Agenda 6, 10/29 to 11/7/19

Week 11

Tue (10/29) Lecture Chapter 18 – Aromatic Substitution Reactions

Reading Klein: Sections 18.1-18.4

Concepts Electrophilic Aromatic Substitution, halogenation, sulfonation, nitration

Homework Klein: 18.38, 18.39, 18.41, 18.43, 18.49, 18.50, 18.54, 18.55, 18.67, 18.70, 18.73

Aromatic Substitution Worksheet (handout)
Aromatic Synthesis Worksheet (handout)

Lab Vacuum distillation and purification of methyl salicylate. (handout)

Thu (10/31) Lecture Chapter 18 – Aromatic Substitution Reactions

Chapter 19 - Aldehydes and Ketones

Concepts Substituent and directing effects, NMR of aromatic compounds

Naming, preparation of aldehydes and ketones

Reading Klein: Sections 18.5-18.13, 19.1-19.6

Homework Carbon NMR Assignments for chloronitrobenzenes (handout)
Lab Analysis of methyl salicylate, NMR exercises (handouts)

Due Chapter 17 homework

Week 12

Tue (11/5) Lecture Chapter 19 – Aldehydes and Ketones

Concepts Hydrates, acetals, imine derivatives, nucleophilic additions II, Baeyer-Villager

oxidation

Reading Klein: Sections 19.7-19.10

Homework Klein: 19.43, 19.44, 19.49, 19.50, 19.59, 19.60, 19.61, 19,63, 19.64, 19.72

Acetal Examples Worksheet (handout)
Acetal Mechanism Worksheet (handout)

Lab The Diels-Alder Reaction. (Exp 47, Full Report for Molecular Modeling + Exp 47)

Due Chapter 18 homework

Carbon NMR Assignments for chloronitrobenzenes,

Aromatic Substitution Worksheet, Aromatic Synthesis Worksheet

Thu (11/7) Lecture Chapter 20 – Carboxylic Acids and Derivatives

Reading Klein: Sections 20.1-20.4

Concepts Naming, properties and synthesis of carboxylic acids

Homework Klein: 20.35, 20.37, 20.44, 20.45, 20.46, 20.48, 20.53, 20.57, 20.77, 20.90

Carboxylic Acid Worksheet (handout)
Carboxylic Acid Derivatives Worksheet

Lab Friedel-Crafts Acylation. Acetylation of Ferrocene. (handouts)

Due Methyl Salicylate lab