

CHEM 233: HOMEWORK SHEET
FINAL EXAM (Spring 2011-Dr. Babb)

Chapter 13: A. Infrared Spectroscopy (pg. 474-487)
Homework: 13.10-13.20, 13.37-13.39, 13.41, 13.42, 13.44

Chapter 14: A. ^1H NMR Spectroscopy (pg. 495-498)
B. ^1H NMR: Number, Position, Intensity of Signals (pg. 498-508)
Homework: 14.1-14.13, 14.34, 14.35, 14.37, 14.39
C. Spin-Spin Splitting (pg. 508-522)
Homework: 14.14-14.27, 14.42, 14.44-14.46, 14.54-14.56, 14.58, 14.59
D. ^{13}C NMR Spectroscopy (pg. 522-527)
Homework: 14.28-14.33, 14.48, 14.50-14.52, 14.70

Chapter 11: A. Alkynes: Nomenclature, Physical Prop. (pg. 399-404)
Homework: 11.1-11.6, 11.27, 11.28
B. Preparation and Reaction of Alkynes (pg. 404-417)
Homework: 11.7-11.22, 11.29-11.31, 11.33, 11.34, 11.36-11.39, 11.43, 11.45, 11.51, 11.54
C. Retrosynthesis (pg. 417-419)
Homework: 11.23-11.24, 11.46-11.48, 11.58, 11.60-11.62

Chapter 12: A. Reduction: Hydrogenation (pg. 426-438)
Homework: 12.1-12.3, 12.6-12.9, 12.11-12.13, 12.16, 12.32, 12.33, 12.35
B. Oxidation (pg. 438-454)
Homework: 12.17-12.24, 12.26, 12.39, 12.40, 12.43, 12.44, 12.49-12.52, 12.57, 12.63, 12.57, 12.71

NOTE: Final Exam is Friday May 6 (8-10:00 AM) and will cover most of the topics listed on this sheet. The Chem 233 final exam is comprehensive and cumulative. New material will account for ~25% of the questions on the final exam. Material from Exams #1-#3 will account for ~75% of the final exam. You are responsible for material covered in lecture, reading material in text and material covered in homework problems and problem sets. To the exam bring a #2 pencil, pen, and a photo ID.