule (attached). The topics are scheduled to change depending on how the course develops. The dates of the quizzes will only change if the ENTIRE class is able to agree on a rescheduled day at MY request.

**Presentations:**

During the last 3 class periods of the semester, you will each be doing a presentation on a special topic in biochemistry (see class schedule). The topic list and preliminary information on the topics can be found on the textbook companion site ([www.wiley.com/college/boyer](http://www.wiley.com/college/boyer)) under “cutting edge”. The final exam will include questions based on the material covered in the student presentations. More details will follow as the semester progresses.

**Calculators:**

If you ever need them, only simple scientific calculators are allowed for quizzes and exams. If you need one and don't have one, I can provide one for you to use during class time. Since we will use it only rarely, you do not need to purchase one yourself.

**Classroom Etiquette:**

All students have the right to a classroom environment that is conducive to learning. Please refrain from any behavior that is disruptive or distracting to other students. All “**ipods**”, **cellular phones**, beepers and chimes on watches must be turned **off** during lectures and exams. Any violation of this policy may result in dismissal from the lecture hall and if continued, a lowering of your grade.

**Students with Disabilities:**

In compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act, reasonable accommodation will be provided to students with documented disabilities on a case by case basis. Students must register with the Office of Academic Support Services and provide appropriate documentation to the college before any academic adjustment will be provided.

**Academic Integrity:**

We are all expected to abide by Ithaca College's guidelines for academic integrity. These guidelines can be found in the student handbook. Any violations of this code will be prosecuted to the fullest extent, which may result in failure on an exam or the entire course.

**Schedule:**

I have tried to provide you with a detailed class schedule (attached). However, keep in mind that lecture topics may change depending on the rate at which we cover things and class interest in a topic. However, the EXAM DATES are final. Only the material covered on each exam will change. This should allow you to plan accordingly for the semester.

Week	Date	Lecture Topic*	Corresponding Textbook Sections*
1	8/26	Introduction & review	Chapter 1
	8/28	Biomolecules in water and bonding	Chapter 2.1-2.2
2	8/31	pH, pK, buffers	Chapter 2.3-2.4
	9/2	Amino Acids & proteins	Chapter 3.1-3.3
	9/4	Protein structure & function	Chapter 3.3-3.5
3	9/7	Labor Day: No class	--
	9/9	Protein structure & design	Chapter 4.1-4.3
	9/11	Proteins & <b>Quiz 1 (ch. 1-4)</b>	Chapter 4.3-4.5
4	9/14	Enzymes	Chapter 5.1-5.4
	9/16	Enzymes	Chapter 5.4-6.1
	9/18	Enzymes, coenzymes, regulation	Chapter 6.2-6.4
5	9/21	Enzymes & carbohydrates	Chapter 6.4-7.1
	9/23	Carbohydrates	Chapter 7.1-7.4
	9/25	Carbohydrates & Lipids	Chapter 7.4-8.1
6	9/28	Lipids & <b>Quiz 2 (ch. 5-7)</b>	Chapter 8.1-8.3
	9/30	Steroids, other lipids and membranes	Chapter 8.4-9.1
	10/2	Membrane transport	Chapter 9.2-9.3
7	10/5	<b>Review</b>	Chapters 1-9
	10/7	<b>EXAM 1</b>	Chapters 1-9
	10/9	DNA, RNA	Chapter 10.1-10.3
8	10/12	DNA, RNA	Chapter 10.4-11.2
	10/14	DNA, RNA	Chapter 11.3-11.6
	10/16	Fall Break: No Class	--
9	10/19	Translation of RNA	Chapter 12.1-12.3
	10/21	Protein Synthesis & Recombinant DNA	Chapter 12.4-13.5
	10/23	Metabolism & <b>Quiz 3 (ch. 10-13)</b>	Chapter 14.1-14.2
10	10/26	Metabolism and bioenergetics	Chapter 14.2-14.3
	10/28	Carbohydrate metabolism	Chapter 15.1-15.3
	10/30	Carbohydrate metabolism	Chapter 15.3-15.5
11	11/2	Citric acid cycle	Chapter 16.1-16.3
	11/4	Glyoxylate cycle and pentose pathway	Chapter 16.3-16.5
	11/6	Electron transport & <b>Quiz 4 (ch. 14-16)</b>	Chapter 17.1-17.2
12	11/9	Oxidative phosphorylation	Chapter 17.3-17.4
	11/11	Lipid metabolism	Chapter 18.1-18.3
	11/13	Lipid metabolism and cholesterol	Chapter 18.3-18.5
13	11/16	<b>Review</b>	Chapters 10-18
	11/18	<b>Exam 2</b>	Chapters 10-18
	11/20	Amino acid metabolism	Chapter 19.1-19.3
14	11/23-27	Thanksgiving: No class	☺ Happy Thanksgiving! ☺
15	11/30	Amino acid and the urea cycle	Chapter 19.3-19.5
	12/2	Integration of metabolism	Chapter 20
	12/4	<b>Student presentations (1 &amp; 2)</b>	--
16	12/7	<b>Student presentations (3 &amp; 4)</b>	--
	12/9	<b>Student presentations (5 &amp; 6)</b>	--
	12/11	<b>Review</b>	<b>All Chapters</b>

\*Lecture Topics are subject to change, but exam dates WILL NOT change, unless the College is closed due to weather. If so, the exam will be given during the following lecture period. Plan accordingly.