

### CH 336 Schedule of Lectures, Quizzes, and Exams

*Revised 3 April 2006*

Lec.	Date	Day	Topic
1	4/3	M	<b>Ch 21.</b> Amines and Heterocyclic Compounds. Reactions of amines.
2	4/5	W	Reactions of Quaternary ammonium compounds. Synthesis of amines. Saturated heterocycles.
3	4/6	H	Aromatic 5-membered and 6-membered ring heterocycles.
4	4/7	F	<b>10 Min Quiz.</b> Biologically important heterocycles.
5	4/10	M	<b>Ch 22.</b> Carbohydrates. Monosaccharide nomenclature and structures.
6	4/12	W	Synthesis / Degradation reactions of saccharides.
7	4/13	H	Open chain vs. closed chain forms. Glycoside formation.
8	4/14	F	<b>10 Min Quiz.</b> More reactions of saccharides.
9	4/17	M	Disaccharides. Polysaccharides.
10	4/19	W	More on polysaccharides. Useful carbohydrates.
11	4/20	H	<b>Ch 28.</b> Synthetic Polymers. Chain-growth polymers.
12	4/21	F	More on chain-growth polymers. Vulcanization. Co-polymers.
13	4/24	M	<b>Exam #1 — In Class.</b>
14	4/26	W	Step-growth polymers. Physical properties of polymers. Biodegradable polymers.
15	4/27	H	<b>Ch. 23.</b> Amino acids. Nomenclature, stereochemistry, acid-base properties.
16	4/28	F	<b>10 Min Quiz.</b> The isoelectric point. Synthesis and resolution of racemic amino acids.
17	5/1	M	Intro. to peptides. Disulfide linkages. Some interesting peptides.
18	5/3	W	Peptide synthesis. Use of protecting groups. Solid-phase peptide synthesis.
19	5/4	H	10 Min Quiz. Protein structures — primary structure.
20	5/5	F	More on primary protein structure. Secondary protein structure.
21	5/8	M	Tertiary and quaternary protein structure.
22	5/10	W	<b>Ch 24.</b> Catalysis. General and specific acid/base catalysis.
23	5/11	H	Metal ion catalysis. Intramolecular catalysis. Anchimeric assistance.
24	5/12	F	<b>Exam #2 — In Class.</b>
25	5/15	M	Enzyme catalysis. Mechanism of carboxypeptidase.
26	5/17	W	Enzyme catalysis. Mechanisms of carboxypeptidase and serine proteases.
27	5/18	H	<b>Ch 25.</b> Organic Mechanisms of coenzymes.
28	5/19	F	<b>10 Min Quiz.</b> Selected mechanisms of coenzymes.
29	5/22	M	Selected mechanisms of coenzymes.
30	5/24	W	<b>Ch 26.</b> Lipids. Fatty acids, waxes, and triglycerides.
31	5/25	H	<b>10 Min Quiz.</b> More lipids — phospholipids, sphingolipids, and prostaglandins.
32	5/26	F	Biosynthesis of terpenes.
33	5/29	M	<b>Memorial Day</b> — No Class.
34	5/31	W	Terpenes. Isoprene rule.
35	6/1	H	Conformations and biosynthesis of steroids.
36	6/3	F	<b>Exam #3 — In Class.</b>
37	6/5	M	<b>Ch 27.</b> Nucleosides and nucleotides. Purine and pyrimidine bases. ATP.
38	6/7	W	Mechanism of phosphoryl transfer reaction. Nucleic acids.
39	6/8	H	10 Min Quiz. Base pairing. Determination of base sequences in DNA.
40	6/9	F	Laboratory synthesis of DNA. Wrap-up.
—	6/12	M	<b>Comprehensive Final Exam</b> — 10:15AM - 12:15PM.