LANEY COLLEGE INSTRUCTOR: STEPHEN CORLETT

Agenda 2, 2/6 to 2/15/18

Week 3

Tue (2/6) Lecture Finish Chapter 2, start Chapter 3 – Acids and Bases

Concepts Chapter 2: functional group review

Chapter 3: Brønsted-Lowry acids and bases, "electron-pushing" in acid/base

reactions, equilibrium, electron pushing, ARIO

Homework Klein: 3.36, 3.37, 3.39, 3.45, 3.47, 3.57, 3.60, 3.62

For lecture download and complete the following worksheet:

Functional Group Worksheet

For laboratory download and complete the following worksheet: Infrared (IR) Functional Group Characteristic Frequencies Worksheet

Reading Lecture: Klein, Sections 2.10-2.13; 3.1-3.4 - review Table 2.1

Medically Speaking – Drug Distribution and pK_a , (p. 103)

Practically Speaking – Baking Soda versus Baking Powder (p. 120)

Due Melting-point experiment (template), Dipole Moment exercise,

Lab Introduction to Infrared (IR) Spectroscopy. Lab lecture – IR workshop.

(Pavia Techniques 13 and 25)

Thur (2/8) Lecture Chapter 3 – Acids and Bases

Quiz 2 (resonance, functional groups, Chapter 2)

Concepts leveling and solvent effects, counterions, Lewis acids/bases

Reading Lecture: Klein, Sections 3.5-3.9

Lab Introduction to IR spectra and boiling point determination

(Pavia 8, also Techniques 13 and 25)

Week 4

Tue (2/13) Lecture Functional Group Lecture

Concepts Introduce naming rules for functional groups.

Bring your Functional Group Worksheet!

Homework Klein: 3.36, 3.37, 3.39, 3.45, 3.47, 3.57, 3.60, 3.62

Due Solubility experiment (template)

Reading Review Table 2.1

Lab Crystallization (Pavia 3C)

Thur (2/15) Lecture Nomenclature Lecture I

Concepts Naming of organic compounds – name construction

Reading Klein: Appendix – Nomenclature of Polyfunctional Compounds (pp.1253-1255)

Due Chapter 2, 3 homework, Functional Group Worksheet, Resonance Worksheet

Lab **Exam 1** (Chapters 1-3) in A 277 at 9:00-11:50 am