

Important Summer Session 2009 Dates

	Session I	7-wk Sess	8-wk Sess	10-wk Sess	Session II
Last day to enroll/add online	June 27 (Sat) (11:59 PM)	June 27 (Sat) (11:59 PM)	June 27 (Sat) (11:59 PM)	July 4 (Sat) (11:59 PM)	Aug 1 (Sat) (11:59 PM)
Last day to drop online	June 28 (Sun) (11:59 PM)	June 28 (Sun) (11:59 PM)	June 28 (Sun) (11:59 PM)	July 5 (Sun) (11:59 PM)	Aug 2 (Sun) (11:59 PM)
Withdrawal period at Summer Office (no refund)	June 29 – July 10 (8:00-4:00)	June 29 – July 17 (8:00-4:00)	June 29 – July 24 (8:00-4:00)	July 6 – July 31 (8:00-4:00)	August 3 – August 14 (8:00-4:00)
Note that during Summer Session there is no auditing of classes, no "Add by Petition" and no "Administrative Drop by Instructor". Failure to attend class does not constitute a "Drop". All deadlines are final.					

Biology 100- Biochemistry

Instructor: Wendy Rothwell (Rothwell-Lopez)

email: rothwell@soe.ucsc.edu

Office hours: 12pm-12:30pm (405A PSB)

Office phone (831) 459-1623

Summer Session II (2009)

Lectures T-F 9:00am-11:30am

Location: TBA

1st Lecture will meet on M, 7/27

Quiz Session: Monday 9:00am

Discussion Sections and Course Assistant (CA) office hours times/locations: TBA

Course Description

An introduction to biochemistry including biochemical molecules, protein structure and function, membranes, bioenergetics, and regulation of biosynthesis. Provides students with basic essentials of modern biochemistry and the background needed for upper-division biology courses.

Required Materials (available on reserve at the Science Library):

Text: Lehninger, Principles of Biochemistry, 5th edition (4th edition is OK to use)

Problem Sets: Available at Baytree Bookstore

Handout Booklet: Available at Baytree Bookstore

Additional references on reserve:

Berg et al. (2002) Biochemistry

Voet and Voet (2004), Biochemistry

Horton et al. (2002), Principles of Biochemistry

Eres account URL: <http://eres.ucsc.edu/>, password = biochem

Prerequisites: Biol 020A, Biol 020B and Chem 7 or 108A or 112A

Quizzes and Exams

	<u>points</u>	<u>% of grade</u>
quiz #1	30	15
quiz #2	30	15
quiz #3	30	15
quiz #4	30	15
final exam	<u>80</u>	40
	200	

Quizzes will be given on Mondays and will cover the previous week's material.

The final will be comprehensive and will be given on the final day of class, **Fri. 8/28** at the regularly scheduled class time and location.

Organization of the Class

Problem sets - A booklet of problems is available at the Baytree Bookstore in the form of a reader (Biochemistry Problem Sets). These problems cover each day's lecture material and are presented in the order in which each concept was addressed in class. These problem sets will not be graded and therefore are not to be turned in to me. They are, rather, to be used as a study guide. 80% of the questions for quizzes and the final exam will be taken directly from these problem sets (with the exception of questions requiring mathematical calculations).

Overheads and Handouts - As I give the lectures I will be filling in information into prepared lecture outlines. Copies of these outlines will be available on Eres prior to each lecture (please note the URL on the first page of this syllabus). Students should print out a copy of each outline and bring it with them to the lecture. I will also be using handouts. A booklet containing these handouts is available at the Baytree bookstore.

If students prefer to have the lecture outlines in a spiral-bound packet (rather than printing them out from the Eres site), this option is available through University Readers. Ordering information is shown below (information is from the University Readers Website) To order, go to <http://www.universityreaders.com/students> and follow these exact steps:

- 1) Click the "Create New Account" button (or enter your existing login information and skip to step 6)
 - 2) Select your State from the dropdown menu.
 - 3) Select your University from the resulting dropdown menu.
 - 4) Enter the fields on the page such as a "login/password" you'd like to use and all applicable "address" info.
 - 5) Click the "Save" button to create your account, and you'll automatically be taken to your university page.
 - 6) At your university page, click the "Add to Cart" button to the right of the course pack you want to purchase.
 - 7) Click on the "Checkout" button on the next page.
 - 8) Review your address info and click on the "Continue" button on the next page.
 - 9) Review our service agreement page and click the "I Agree - Continue Checkout" button on the next page.
 - 10) Select shipping and payment preferences from the dropdown menus. Click the "Continue" button.
 - 11) Enter payment details and click the "Place Order" button to finalize your order. The authorization will take about 5-10 seconds. You'll be prompted with an Invoice screen once your order has been authorized and completed. You will also receive confirmation via email regarding your order.
- Please direct all ordering questions to webmaster@universityreaders.com or call **800.200.3908**. Thanks!

Make-up Policy

No make-ups will be provided. If a student has a reasonable reason for missing a quiz (e.g. family emergency, illness, etc... not "didn't study enough" or "went on a vacation"), the missed quiz will be given a score equal to the lowest score from the other quizzes minus 10%. No make-up final exams will be provided for any reason.

Grading Policy

I don't expect to grade on a curve. However, I will wait to see the actual distribution of scores before making a final decision. I will not, however, pass anyone with an overall score of <60%.

DRC: Anyone needing DRC accommodations needs to let me know, and submit an Accommodation Authorization as early in the session as possible in order to ensure enough time to set up the accommodations. Contact DRC at 459-2089 (voice), 459-4806 (TTY).

The DRC Office has provided the following paragraph

"If you qualify for classroom accommodations because of a disability, please submit your Accommodation Authorization from the Disability Resource Center (DRC) to me during my office hours as soon as possible, preferably within the first week of the summer session. Contact DRC at 459-2089 (voice), 459-4806 (TTY)."

Biochemistry (Biology 100)**Proposed lecture schedule, 2008**

<u>week</u>	<u>day</u>	<u>lecture #</u>	<u>Topic</u>	<u>chapters</u>
1	M	1	Introduction and Biomolecules	1
1	T	2	Water, pH, and buffers	2
1	W	3	Amino acids and peptides	3
1	Th	4	Proteins I: Introduction	3
1	F	5	Proteins II: Structure/Function	4,5
2	M		Quiz #1	
2	T	5	Proteins II: (continued)	
2	W	6	Enzymes	6
2	Th	7	Lipids	10
2	F	8	Membranes and Transport	11
3	M		Quiz #2	
3	T	9	Carbohydrates	7
			Nucleotides and Nucleic Acids	8,24
3	W	9	(continued)	
3	Th	10	Bioenergetics	13
3	F	11	Intro to Metabolism	
			Glycolysis	14,15
4	M		Quiz #3	
4	T	12	Citric Acid Cycle	16
4	W	13	Fat Metabolism	17
4	Th	13	Amino acid oxidation, Urea cycle	18
4	F	14	Electron transport and ATP synthesis	19
		15	Carbohydrate biosynthesis	14,15, 20
5	M		Quiz #4	
5	T	16	Lipid biosynthesis	21
			Pathways for nitrogen-containing compounds	22
	W	17/18	Integration and hormonal regulation of metabolism	23,12
5			DNA replication	25
5	Th	18/19	RNA metabolism	26
			Translation	27
5	F		Final Exam	