

Chemistry 11 Laboratory, Section 31, Thursday, 6:30 PM to 9:20 PM, Room 112, Daly Science

COURSE SYLLABUS

INSTRUCTOR: Tom Blackburn
E-mail: TBlackburn@scu.edu

TIME AND PLACE: Daly Science 112, Thursday 6:30 → 9:20 pm

OFFICE HOURS: Meeting location – Room 112 (The Lab)
Times – Wednesday from 12:00 – 2:00 pm
Other times may be possible by arrangement

REQUIRED MATERIALS:

- 1) Closed-toed shoes only. No shorts. No bare midriffs, legs, shoulders (no T-tops), Safety goggles.
- 2) Bound Lab Notebook (number pages), Pocket calculator, Laboratory Manual (Fall 2010).

COURSE CONTENT:

Laboratory work will supplement the lecture with direct contact and experience in safety and skill building. Objectives will center around 1) the language of chemistry including chemical nomenclature, symbols and common units of measurement, 2) stoichiometry; the chemical arithmetic associated with the formulas for chemicals and with balanced chemical reactions, 3) the driving forces involved in reactions of aqueous solutions of strong electrolytes, 4) the internal structure of atoms, particularly the allowed energies of and behavior of an atom's electrons, 5) the concepts of ionic and covalent bonding, 6) the accepted theory predicting the shapes of molecules including the concept of atomic orbital hybridization, 7) the heat changes associated with chemical reactions and physical processes.

RECOMMENDED APPROACH: Everyone's learning style is somewhat different. The following are helpful for most people.

1. Please DON'T MISS CLASS.
2. Read the laboratory manual before class.
3. Record good notes in your notebook (in pen). Follow the guideline in the manual.
4. Bring a marker, pens and pencils, (pencils are ok for reports; see lab manual).
5. Ask questions. Question answers.
6. Be "coachable".
7. Don't underestimate the importance of repetition in learning chemistry.