Brown-Pfizer Master of Arts Program
Syllabus for BI127A, Advanced Biochemistry, Spring 2008

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The textbook is Lehninger Principles of Biochemistry, 4th Ed., by D. L. Nelson and M. M. Cox, 2005, published by Freeman. Specific problems from the textbook and additional problems and readings from the primary literature will be assigned for each class.

Class	Date	Topic and Textbook Reading
1	1/29	Introduction; Amino Acids and Peptides
2	2/5	Protein Structure and Function
3	2/12	Enzyme Kinetics
	2/19	No class (Brown Long Weekend)
4	2/26	Enzyme Mechanisms and Regulation
5	3/4	Lipids and Membranes
**	3/4	Take-home Midterm Exam I Covering Classes 1-5
6	3/11	Carbohydrates and Introduction to Metabolism
7	3/18	Glycolysis
	3/25	No class (Brown Spring Break)
8	4/1	Citric Acid Cycle
9	4/8	Oxidative Phosphorylation
10	4/15	Autotrophy, Photosynthesis and Carbon Fixation
**	4/15	Take-home Midterm Exam II Covering Classes 6-10
11	4/22	Gluconeogenesis and Glycogen Metabolism; Lipid Metabolism
12	4/29	Nitrogen, Amino Acid and Urea Metabolism; Nucleotide Metabolism
13	5/6	Integration and Regulation of Metabolism
	5/13	Review Session and Final Exam (comprehensive)