Chemistry 366L Course Syllabus Spring 2004
Physical Chemistry II Lab
St. John Fisher College, Department of Chemistry

Course Details

Time and Place: W 1:25 - 5:35 pm Skalny A-100

Instructor: Dr. Kris Lantzky-Eaton

Office: Skalny Science Center A109

Office Hours: M 1:00 - 2:00 pm
T 10:00-11:00 am
or by appointment

Phone: 385-5284

Email: klantzky@sjfc.edu

Course Mechanics

Course Description: Physical Chemistry Lab is intended for students majoring in chemistry. Students in biology, physics or engineering will also find this class helpful. Students are required to meet pre-requisites or have instructor approval. Students must be enrolled in CHEM 366.

Objectives: Students will gain a better knowledge of experimental quantum mechanics and kinetics. Students will gain experience in scientific writing and better experimental techniques. The class will also gain a working knowledge of different computational and mathematical packages such as CaChe, Matlab, Mathematica and/or Maple.

Written Reports: 4 experiments will be preformed throughout the semester. Students are expected to turn written reports in by 5 pm on the day that it is due. Failure to meet that deadline, without prior approval from the instructor, will result in a 10% deduction per day. Students may work in groups of two for the experiment however each individual must submit thier own written report. Written reports are expected to be 10 to 15 pages in length. All data should be submitted with the lab reports. See addendum about writing laboratory reports.
Logistics: Students will work in groups of two to complete four experiments during the semester. The schedule outlined below indicated the dates which the experiments are started and the written report is due. Experiments are written to be completed in one or two weeks. Students will have two or three weeks, depending on experiments to complete the experiment and write the written report. The presentation will be based on experiments preformed in Chem 365 and Chem 366. Presentations will be presented Friday afternoons to the sophomore seminar.

Grades will be based in 4 written reports and one presentation and paper. Cheating is not acceptable in this course. If a student is caught cheating they will automatically fail the course.

4 written reports (2x100pts, 2x200 pts) = 600pts
1 presentation = 50 pts
1 paper = 50 pts

Total pts for the course = 700 pts

Grading Scale
100% - 90%A
89% - 80% B
79% - 70% C
69% - 60% D
59% - ↓ F

Attendance: There is not an attendance policy however keep in mind laboratory make-up is only at the discretion of the instructor.

Materials: All experiments will be available online. They are presented as a PDF (portable document file) and can be viewed with Acrobat Reader. Students will wear Z87.1 approved eye protection at all times when conducting an experiment.

Experiment 1: Flash Photolysis Kinetics (1 week)
Experiment 2: Vibrational and Rotational Transitions of HCl and DCl (2 week)
Experiment 3: IR and Raman Spectroscopy (2 week)
Experiment 4: Fourier Transform-Nuclear Magnetic Resonance: FT-NMR (1 week)
College Policy Concerning Students with Disabilities In the compliance with St. John Fisher College policy and applicable laws, appropriate academic accommodations are available to you if you are a student with a disability. All requests for accommodations must be supported by appropriate documentation/diagnosis and determined reasonable by St. John Fisher College. Students with Documented disabilities (physical, learning, psychological) who may need academic accommodations are advised to make an appointment with the Coordinator of Services for students with disabilities in the Academic Support Center, K202. Late notification will delay requested accommodations.