

Lecturer: *Dr. Frank Deis* Nelson A-311, email deis@rci.rutgers.edu.
phone 732-445-2814. Office hours Tuesday 12 to 2, other days by chance.

Course Page: <http://www.rci.rutgers.edu/~molbio/Courses/301/301r.html>

Handouts: <http://www.rci.rutgers.edu/~molbio/Courses/301/berg6.html>

If tests cannot be handed back immediately, grades posted on web page.

Syllabus: Readings in Berg/Tymoczko/Stryer's "**Biochemistry**", 7th Edition (2012).
Recommended: "**Companion**" by Deis et al. (2012). (6th can be used)

Date	Topic	Chapter
Jan 18	Biochemistry, An Evolving Science	Ch. 1
23	Protein Composition & Structure	Ch. 2
25	Exploring Proteins & Proteomes	Ch. 3
30	DNA, RNA, Genetic information	Ch. 4
Feb 1	Exploring Evolution & Bioinformatics	Ch. 6
6	Hemoglobin – A Protein in Action	Ch. 7
8	Enzymes & Carbohydrates	Ch. 8 & 11
13	Lipids & Cell Membranes	Ch. 12
15	FIRST TEST	
20	Channels & Pumps	Ch. 13
22	Signal Transduction	Ch. 14
27	Metabolism – cofactors, energy	Ch. 15
29	Glycolysis	Ch. 16
Mar 5	Gluconeogenesis	Ch. 16
7	SECOND TEST	
12	<i>Spring Break, no class</i>	
19	Citric Acid Cycle	Ch. 17
21	Mitochondria, part I	Ch. 18
26	Mitochondria, part II	Ch. 18
28	Pentose Phosphate Pathway (Calvin Cycle)	Ch. 20
Apr 2	Glycogen	Ch. 21
4	THIRD TEST	
9	Fatty Acid Metabolism	Ch. 22
11	Urea Cycle, Amino Acid Catabolism	Ch. 23
16	One Carbon Metabolism	Ch. 24, 25
18	Exploring Genes & Genomes	Ch. 5
23	DNA Replication and Repair	Ch. 28
25	RNA Synthesis and Processing	Ch. 29
30	Protein Synthesis	Ch. 30

FINAL EXAM Mon. May 7, 8-10 PM (not cumulative)

Examinations will be based on the material presented in lecture. You should therefore take careful notes in class. This should be reinforced and clarified by reading and homework assignments in the text. If a bona-fide illness or emergency causes you to miss an exam, please call Dr. Deis at 732-445-2814 or leave a message with the Biochemistry Department Secretary at 732-445-3979 *within 24 hours* or you could be given a zero on the test. There will be an *automatic markdown* on all **make-ups** taken for any reason. Assigned seating for tests is in ARC-103 during class time