CHEM 490: Seminar (0.5 credit)  spring 2007

South Dakota School of Mines and Technology

Course Meeting Time: Tuesday, 12:00-12:50 pm

Location: Chem-Chem Engr Building, Room 228

Instructor: Zhengtao Zhu  Office: Chem-Chem Engr 316; Phone: 394 2447; Email: zhengtao.zhu@sdsmt.edu; Office hours: M, W, 4:00-5:30 pm; F, 2:00-2:50 pm; or by appointment

Textbook: None

Catalog Description: Prerequisite: Permission of instructor. CHEM490 is a highly focused and topical course on scientific presentation and writing skills. The format includes student presentations and discussions of reports based on literature, practices, problems, and research. Enrollment is generally limited to fewer than 20 students.

Course Content: Students enrolled in CHEM490 are required to give a presentation or term paper based on a research article published from one of the American Chemical Society journals, the list of which can be found at the website of http://pubs.acs.org/about.html. Half of the class will give presentation. The presentation is about 15 minutes plus 5 minutes for discussion. The other students will submit a short term paper at the end of the semester.

Objectives: At the conclusion of CHEM 490, students should be able to

1. Understand the principles of organization and development that are required to produce a variety of short, basic technical documents.
2. Understand the basic components of planning and preparing effective oral presentation of technical and professional material.
3. Improve communication skills by working on writing projects.

Outcomes: In CHEM 490 students will demonstrate effective technical communication by

1. Producing well organized and effectively designed short, basic technical documents.
2. Recognizing and using appropriate conventional formats and visuals for a variety of basic technical/professional documents.
3. Observing a technical communication style based on conciseness, clarity and fluency.

**Grading Policy:** You will be graded on your presentation/term paper (50%) and your participation in the class (50%).

For an oral presentation, common criteria include (1) conciseness, clarity, and fluency of the presentation and (2) formats and visuals of the presentation will be used to judge your seminar. Fail to meet the above requirements will result in the reduction of the final grade by a full letter. One excused absence will be allowed with no deduction in grade. Unexcused absences will result in the reduction of the final grade by a full letter.

Term paper: You need to write a concise report on a topic selected from a research article published from one of the American Chemical Society journals. The report would include the background, the techniques, the significance, and the conclusions of the work. The grading criteria include (1) organization and logic (2) conciseness and clarity (3) document format and style. The report needs to be approx. 5 pages, including necessary figures, tables, and references. Please follow the reference style of the American Chemical Society publications. Use 12 pts Time New Roman fonts, 1.5 lines spacing, and 1 inch margins. The paper is due at 12:30 pm on May. 1, 2007.

**Note that no internet reference is allowed.**

Students with special needs or requiring special accommodations should contact the instructor, (Zhengtao Zhu, at 394 2447) and/or the campus ADA coordinator, Jolie McCoy, at 394-1924 at the earliest opportunity.

Freedom in learning. Students are responsible for learning the content of any course of study in which they are enrolled. Under Board of Regents and University policy, student academic performance shall be evaluated solely on an academic basis and students should be free to take reasoned exception to the data or views offered in any course of study. Students who believe that an academic evaluation is unrelated to academic standards but is related instead to judgment of their personal opinion or conduct should contact the dean of the college which offers the class to initiate a review of the evaluation.