

Course Title: Biochemistry / CH 433 / 3 credits

Instructor: Ken Cornell, Ph.D.
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room SN 320
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Class Schedule: MWF 8:40 am– 9:30 pm, room E416

Office Hours: Monday, Friday 10:30 – 11:30 am. Otherwise, by appointment.

Textbook: *Fundamentals of Biochemistry* by Voet , Voet & Pratt, 2nd Edition. Copies are available at the University Bookstore.

Examination Schedule & Grading Policy: Course grades will be determined from a combination of Quiz, Midterm, and comprehensive Final exam scores. The breakdown of the scores will be approximately:

Quizzes and/or homework	100 pts	Score: 90% +	A
Midterms	200 pts (2@ 100pts ea.)	80 – 89%	B
Final	200 pts	70 – 79%	C
	500 pts total	60 – 69%	D
		< 60	F

Homework: PLEASE TRY AND READ THE MATERIAL IN THE OUTLINE BEFORE COMING TO CLASS. Even a quick review of the material will help make the lecture more understandable. Periodically through the term I will indicate homework problems that are particularly relevant to the course. I will also issue homework problems and / or quizzes during the course, although they do not appear on the schedule. You will be forewarned of quizzes and adequate time to perform homework assignments will be given. IT IS EXPECTED THAT HOMEWORK PROBLEMS BE PERFORMED INDIVIDUALLY. REGURGITATION OF GOOGLE SEARCH MATERIAL IS NOT ACCEPTIBLE, NOR IS THE COPYING OF CLASSMATES WORK.

Other resources:

- Powerpoint presentations, handouts, copies of other exams, etc, will be made available on Blackboard (Bb). My advice to you is to download the powerpoint presentations and print at 4 slides per page prior to coming to class. This will save you a lot of writing! Additional notes, problem solutions, etc., can then be written right onto the slide copies.
- Additional papers, handouts, etc. will be distributed during class.
- Other good texts are available in the library. A particularly good reference: *Biochemistry* by Berg, Tymoczko & Stryer, 5th Edition, is also available online at NCBI website at <http://www.ncbi.nlm.nih.gov/books> under “Bookshelf”

CH 433 Biochemistry II Lecture Schedule Spring 2006 (**APPROXIMATE!**)

Week/Date	Lecture	Topics	Reading
One	1/16	- Martin Luther King Day (no class)	
	1/18	- Boise State @ Capital, Pick up syllabus, see you Friday!	Chapters 11-12
	1/20	1 Review enzyme kinetics, Intro to 2 substrate reactions	Chapters 11-12
Two	1/23	2 Enzyme kinetics: 2 substrate reactions	Chapters 11-12
	1/25	3 Enzyme catalytic mechanisms / organic reactions	Chapters 11-12
	1/27	4 Enzyme catalytic mechanisms/ organic reactions	Chapters 11-12
Three	1/30	5 Metabolism/mechanisms and regulation	Chapter 13
	2/1	6 Metabolism/mechanisms and regulation	Chapter 13
	2/3	7 Metabolism/Glucose Catabolism/Glycolysis	Chapter 14
Four	2/6	8 Metabolism/Glucose Catabolism/Glycolysis	Chapter 14
	2/8	9 Metabolism/Glucose Catabolism/Glycolysis	Chapter 14
	2/10	10 Metabolism/Glucose Catabolism/Glycolysis	Chapter 14
Five	2/13	11 Glycogen Metabolism/ Gluconeogenesis	Chapter 15
	2/15	12 Glycogen Metabolism/ Gluconeogenesis	Chapter 15
	2/17	Midterm #1 (chapters 11-15)	
Six	2/20	- Presidents Day – No Class	
	2/22	13 Glycogen Metabolism/ Gluconeogenesis	Chapter 15
	2/24	14 Glycogen Metabolism/ Gluconeogenesis	Chapter 15
Seven	2/27	15 Citric acid cycle: intermediate metabolism	Chapter 16
	3/1	16 Citric acid cycle: intermediate metabolism	Chapter 16
	3/3	17 Citric acid cycle: intermediate metabolism	Chapter 16
Eight	3/6	18 Citric acid cycle: intermediate metabolism	Chapter 16
	3/8	19 Oxidative phosphorylation, electron transport	Chapter 17
	3/10	20 Oxidative phosphorylation, electron transport	Chapter 17
Nine	3/13	21 Oxidative phosphorylation, electron transport	Chapter 17
	3/15	22 Oxidative phosphorylation, electron transport	Chapter 17
	3/17	23 Photosynthesis	Chapter 18
Ten	3/20	24 Photosynthesis	Chapter 18
	3/22	25 Photosynthesis	Chapter 18
	3/24	26 Midterm #2 (chapter 15-18)	
Eleven	3/27 - 3/31	Spring Break (no class)	
Twelve	4/3	27 Lipid metabolism	Chapter 19
	4/5	28 Lipid metabolism	Chapter 19
	4/7	29 Lipid metabolism	Chapter 19
Thirteen	4/10	30 Amino acid metabolism	Chapter 20
	4/12	31 Amino acid metabolism	Chapter 20
	4/14	32 Amino acid metabolism	Chapter 20
Fourteen	4/17	33 Amino acid metabolism	Chapter 20
	4/19	33 Integrated metabolism	Chapter 21
	4/21	34 Integrated metabolism	Chapter 21
Fifteen	4/24	35 Integrated metabolism	Chapter 21
	4/26	36 Integrated metabolism	Chapter 21
	4/28	37 Nucleotide metabolism	Chapter 22
Sixteen	5/1	38 Nucleotide metabolism	Chapter 22
	5/3	39 Nucleotide metabolism	Chapter 22
	5/5	40 Nucleotide metabolism	Chapter 22
Seventeen		Final Exam: Wednesday May 10, 8-10am	