

**LECTURE SCHEDULE**

<u>Date</u>	<u>Lecture Topic</u>	<u>Instructor</u>	<u>Voet &amp; Voet (Chapter: Pages)</u>
16-Aug	Introduction to GBS 707	Scott Ballinger	
16-Aug	Primary Structure of Proteins	Stephen Barnes	4: 65-81; 7: 164-175
17-Aug	Purification of Proteins - Mass spectrometry	Stephen Barnes	6: 129-156
18-Aug	Secondary Structure of Proteins	Larry DeLucas	8: 221-259
19-Aug	3-D Structure of Proteins	Larry DeLucas	8: 258-272; 9: 278-319
22-Aug	Allosteric Regulation of Proteins	Rakesh Patel	10: 347-354
23-Aug	Enzymes - Kinetics - Michaelis-Menten Derivation	Rakesh Patel	13/14: 467-492
24-Aug	Enzymes - Inhibition	Rakesh Patel	14: 492-504
25-Aug	Enzymes - Reactive mechanisms, Problem Solving	Rakesh Patel	
26-Aug	Study Day		
29-Aug	<b>Exam 1</b>	Staff	
30-Aug	Biology of Lipids	Rob Hardy	12: 386-399
31-Aug	Carbohydrate Chemistry	Zdenek Hel	11: 359-384
1-Sep	Principles of Thermodynamics	Jack Lancaster	3: 52-62
2-Sep	Glycolysis	Zdenek Hel	17: 593-634
5-Sep	LABOR DAY HOLIDAY		
6-Sep	Citric Acid Cycle - Beta Oxidation	Scott Ballinger	21: 789-820
7-Sep	Electron Transport - Oxidative Phosphorylation	Shannon Bailey	22: 823-867
8-Sep	Applied Bioenergetics	Victor Darley-Usmar	
9-Sep	Glycogenolysis - Gluconeogenesis/Pentose Phosphate Pathway	Zdenek Hel	18: 638-668; 23: 871-899
12-Sep	Amino Acid Metabolism	Aimee Landar	26: 1019-1084
13-Sep	Lipid Metabolism	Kirill Popov	25: 940-1015
14-Sep	Nucleotide metabolism	Peter Detloff	28: 1107-1140
15-Sep	Integration of metabolism	Kirill Popov	27: 1088-1105
16-Sep	Study Day		
19-Sep	<b>Exam 2</b>	Staff	

**Course Objectives:** The purpose of this course is to provide students a rigorous background in the principles of biological chemistry. The principles taught are those we believe students should master and include the application of these principles to research protocols and performance.