

09-105 Introduction to Modern Chemistry - I

- 10 unit course
- Weekly 3 hours lecture and 2 hours recitation.

Instructor:
Ravichandra Bachu

Learning Goals

1. *To develop problem solving skills.*
2. *To develop critical thinking skills.*
3. *To strengthen one's mathematical skills in a chemistry context.*
4. *To learn some chemistry and have fun while learning it.*

Student evaluation: 3 in-class exams, weekly online home works, and a final exam.

Course Description:

This course begins with a very brief survey of some fundamental principles of chemistry. These will form the basis for introducing the relationships between the structure of molecules and their chemical properties and behavior. Major topics will include stoichiometry, solution chemistry, atomic structure, chemical bonding, gases, and intermolecular interactions. Structures of inorganic compounds, including transition metal complexes, will be included. Relevant examples will be drawn from such areas as environmental, materials, and biological chemistry.