

Chemistry, Structure, and Therapeutic Applications of Biomolecules Schedule
 Spring Semester 2015
 Tuesday & Thursday
 9:00 am – 10:20 am

Course No: 6012

Course Director: Dr. Paul R Rosevear

Textbook:

Session Number	Day	Date	Topic	Chapter	Instructor
1	Tu	1-13-15	Structure and Properties of Water, pH, Acid-Base Equilibria, Gibbs Free Energy		
2	Th	1-15-15	Molecular Forces		
3	Tu	1-20-15	Chemistry of Amino Acids		
4	Th	1-22-15	Protein Structure: Molecular Forces Insulin Structure/Function		
5	Tu	1-27-15	Quaternary Structure/Allosterism		
6	Th	1-29-15	Natively Disordered Proteins		
7	Tu	2-3-15	Enzyme-Diversity		
8	Th	2-5-15	Exam		
9	Tu	2-10-15	Chemical Catalysis: Hammond Postulate & Transition State Theory		
10	Th	2-12-15	Principles of Catalysis		
11	Tu	2-17-15	Kinetic Isotope Effects & Steady State Kinetics/ Multisubstate Systems		
12	Th	2-19-15	Enzyme Rate Constants & pH Dependence of Enzyme Reactions		
13	Tu	2-24-15	Stereochemistry of Enzyme Reactions		
14	Th	2-26-15	Dehydrogenases/Proteases		
15	Tu	3-3-15	Ribonuclease/Lysozyme/Triosephosphate Isomerase		
16	Th	3-5-15	Enzyme - Drug Interactions		
17	Tu	3-10-15	Exam		
18	Th	3-12-15	Carbohydrate Chemistry & Stereochemistry		
19	Tu	3-17-15	Spring Break		
20	Th	3-19-15	Spring Break		
21	Tu	3-24-	Carbohydrate Structure & Conformation		

		15			
22	Th	3-26-15	Protein – Carbohydrate Interactions		
23	Tu	3-31-15	Lipids		
24	Th	4-2-15	Lipid – Protein Interactions		
25	Tu	4-7-15	Chemistry and Structure of RNA and DNA		
26	Th	4-9-15	Tertiary Structure in Nucleic Acids		
27	Tu	4-14-15	Protein-Nucleic Acid Interactions		
28	Th	4-16-15	Nucleic Acid - Drug Interactions		
29	Tu	4-21-15	Protein - DNA - Drug Interactions		
30	Th	4-23-15	Review		
31		TBD	Exam Week		