

BMB 407/507 - Proteins & Enzymes Spring 2007**Tues/Thurs 9:30-10:45 AM; LC-140 (Tues); FLW-4053(Thurs)****Course Coordinator:** Arun Malhotra, Room 105 Gautier Bldg, Medical Campus, 305-243-2826; malhotra@miami.edu**Instructors:** Arun Malhotra; Roger Fenna (r.fenna@miami.edu); TK Harris (tkharris@miami.edu); Amjad Farooq (a.farooq@miami.edu)

Lecture #	Date	Day	Lecturer	Topic	Notes
Part I - Protein Structure					
1	16-Jan	Tu	Malhotra	Introduction to Course	
2	18-Jan	Th	Fenna	3D Structure of Proteins	
3	23-Jan	Tu	Fenna	3D Structure of Proteins	
4	25-Jan	Th	Fenna	3D Structure of Proteins	
5	30-Jan	Tu	Fenna	X-ray Crystallography	Last day to drop without W - Jan 31
6	1-Feb	Th	Fenna	X-ray Crystallography	
7	6-Feb	Tu	Malhotra	Practical Methods - Protein Bioinformatics	Term Paper Assignment
8	8-Feb	Th	Malhotra	Practical Methods - Protein Structure	
9	13-Feb	Tu	Farooq	NMR - Introduction	
10	15-Feb	Th	Farooq	NMR - Protein Structure & Dynamics	
11	20-Feb	Tu	Fenna	Examination I	
Part II - Proteins & Enzymes					
12	22-Feb	Th	Fenna	Enzyme Kinetics - Introduction	Academic Alerts Due - Feb 26 (Mon)
13	27-Feb	Tu	Fenna	Enzyme Kinetics - Practical Methods	
14	1-Mar	Th	Fenna	Enzyme Kinetics - Basic Equations	
15	6-Mar	Tu	Harris	Chemical Catalysis	
16	8-Mar	Th	Harris	pH Dependence of Enzyme Catalysis	
<< Spring Break - March 10-18 >>					
17	20-Mar	Tu	Harris	Intermediates in Enzymatic Reactions	Term Papers Outline/Draft due
18	22-Mar	Th	Harris	Stereochemistry of Enzymatic Reactions	
Last Day to Drop - March 26					
19	27-Mar	Tu	Harris	Conformational Change & Allosteric Regulation	
20	29-Mar	Th	Harris	Conformational Change & Allosteric Regulation	
21	3-Apr	Tu	Harris	Examination II	
Part III - Proteins in Biology					
22	5-Apr	Th	Malhotra	Proteins - Motors and Switches	
23	10-Apr	Tu	Malhotra	Proteins - Post Translational Modifications	
24	12-Apr	Th	Malhotra	Protein Folding - Introduction	
25	17-Apr	Tu	Malhotra	Protein Folding <i>in vivo</i>	Term Papers due
26	19-Apr	Th	Malhotra	Practical Methods - Prot. Production & Characterization	
27	24-Apr	Tu	Malhotra	Practical Methods - Protein Engineering	Last Day of Classes (April 27th)
28	26-Apr	Th	Malhotra	Review; Student Evaluations	
May 3rd (8-10:30 am)			Malhotra	Final Examination	Grades entered in myUM - May 14th (Mon) Grades released - May 17th

Textbook: There is no textbook for this course. Please refer to class handouts and web notes.**Web Notes:** [http://courses.miami.edu \(BMB5070-072\);](http://courses.miami.edu (BMB5070-072);) also see <http://structure.med.miami.edu>