

Biological Chemistry II

CHEMISTRY/BIOLOGY 3520
Spring Semester 2006

INSTRUCTORS: Professor C. Dale Poulter (1st ½ semester 1/9/06-2/27/06)
Office: HEB 2270 Telephone: 581-6685
Email: poulter@chem.utah.edu

Professor Peter Flynn (2nd ½ semester 3/1/06-4/26/06)
Office: HEB 1104 Telephone: 581-3828
Email: pfflynn@chem.utah.edu

LECTURES: 10:45-11:35 AM M, W, F HEB 2004

TEXTS: Lehninger PRINCIPLES OF BIOCHEMISTRY, 4th Edition, by David L. Nelson & Michael Cox

The Absolute Ultimate Guide to Lehninger PRINCIPLES OF BIOCHEMISTRY, 4th Edition. Study Guide and Solutions Manual, by Marcy Osgood & Karen Ocorr

OFFICE HOURS: Office hours for Professor Poulter are Wednesday, 2:00-3:00 PM, HEB 2270 or by appointment

Office hours for Professor Flynn are Wednesday, 4:00-5:00 PM, HEB 1104 or by appointment

TEACHING

ASSISTANTS: Alana Simorellis 3520-002 T 7:30-8:20 AM; Room AEB 310
Alana Simorellis 3520-004 H 9:40-10:30 AM; Room AEB 350
Office Hours: Tuesday 11:00AM-12:00PM; Room HEB 1110
asims@chem.utah.edu / 585-1710

Sucharita Kundu 3520-003 W 6:00-6:50 PM; Room LS 107
Sucharita Kundu 3520-005 F 2:00-2:50 PM; Room HEB 2010
Office Hours: Friday 11:45-12:45PM, Room HEB 1316
suchi@chem.utah.edu / 581-3985

DISCUSSION SECTIONS:

Four discussion sections with the Teaching Assistants are scheduled for each week to answer questions and to provide additional discussion material covered in class. Attendance at these help sessions is strongly encouraged. A teaching assistant will be available for individual assistance. (See Office Hours listed above).

Day	Time	Room
Tuesday	7:30-8:20 AM	AEB 310
Wednesday	6:00-6:50 PM	LS 107
Thursday	9:40-10:30 AM	AEB 350
Friday	2:00-2:50 PM	HEB 2010

EXAMINATIONS: The class has four (4) exams which will be given in HEB 2004:

Exam I: 10:45 AM; Wednesday, February 1st
Exam II: 10:45 AM; Monday, February 27th

Exam III: 10:45 AM; Friday, March 31st
Exam IV: 10:45 AM; Wednesday, April 26th

GRADES:	Exam I	100 points
	Exam II	100 points
	Exam III	100 points
	<u>Exam IV</u>	<u>100 points</u>
	Total	400 points

There is no comprehensive final exam. The 4th examination will be given at the time scheduled for the final examination for this class. Grades will be calculated on the basis of 300 points. The lowest exam score will automatically be excluded from the calculation. There are **NO** make-up exams. If for **ANY** reason you miss an exam, that exam will automatically be the one excluded from the calculation. If 2 or more exams are missed, zeros will be entered into the calculation. The examination schedule is given in the syllabus. Their dates and times are within normally scheduled hours for this class and will not be changed. **Do not make commitments that conflict with these dates.** Students who are traveling for **University-approved** reasons (student athletes, etc.) must make arrangements with Professor Poulter or Flynn **10 days** before the examination date to arrange for an alternate testing site.

WITHDRAWALS: Students may drop (delete) this class with no tuition penalty or permission until **Wednesday, January 18, 2006** (the class will not appear on the students transcript). **Friday, March 3, 2006** is the final day students can withdraw from this course (a "W" will appear on the students transcript and the student will be responsible for paying tuition for the class). After March 3, 2005, students must file a petition with the Dean's office to withdraw from the course (The University's policy states that withdrawal will only be granted for "non-academic reasons beyond the student's control", i.e., "I want to avoid a bad grade" does not qualify.)

INCOMPLETES: The official University policy regarding incomplete course work an assignment of the grade "I" will be followed: "The grade 'I' may be given for work not completed because of circumstance beyond the student's control, providing the student is passing the course and needs to complete 20% or less of the work required for the course. An UNEXCUSED absence at an exam cannot be used as a reason to get an "I" grade.

EQUAL OPPORTUNITY: The University of Utah seeks to provide equal access to its program, services, and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in alternative format with prior notification to the Center for Disability Services.

ACCOMODATIONS POLICY: Students should review the syllabus carefully to see if the topics covered in this course conflict with your sincerely-held core beliefs. If you have a concern, please discuss it with the instructor before the end of the first week of class.

AUDITING: To receive an official audit, you must sign up as an "audit" and you must attend lectures and take the exams. The exams will be graded and returned to you.

SNOW CLOSURE & EMERGENCIES: Drs. Poulter and Flynn will be available by e-mail in the event of any snow closure. In the event of a personal emergency at the time of an exam you must call Professor Poulter at 581-6685 (1st ½ Semester) or Professor Flynn at 581-3828 (2nd ½ Semester).

- SUPPORTING INFORMATION:** Supporting information is located on the World Wide Web. The URL for this material will be announced in class. This material can be accessed with any web browser (i.e., Netscape or Explorer)
- TUTORING:** Tutoring is available through the University of Utah Tutoring Center in the Student Services Building, Room 350. Students are given a list of tutors to contact and schedule for day, evening, or weekend appointments. Low-income students may qualify for free tutoring. For more information call 581-5153 or visit www.sa.utah.edu/Tutoring/
- TEXTBOOK WEBSITE:** The textbook has its own web site with helpful study guides and additional exercises. You can register for access at the following URL: <http://bcs.whfreeman.com/lehninger/>
- WEBCT:** The Lecture notes and copies of previous examinations will be posted on WebCT. Other interesting links will also be posted on the WebCT site for the class. The URL is: <http://webctnew.utah.edu>

CHEMISTRY/BIOLOGY 3520

Lecture	Day	Date	Lecturer	Topic	Chapter
1	M	JAN 9	Poulter	Lipid Structures	10
2	W	JAN 11	Poulter	Lipid Structures	10
3	F	JAN 13	Poulter	Membrane Architecture	11
HOLIDAY	M	JAN 16	--	Martin Luther King Jr. Day	
4	W	JAN 18	Poulter	Membrane Architecture / Transport	11
5	F	JAN 20	Poulter	Membrane Transport	11
6	M	JAN 23	Poulter	Membrane Transport / Mechanisms of Signaling	11/12
7	W	JAN 25	Poulter	Mechanisms of Signaling	12
8	F	JAN 27	Poulter	Regulation of Signaling	12
9	M	JAN 30	Poulter	Regulation of Signaling	12
EXAM I	W	FEB 1	--		
10	F	FEB 3	Poulter	Fatty Acid Biosynthesis	21
11	M	FEB 6	Poulter	Polyketide / Phospholipid Biosynthesis	21
12	W	FEB 8	Poulter	Isoprenoid / Cholesterol Biosynthesis	21
13	F	FEB 10	Poulter	Regulation of Cholesterol / Amino Acid Biosynthesis	21/22
14	M	FEB 13	Poulter	Amino Acid Biosynthesis	22
15	W	FEB 15	Poulter	Amino Acid/ Nucleic Acid Biosynthesis	22
16	F	FEB 17	Poulter	Nucleic Acid Biosynthesis	22
HOLIDAY	M	FEB 20	--	President's Day	
17	W	FEB 22	Poulter	Nucleic Acid Biosynthesis / Hormonal Regulation	22/23
18	F	FEB 24	Poulter	Hormonal Regulation	23
EXAM II	M	FEB 27	--		
19	W	MAR 1	Flynn	Structural Methods	4+ 24
20	F	MAR 3	Flynn	Nucleic Acid Structure	8+ 24
21	M	MAR 6	Flynn	Protein-Nucleic Acid Interactions	24
22	W	MAR 8	Flynn	Chromosome Structure	24
23	F	MAR 10	Flynn	DNA Replication in Prokaryotes	25
HOLIDAY	M-	MAR 13-17	--	Spring Break	

	F				
Lecture	Day	Date	Lecturer		Chapter
24	M	MAR 20	Flynn	DNA Replication in Eukaryotes	25
25	W	MAR 22	Flynn	Mechanisms and Effects of DNA Mutation	25
26	F	MAR 24	Flynn	DNA Recombination	25
27	M	MAR 27	Flynn	Transcriptional Control in Prokaryotes	26
28	W	MAR 29	Flynn	Transcriptional Events in Eukaryotes	26
EXAM III	F	MAR 31	--		
29	M	APR 3	Flynn	Posttranscriptional RNA Processing	26
30	W	APR 5	Flynn	Recent Developments in Genetic Therapeutics	26
31	F	APR 7	Flynn	The Genetic Code	27
32	M	APR 10	Flynn	Structure and Function of tRNA	27
33	W	APR 12	Flynn	Structure and Function of the Ribosome	27
34	F	APR 14	Flynn	Synthesis of Polypeptides	27
35	M	APR 17	Flynn	Protein Degradation	27
36	W	APR 19	Flynn	Genome Control Hierarchies	28
37	F	APR 21	Flynn	Regulation of Expression in Prokaryotes	28
38	M	APR 24	Flynn	Regulation of Expression in Eukaryotes	28
EXAM IV	W	APR 26	--		