

SYLLABUS, Chemistry 481, Laboratory Internship, Fall 2004

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Consultation Hours Monday through Friday: 9:30-5:00 pm, except when I'm in class (9:40-10:35 MWF, 12:55-4 pm W, and 1:30-4:30 Th), or if I'm in a meeting. If I'm not in my office, please check with the secretary in Beauregard 210.

Meeting time and place Interns will meet regularly on Thursdays 1:30-4:30 to work on instructional project, in Beauregard 237. Each intern must develop a work schedule (mentoring students in a laboratory course or assisting in the preparation of materials and apparatus for the laboratory) by consulting with the instructor of laboratory course that he/she is assigned to assist.

Catalog Description. CHEM 481. Laboratory Internship. 3-0-6. Prerequisites: Junior or senior standing, completion of CHEM 300, 302. Teaching experience in undergraduate chemistry laboratory, including maintenance, laboratory preparation, and assistance of students in laboratory experience under the direct supervision of faculty mentor. May be repeated for credit if content differs. (40.0599)

Prerequisites. Prerequisites: Junior or senior standing, completion of CHEM 300, 302.

Textbook none

Supplements

Students will be provided with a copy of the laboratory manual, and instructions for preparing the laboratory reagents and apparatus.

Course Goal. To provide students with an understanding of a teacher's role in a laboratory setting.

Student Outcome Objectives. Students will be able to

- Work independently, responsibly, and efficiently to solve problems occurring in a laboratory setting
- Demonstrate clear oral and written communication skills
- Perform routine laboratory procedures safely and efficiently
- Explain fundamental principles of chemistry to students
- Assess student progress and develop assessment tools
- Demonstrate safety practices regarding laboratory and chemical storage
- Develop skills to do research (literature searching, laboratory techniques)

Course Content

- Safety in the laboratory
- Principles of experiments conducted in laboratory course the student intern is assigned to assist.

This course addresses the following benchmarks in the Louisiana Content Standards:

- Measurement and symbolic representation (PS-H-A1)
- Structure and properties of matter (PS-H-C4)

- Chemical reactions (PS-H-D2 through D7)
- Abilities necessary to do scientific inquiry (SI-E-A2 through A7, SI-M-A2 through A8, SI-H-A1 through A7)
- Understanding scientific inquiry (SI-E-B2 through B6, SI-M-B3, B5, B6, SI-H-B1)

Course Requirements

Assisting in the lab. The intern will be required to be prepared for each lab session. The intern will answer questions and help with the set up of each lab (calculate and prepare appropriate quantity of chemicals needed)

Multimedia Instructional Project. The intern will develop a multimedia instructional project on one of the experiments being done in the laboratory course he/she is assigned to teach. This will involve the development of digital movies based on a PowerPoint presentation (with audio narration) on the experiment, a sample of a lab report, and a rubric for grading lab reports. The PowerPoint presentation will also be delivered, live, to students in the class.

Daily Journal. In the journal, the intern will:

- Describe what activities will be conducted that day
- Describe what the students actually did during class
- Reflect on the outcome of the daily laboratory experience (personal and students)

Methods of Evaluation Each category above is graded on a 0-100% scale. Assisting in the laboratory is worth 50% of your grade (evaluation to be performed by the instructor of the laboratory course that the student is assigned to); the daily journal is worth 10%, and the Multimedia Instructional Project is worth 40%. Course grades will be assigned according to your average grade as follows: A: 90-100%, B: 80-89%, C: 70-79%, D: 60-69%, F: <60%

Make-up Policy Make work will be decided on a case-by-case basis. In general, you must have a valid verifiable excuse.

Academic Honesty Policy Cheating will not be tolerated and will be dealt with as detailed in the NSU Code of Student conduct.

Attendance Policy The student is expected to consult with the instructor in charge of the laboratory course he/she is assigned to and put in at least three hours of lab work each week.

Semester Withdrawals. The last day to drop with an automatic grade of W is October 29, 2004

Disabilities Policy If you have a documented disability that requires assistance, you will need to register with the Office of Disability Services for coordination of your academic accommodations. The Office of Disability Services is located in Peltier Hall, Room 100-A. The phone number is (985) 448-4430 (TDD 449-7002)

THIS SYLLABUS IS NOT A CONTRACT AND IS SUBJECT TO CHANGE.