

General Biochemistry

(CHEM 463, BIOL 483, CHEM 563)

Syllabus for Fall 2009

Text: Lehninger Principles of Biochemistry, 5th Ed.

LECTURE #	LECTURE DATE	TOPIC	TEXT ASSIGNMENT
1	August 31	Foundations of Biochemistry	Chapters 1&2: 1-70
2	September 2	Amino Acids and Proteins	Chapter 3: 71-85
3	September 9	Protein Structure	Chapter 4: 113-152
4	September 14	Protein Function	Chapter 5: 153-169
5	September 16	Enzymes	Chapter 6: 183-205
6	September 21	Enzymes	Chapter 6: 205-220
	September 23	Exam 1	Lectures 1-6
7	September 28	Carbohydrates	Chapter 7: 235-262
8	September 30	Nucleotides & Nucleic Acids	Chapter 8: 271-298
9	October 5	Lipids	Chapter 10: 343-363
10	October 7	Biological Membranes	Chapter 11: 371-389
11	October 13	Transport	Chapter 11: 389-413
12	October 14	Biosignaling	Chapter 12: 419-438
13	October 19	Biosignaling	Chapter 12: 438-455; 461-469
	October 21	Exam 2	Lectures 7-13
14	October 26	Intro to Metabolism	Chapter 13: 485-521
15	October 28	Glycolysis	Chapter 14: 527-551
16	November 2	Carbohydrate Biosynthesis: Pentose Phosphate Pathway	Chapter 14: 551-563
17	November 4	Principles of Metabolic Regulation	Chapter 15: 569-594
18	November 9	Glycogen	Chapter 15: 594-609
19	November 11	Citric Acid Cycle	Chapter 16: 615-638
	November 16	Exam 3	Lectures 14-19
20	November 18	Fatty Acid Catabolism	Chapter 17: 647-668
21	November 23	Oxidative Phosphorylation	Chapter 19: 707-735
22	November 30	Photophosphorylation	Chapter 19: 742-761
23	December 2	Fatty Acid, Cholesterol, and Steroid Synthesis	Chapter 21: 805-845
24	December 7	Amino Acid Biosynthesis and Degradation	Chapter 22: 851-873 Chapter 18: 673-702
25	December 9	Integration of Metabolism	Chapter 23: 901-940
	December 16 10:30 – 1:15	Final Exam	Lectures 20-25