XAVIER UNIVERSITY CHEM 162-11 (General Chemistry II) **SPRING 2002**

Dr. Craig M. Davis (DavisC@xu.edu) **Office**: Logan 206A **Phone**: 745-2066

Office Hours: Monday 3:00-4:00 p.m.; Wed. & Thurs. 9:30-11:30 a.m.; and by appointment.

Text: ***Chemistry***, 7th ed., by R. Chang; and ***Student Solutions Manual***, 7th ed., by B. Cruickshank and R. Chang; both WCB/McGraw-Hill; Boston, MA; 2002.

Format: Three lectures each week, 8:30-9:20 a.m. MWF in Logan 100 (3 credits).

Prerequisites: CHEM 160 and 161.

Description: This is the second semester of a science-major sequence. Fundamental principles of general chemistry are discussed. These will include: liquids, solids, and solutions; equilibrium, thermodynamics, and kinetics; acids and bases; and electrochemistry.

Homework: Appropriate questions from the end of each chapter of the textbook will be suggested. Although the problems will not be collected, students should find the exercise of answering these questions vital to the understanding of the material presented in the lecture.

Attendance: Regular attendance in this lecture class is strongly encouraged but not required.

Tests: Five tests will be given (dates below). Each test counts 17% toward the overall grade. Students are responsible for taking tests at the scheduled times. Make-up tests will be given only with proof of illness or conflicting event (note from an appropriate university counselor). Notice of an illness or conflict MUST be made in person or by phone BEFORE the testing period.

NOTE: Only non-programmable calculators will be allowed.

Final Exam: Monday, May 6, 8:30 a.m., in Logan 100. Final counts 15% toward overall grade. This is an American Chemical Society standardized examination for the entire academic year.

Academic Honesty: Cheating on any examination will result in a grade of "**F**" for the course. Students may appeal according to normal procedures stated in the University Catalog.

Grading Scale: **A** 92-100; **B** 81-91; **C** 70-80; **D** 60-69; **F** 59 and below.
Upon review at the end of the semester, this scale may be adjusted downward. (According to the Xavier University Catalog, a grade of "A" is earned for "Exceptional" performance. This is also the agreed upon grading policy of the faculty in the Chemistry Department.)

TENTATIVE SCHEDULE

CLASS	TOPIC	
1-4	Chapter 11	Liquids and Solids (skip Sections 4 and 5)
5-8	Chapter 12	Physical Properties of Solutions
9	***Test #1***	***Monday, February 4***
10-13	Chapter 14	Chemical Equilibrium
14-16	Chapter 15	Acids and Bases (begin)
17	***Test #2***	***Monday, February 25***
18-20	Chapter 15	Acids and Bases (finish)
21-25	Chapter 16	Acid-Base Equilibria and Solubility Equilibria

26	***Test #3***	***Monday, March 18***
27-29	Chapter 18	Entropy, Free Energy, and Equilibrium
30-31	Chapter 19	Electrochemistry
35	***Test #4***	***Wednesday, April 17***
36-40	Chapter 13	Chemical Kinetics (skip Section 5)
41	***Test #5***	***Wednesday, May 1***
42	Conclusion	Evaluations; Return Test.
43	***FINAL EXAM***	***Monday, May 6, 8:30-10:20 a.m.***