LANEY COLLEGE INSTRUCTOR: STEPHEN CORLETT

## Agenda 3, 2/20 to 3/1/18

## Week 5

Tue (2/20) Lecture Chapter 4 – Alkanes and Cycloalkanes

Concepts Naming, occurrence, stability of alkanes, conformational analysis

Reading Klein: Sections 4.1-4.8

Practically Speaking: Pheromones: Chemical Messengers (p. 135)

Naming Drugs (p. 145)

Homework Klein: 4.41, 4.48, 4.49, 4.51, 4.52, 4.53, 4.66, 4.68

Alkane Naming Practice (handout)

Due IR Spectroscopy/BP lab, Crystallization lab

Lab Extraction (Exp 4)

Thur (2/22) Lecture Chapter 4 – Alkanes and Cycloalkanes

Concepts Cycloalkanes, chair/boat conformations of cyclohexane, drawing cyclohexane,

equilibrium of substituted cyclohexanes.

Reading Klein: Sections 4.9-4.11

Due rough draft of separation plan for Experiment 5

Lab A Separation and Preparation Scheme (Pavia 5) – laboratory lecture and

preparation.

Week 6

Tue (2/27) Lecture Chapter 4 – Alkanes and Cycloalkanes

Quiz 3 (Chapter 4 topics)

Concepts bicyclic and polycyclic compounds, review session

Reading Klein: Sections 4.13-4.15

Lab A Separation and Preparation Scheme (Pavia 5, partial report)

Thur (3/1) Lecture Chapter 5 – Stereoisomerism

Concepts Configuration, optical activity

Reading Klein: Sections 5.1-5.5

Configurations (R/S), optical activity, enantiomers and diastereomers

Practically Speaking: The Sense of Smell (p. 202);

Medically Speaking: Chiral Drugs (p. 208-9, compare to the reading from p. 166)

Homework Klein: 5.34, 5.36, 5.38, 5.49, 5.50, 5.56, 5.62

Stereochemistry Worksheet (handout)

Due Chapter 4 homework, Extraction lab

Lab Chromatography (Pavia 6, template)