Syllabus Chem 29B Organic Chemistry Laboratory
Spring 1998 TTh 10:30 am - 1:20 PS 77

Instructor J. Dekker

Office PS 78 Phone (209)638.3641 extension 353,
email: jdekker@mail.mobynet.com
Office hours M T Th 2:30-3:30 pm or by appointment

Subject prerequisites: Chem 28A and Chem 29A. Chem 28B has to be taken concurrently.

Textbooks
1. Svoronos/Sarlo Organic Chemistry Laboratory Manual (2nd ed)
2. McMurry Organic Chemistry (4th ed)
3. Traynham Organic Nomenclature (5th ed)

Required materials
1. A lab research notebook
2. Safety goggles.
3. A scientific calculator e.g. TI-82 or TI-85.

Course objectives and outcomes Students will become familiar with safety procedures and lab equipment for semi-micro organic experiments. They will be capable of synthesizing and purifying organic compounds, of measuring melting points, refractive index, optical activity etc. They will also learn to identify unknown compounds by analyzing MS, IR and NMR spectra.
Through interactive computer programs the students will obtain support in thoroughly understanding the concepts taught in organic chemistry lecture (Chem 28B).

Homework Students are expected to come to lab well prepared. This means that the steps to be taken to properly complete the experiment are underlined in the text of the lab manual or written down in the lab notebook ahead of time. The theoretical explanations in the lab manual typically are too brief to fully comprehend the experiment. Therefore preparation reading McMurry's text on the subject is appropriate.

Lab report This semester 3 experiments are finalized with a lab report using the observations and data collected in the experiment. The lab reports essentially are a write-up of the experiment and they are also a research paper. The student will have to use resources in the library to find appropriate theoretical background information or use the Internet, which will be available to each student for free in the organic chem lab, room PS 77.

Lab materials Expensive grounded glassware and other delicate lab supplies will be made available. Students will be held responsible for their own desk inventory.

Attendance Attendance at all labs is mandatory. Role will be taken every time. Students will have to complete all the laboratory assignments. You will be dropped if you miss two weeks without further notice.

Grading To determine the final grade in this class the average of the timely submitted and neatly typed lab reports will count towards 60% and the individually graded labs towards 40% of your final grade.
We will also take into account the quality of the product, the working technique, and the efforts to reach the experimental goal and occasionnally the quantity of the compound.
General grade break-off A 90% and up, B 80-89%, C 70-79%, D 60-69%, F 59% and lower.

Drop date The drop date is Friday MARCH 13, 1998. After this date a letter grade will have to appear on your transcripts. If you are dropped from the class before this date you will receive a W.

Lab rules It is MANDATORY to use safety glasses at any time that you are in the lab.
You have to perform all the assigned experiments. If for whatever reason you have to miss a lab, you are accountable to inform the instructor ahead of time and make arrangements to make up the lab within one week. The grade for a missed lab is a zero (0).
Copying of experimental data and answers to questions in lab reports is considered fraudulent behavior and will result in a zero grade for the copier and the originator.
Lab reports have to be turned in in time. If the due date and due time is not made a minimum of 10 points will be deducted.

Lab schedule Chem 29B Spring 1998 Please, turn over.--->