

CHM 6361.001: Physical Biochemistry

Spring 2006

MWF, 1:00 pm to 1:50 pm

CB1.122

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text: *Physical Biochemistry: Principles and Applications*
by David Sheehan

optional text: *Biochemistry: A Short Course*
by Harry R. Matthews, Richard Freedland, Roger L. Miesfeld
This is a summary of undergraduate biochemistry. Alternatively any Biochemistry text would be useful.

website: <http://www.utdallas.edu/~haines/CHM6361/index.html>
<http://webct.utdallas.edu>

General Information:

This course is an introduction to physical biochemistry, including various biophysical methods and a review of several basic biochemistry concepts.

Topic Schedule:

Week

1	M	1/9/2006	Intro	Haines
1	W	1/11/2006	Nucleic Acids	Haines
1	F	1/13/2006	Nucleic Acids	Haines
2	M	1/16/2006	HOLIDAY	
2	W	1/18/2006	Protein Structure 1	Dieckmann
2	F	1/20/2006	Protein Structure 2	Dieckmann
3	M	1/23/2006	Protein Structure 3	Dieckmann
3	W	1/25/2006	Protein Structure Techniques	Dieckmann/Haines
3	F	1/27/2006	Lipids, Membranes 1	Haines
4	M	1/30/2006	Lipids, Membranes 2	Haines
4	W	2/1/2006	Intro to Enzymes and Kinetics	Haines
4	F	2/3/2006	Kinetics and Drug Action 1	Haines
5	M	2/6/2006	Kinetics and Drug Action 2	Haines
5	W	2/8/2006	Enzyme Regulation	Haines
5	F	2/10/2006	Mechanism of Catalysis	Haines
6	M	2/13/2006	Vitamins and Cofactors	Haines
6	W	2/15/2006	DNA replication	Haines
6	F	2/17/2006	Transcription	Haines
7	M	2/20/2006	Translation	Haines
7	W	2/22/2006	Post-translation	Haines
7	F	2/24/2006	Molecular Biology 1	Haines
8	M	2/27/2006	Molecular Biology 2	Haines
8	W	3/1/2006	Bioinformatics	Haines
8	F	3/3/2006	Seq->Struct Case Study - Enz of Drug Metabolism	Haines
9	M	3/6/2006	SPRING BREAK	
9	W	3/8/2006	SPRING BREAK	
9	F	3/10/2006	SPRING BREAK	
10	M	3/13/2006	Separation Techniques	Dieckmann
10	W	3/15/2006	Separation Techniques	Dieckmann
10	F	3/17/2006	Separation Techniques	Dieckmann

11	M	3/20/2006	Size determination/assoc	Dieckmann
11	W	3/22/2006	Size determination/assoc	Dieckmann
11	F	3/24/2006	Size determination/assoc	Dieckmann
12	M	3/27/2006	Protein Quantitation etc.	Haines
12	W	3/29/2006	Intro to Spectroscopy	Goux
12	F	3/31/2006	Fluorescence	Dieckmann
13	M	4/3/2006	CD	Goux
13	W	4/5/2006	CD	Goux
13	F	4/7/2006	Biological Chromophores	Haines
14	M	4/10/2006	Metabolism 1	Sherry
14	W	4/12/2006	Metabolism 2	Sherry
14	F	4/14/2006	Advanced Biophysics of Membranes (tentative)	Nielsen
15	M	4/17/2006	Advanced Biophysics of Membranes (tentative)	Nielsen
15	W	4/19/2006	Advanced Biophysics of Membranes (tentative)	Nielsen
15	F	4/21/2006	Advanced Biophysics of Membranes (tentative)	Nielsen
16	M	4/24/2006	Wrapup and Course Review	Haines

course Evaluation:

exams: There will be two take home exams during the semester.

Exam 1: Pick up Friday, Feb. 24th
 Turn in Friday, Mar. 3rd
 Exam 2: Pick up Friday, Apr. 21st
 Turn in Friday, April 28th

Both exams must be taken at the scheduled time (there are no make-up exams). Failure to take an exam will result in a "zero" (0). Each student must work alone, not discuss the exam with other students, and turn in their own work.

attendance: your attendance and class participation will have an impact on your final grade. Taking an active role in your learning will (guaranteed) help you perform better.

academic honesty: I assume that students that are at this level need not be reminded of the necessity of doing their own work. I encourage people to study together --you really will learn more. On exams you may not work together. If anyone is found participating in dishonest conduct, they will be dealt with in the normal university policies as outlined in your student handbook. If found guilty, penalties can range from failing the course to university dismissal. Folks, it is not worth it!