Chemistry 101 – General Chemistry I  
Fall Semester 2005  
Dr. Allen Clabo

- **Pre-requisite:** Completion of Math 105 or eligibility to take Math 111 (or higher); **Co-requisite:** CHEM 101L must be taken in the same semester as CHEM 101 lecture
- **Class times:** MWF 11:30 a.m. – 12:20 p.m., LSF L301
- **Office:** LSF L303E
- **Office Hours:** MWF 8:30 – 9:30, 10:30 – 11:30 a.m.; TTh 10:30 a.m. – 12:30 p.m.
- **Office Telephone:** 661-1457
- **E-mail:** dclabo@fmarion.edu
- **Web page:** http://swampfox.fmarion.edu/web/chem/aclabo/index.htm
- **Required Text:** Chemistry, 8th edition, R. Chang
- **Exams:**
  - 3 1-hour exams – 15% each = 45% (Tentative dates: 9/23, 10/28, 11/30)
  - Quizzes (in-class and take-home) = 15%
  - Final Exam (Fri., 12/9, 11:45 a.m.) = 15%
  - Laboratory Grade = 25%
  - There will be no make-up exams or quizzes.
  - The lab grade is determined by each lab instructor and reported to the lecture instructors.
- **Grading Policy:** 90-100% = A; 80-89% = B; 70-79% = C; 60-69% = D; 0-59% = F. You will receive no less than the grade that you earn according to this scale.
- **Attendance** in lecture is a responsibility of the student. It is expected and is governed by the FMU policy on attendance. Attendance may be checked any day and used at my discretion in the calculation of the course grade. The student is responsible for all material covered in lecture or in lab or assigned in the text. Attendance is required at all scheduled lab times. A total of 3 or more absences from lab and/or lab reports not turned in will result in a grade of F for the course. It is the student’s responsibility to withdraw from the course if that is what the student desires.

- **Course content:**
  - Chapters 1 – 10 in Chang text:
### Course objectives:

- know basic definitions and usage of chemical terms and concepts
- use the basic units of measurement, including using dimensional analysis to solve problems
- understand atomic theory, including atomic and molecular masses
- use basic rules of nomenclature to name and identify chemical substances
- demonstrate understanding and use of chemical equations, chemical reaction types, and stoichiometric relationships
- qualitatively and quantitatively describe the nature of gases
- understand the basics of quantum theory and its application to the electronic structure of atoms and molecules and to the periodic table
- understand VSEPR and hybridization and the relationship to chemical bonding and molecular structure in simple molecules
- understand fundamentals of thermochemistry, including enthalpy, and the relation of energy and reactivity