

**CHEM 233: HOMEWORK SHEET**  
**EXAM I (Spring 2012-Dr. Babb)**

- Chapter 1:**
- A. Prologue (pg. 1-5)
  - B. Review of Lewis Structures, Formal Charge, Resonance, etc. (pg. 6-27)  
*Homework:* 1.3-1.21, 1.36-1.37, 1.41-1.43, 1.45, 1.46-1.58 (even), 1.53, 1.59, 1.60, 1.80
  - C. Drawing Organic Structures (pg. 27-31)  
*Homework:* 1.22-1.28, 1.62-1.68 (even)
  - D. Hybridization and Bond Lengths/Energies (pg. 32-45)  
*Homework:* 1.29-1.34; 1.69-1.73, 1.74, 1.76
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- Chapter 2:**
- A. Bronsted-Lowry Acids and Bases (pg. 54-62)  
*Homework:* 2.1-2.14, 2.34, 2.38 a, c, e, 2.39a, c, f
  - B. Acid Strength (pg. 62-72)  
*Homework:* 2.15-2.24, 2.27, 2.47, 2.49, 2.50, 2.53, 2.57, 2.58
  - C. Lewis Acids and Bases (pg. 72-74)  
*Homework:* 2.28-2.33, 2.64
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- Chapter 3:**
- A. Functional Groups (pg. 81-87, 102-105)  
*Homework:* 3.1-3.4, 3.17-3.20, 3.22, 3.46, 3.47
  - B. Review of Intermolecular Forces and Applications (pg. 87-102)  
*Homework:* 3.5-3.9, 3.11-3.16, 3.24, 3.25, 3.27-3.29, 3.31-3.33, 3.38, 3.39, 3.42
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- Chapter 4:**
- A. Alkanes, Cycloalkanes, and Nomenclature (pg. 113-129)  
*Homework:* 4.1-4.17, 4.36, 4.39a, 4.40, 4.42, 4.44
  - B. Alkane: Conformations and Newman Projections (pg. 129-137)  
*Homework:* 4.18-4.23, 4.47-4.50
  - C. Cycloalkane: Conformations, Ring Strain, and Substitution (pg. 137-147)  
*Homework:* 4.24-4.31, 4.56, 4.57, 4.59-4.62, 4.65
  - D. Alkane Reactions (pg. 147-151)  
*Homework:* 4.32-4.35, 4.69, 4.70, 4.72
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**NOTE: Exam I is Thursday, Feb. 2 (7-8:30 PM)** and will cover most of the topics listed on this sheet. You are responsible for material covered in lecture, reading material in text and material covered in homework problems. To the exam bring a #2 pencil, pen, and a photo ID. Communication/electronic devices must be turned off and put away in your book bag which itself must be placed at the front of the exam room. Any student caught with an electronic device during exam/quiz will receive an "F" for the exam/quiz and will be brought up on charges of Academic Dishonesty.