## Essentials of General, Organic, and Biochemistry Proposed Course Schedule

Proposed Course Schedule		
Week	Date Topic	Text Reading
1 M T	8/26 Introduction; Properties of Matter; The Elements: Names & Symbols	1.1-1.5
Т	8/27 Atoms & Molecules; Formulas; Measurements: Metric vs English	1.6-1.10
W	8/28 Significant Numbers; Sci Notation; Conversion Factors, Dimensional Analysis	2.1-2.6
F	8/30 Conversion Factors and Dimensional Analysis	2.7-2.8
2 M	9/2 Labor Day Holiday	
T	9/3 Temperature Scales (°C,°F, K); Heat & Calories	2.8
W	9/4 Atomic Structure, Mass Numbers, Isotopes, Periodic Table	3.1-3.7
F	9/6 Nuclear Stability & Radioactivity; Fission, Fusion, Confusion	3.8-3.9
3 M T	9/9 Half-life, Nuclear Medicine	3.10-3.11
T	9/10 Chemical Bonds: Lewis Dot Structures, Ionic Compounds & Their Names	4.1-4.9
W F	9/11 Covalent Bonds; Single & Multiple Bonds	4.10-4.18
4 M	9/13 Polar Bonds; Naming non-ionic compounds 9/16 Avagadro & the Mole	4.19 5.1-5.2
4 IVI T	9/17 Molar Calculations	5.3
Ŵ	9/18 Chemical Equations	5.4-5.6
F	9/20 Balancing Chemical Equations	5.4-5.7
5 M	9/23 Mass calculations using chemical equations	5.7-5.8
T	9/24 More calculations; Review of Chapters 1-5	0.1-0.0
W	9/25 Gases, Liquids, and Solids; Gas Laws, Barometric pressure	6.1-6.7
F	9/27 No Lecture Today: First Exam (Thursday, Friday, Saturday at Tracy Hall Testing Center)	Chap 1-5
6 M	9/30 Dalton's Law; Vapor Pressue, Evaporation, Boiling	6.8-6.13
T	10/1 Solutions: Concentration Units, Preparation, Dilutions	7.1-7.6
Ŵ	10/2 Colligative Properties; Osmosis	7.7-7.9
F	10/4 Chemical Reactions: Oxidation and Reduction	8.1-8.3
7 M	10/7 Combustion reactions; rates of chemical reactions;	8.4-8.6
T	10/8 LeChatelier and chemical equilibrium	8.7-8.8
Ŵ	10/9 Acids, Bases, and Salts	9.1-9.7
F	10/11 pH Scale, buffers	9.8-9.9
	10/14 Organic Chemistry-Alkanes	10.1-10.8
т	10/15 Naming organic compounds	10.9-10.2
W	10/16 Petroleum: Products from Oil	10.12-10.14
F	10/18 Fall Break Holiday	
	10/21 Unsaturated Hydrocarbons: Alkenes	11.1-11.6
Т	10/22 Unsaturated Hydrocarbons: Alkynes and Aromatics	11.7-11.8
W	10/23 Unsaturated Hydrocarbons: Reactions & Addition Polymers	11.9-11.10
F	10/25 No Lecture Today: Second Exam (Thursday, Friday, Saturday at Tracy Hall Testing Center)	Chap 6-11
10 M	10/28 Alcohols: mono-, di-, and triols	12.1-12.4
т	10/29 Ethanol: production, concentration terms, commercial importance	12.4
W	10/30 Reactions of Alcohols	12.1-12.4
F	11/1 Ethers & thiols	
11 M	11/4 Amines 1°, 2°, 3° amines; names	12.5-12.9
Т	11/5 Amine reactions; acid salts of amines	12.5-12.9
W	11/6 Catecholamines, opiods	12.9
F	11/8 Aldehydes, Ketones	13.1-13.5
	11/11 Carboxylic acids & Esters; Polyester	13.6-13.9
Т	11/12 Amides; nylon	13.10-13.12
	11/13 Carbohydrates: Monosaccharides	14.2-8
	11/15 Carbohydrates: Disaccharides & Polysaccharides	14.9-14.10
_	11/18 Lipids: Fatty acids & Triacyglycerols (Fats & Oils)	15.1-15.4
Т	11/19 Lipids: Soap production; Phospholipids, sphingolipids, steroids	15.5-15.9
	11/20 Proteins: Amino acids, the building blocks of proteins	16.1-16.4
	11/22 No Lecture Today: Third Hour Exam (Tracy Hall Testing Center Fri,Sat,Mon,Tues)	16.5-16.11
	11/25 Enzymes: Characteristics and function (Tracy Hall Testing Center Fri, Sat, Mon, Tues, Wed)	16.13-16.14
Т	11/26 Enzymes: Factors affecting activity (Tracy Hall Testing Center Fri, Sat, Mon, Tues, Wed)	16.15-16.16
	11/27 No Lecture Today: Third Hour Exam (Tracy Hall Testing Center Fri,Sat,Mon,Tues,Wed)	Chap 12-15
F	11/29 Thanksgiving Holiday	
15 M	12/2 Food Labels and Nutritional Values	
Т	12/3 Review for Final Exam	Chap 1-10
W	12/4 Review for Final Exam	Chap 2-13
F 16 W	12/6 Review for Final Exam	Chap 13-16
	12/11 Final Exam - 10:30-12:30am (Wednesday - in Lecture Room)	Comprehensive