

CHEM 116: HOMEWORK SHEET
HOUR EXAM IV (Fall 2009-Dr. Babb)

Chapter 15:
(5th McMurry/Fay Text)

- A. pH of Buffer Solution After Addition of Strong Acid/Base (pg. 601-604)

Other Homework: 15.7, 15.8, 15.68, 15.69
Chapter 18 (Problem Book) 22-25, 26-30

- B. Titrations and Titration Curves (pg. 607-618)

- C. Indicators (pg. 553-554)

Graded Online Homework: 116-titration

Other Homework: 15.13-15.17, 15.42, 15.44, 15.48, 15.78-15.84 (even), 15.85, 15.124
Chapter 22 (Problem Book) 13-15, 1-11

- E. Solubility Product (K_{sp}) and Factors Affecting Solubility (pg. 618-624)

Graded Online Homework: 116-Ksp

Other Homework: 15.20-15.26, 15.40, 15.90-15.104 (even), 15.128
Chapter 19 (Problem Book) 1-7, 8-17

- F. Ion Product, Separations via Pptn. and Qualitative Analysis (pg. 629-633)

- G. Calculations Involving Complex Formation (pg. 624-629; Prob. Bk. 309-314)

Graded Online Homework: 116-qualanal

Other Homework: 15.27-15.31, 15.106-15.118 (even), 15.132
Chapter 19 (Problem Book) 18-25
Chapter 23 (Problem Book) 1-2, 4-10, 15, 17, 20
Chapter 19 (Problem Book) 26-34

Chapter 16:

- A. Spontaneity and Entropy (pg. 647-661)

Graded Online Homework: 116-entropy

Other Homework: 16.1-16.6, 16.30, 16.36, 16.38, 16.40, 16.44-16.56 (even)
Chapter 15 (Problem Book) 7-10, 14, 15

- B. Free Energy and Equilibrium (pg. 662-677)

Graded Online Homework: 116-gibbsfe

Other Homework: 16.7-16.17, 16.22, 16.24, 16.28, 16.62-16.92 (even), 16.96, 16.104, 16.110
Chapter 15 (Problem Book) 16-20

NOTE: Exam IV is Wednesday, Nov. 18 (in lab) 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. **Please bring the following items to the exam: #2 pencil, non-programmable calculator (cover removed), and photo ID.** Sample back tests can be found on the Chem 116 website at <http://www.as.wvu.edu/~mbabb>.