

CHEM-482 O: Chemistry Seminar Course Syllabus

Course: Chemistry Seminar (CHEM-482 O); 2 credits

Communication (Oral) Intensive

Prerequisites: CHEM-481

Location: Reichardt 201

Meeting Time: T, R 4:00 – 5:00 pm

Blackboard link: <http://classes.uaf.edu>

All information and supporting documents for this course will be maintained on the UAF Blackboard website. It is therefore important that you check the site regularly for updates. Time-sensitive information and reminders will occasionally be sent to all students enrolled in the course, so it is important that you **verify that your email address is correct**.

Instructor: Dr. Brian Edmonds

Faculty Mentors: All Chemistry and Biochemistry faculty members can serve as mentors. A list of potential mentors will be provided.

Office hours: W 10:30 AM – 12:00 PM (or by appointment)

Office: Murie Building, Room 113E

Research Lab: Murie Building, Room 110

Phone: 907-474-6527

E-mail: bwedmonds@alaska.edu

Preferred contact method: e-mail

Recommended Reference Text

Title:	<i>The Craft of Scientific Presentations</i>
Author:	Alley, Michael
Publisher:	Springer-Verlag, New York
ISBN:	0387955550
Publication Date:	2008

Course Description:

This is the second of a two-semester sequence in oral communication required for the B.S. degree in Chemistry. Together, these two courses provide an introduction to the techniques and style of technical oral presentations generally accepted by professional chemists. Class will meet two hours per week, the first hour in open session, and the second in closed session. Chem-482 students are required to give one 40-minute (minimum) and two ~10 minute oral presentations during the semester on a date scheduled by the instructor, attend all of the public seminars (T), and participate in critiques and presentations during the Thursday session.

Note: The oral communication intensive credit is earned upon successful completion of **both** Chem-481 and Chem-482 O.

Course Goals:

Students who successfully complete this course (and Chem-481) will have an understanding of the principles of oral communication in science including accepted presentation techniques, listening skills, critical analysis of scientific presentations, participation in scientific discussions, and introduction of

speakers. Students will also attain a high level of subject matter mastery in a **research area** (not limited to a single journal article, *e.g.*) chosen by the student in consultation with a faculty mentor.

Learning Outcomes:

1. Demonstrate the ability to present scientific material during one 40-minute presentation of a peer-reviewed journal article. (Short, ~10 minute presentations will also be evaluated.)
2. Demonstrate the ability to critically evaluate the research presented in a peer-reviewed article, and to answer questions posed by the audience at the end of the presentation.
3. Demonstrate the ability to listen to a research presentation and formulate thoughtful questions pertaining to the material presented.
4. Actively participate in a discussion of the strengths and weaknesses of a speaker's presentation, and the scientific merit of the material presented.
5. Provide clear written critiques of research and/or journal presentations with respect to presentation style and content.

Instructional Methods:

Students are required to attend all class sessions and participate in all class activities. In addition, Chem-482 students are required to prepare and deliver their own seminar and give two ~10 minute presentations. Note that the student must **submit an abstract (with graphic) of their seminar topic one week prior to the seminar**. The abstract will be used to create a flier to advertise the seminar. Students are expected to listen to all seminar presentations (Tuesdays), and to ask relevant/thoughtful questions during the question and answer period following each presentation. Written critiques of all presentations are required, and students are expected to participate in discussions of these critiques during the Thursday sessions.

A major component of Chem-482 is the interpretation, analysis and presentation of a scientific study. To facilitate a good outcome for this activity, a mentorship approach is utilized. Mentors are faculty members within the Department of Chemistry and Biochemistry (a list will be provided), faculty affiliated with a graduate program in the Department, or unaffiliated faculty or local professionals engaged in chemistry relevant research. The course instructor must approve unaffiliated mentors in advance. Please read "Mentor Responsibilities" below and provide this information to your mentor when you request their assistance. Note that a draft PowerPoint of your presentation must be submitted to the instructor by **September 29**.

A second major component of Chem-482 is participation in a critical discussion of your presentation. This will involve questions regarding the content of the seminar, and constructive feedback (criticism) of other aspects of the presentation such as style, organization, and use of multimedia. Acceptance of criticism is an essential part of becoming a better scientist and developing effective presentation skills. You are expected to conduct yourself in a professional manner during these discussions.

Mentor Responsibilities:

Mentors are responsible for assisting students in choosing a topic for their public seminar. Students should work with their mentor to select **at least two related peer-reviewed research articles** that are chemistry relevant and level appropriate, meaning that the student is able (with effort) to comprehend and present the material. Students are encouraged to use helpful review articles, but it is not acceptable to simply present the material in the review. Mentors are responsible for helping the student understand the context of the research, how the data have been acquired and interpreted, the conclusions, and overall impact of the studies. It is expected that the mentor will listen to the presentation at least once and provide suggestions for improvement. The student is required to submit a signed "Mentor Agreement" form identifying the mentor and the topic. This form is due by **September 13**. A second, "Ready to Present" form is also required to verify that the mentor has listened to the presentation and that the student is prepared to give the presentation on the assigned date. This form must be signed by the mentor and delivered to the instructor **one week prior to the scheduled seminar**. Mentors are encouraged to attend the public seminar.

Course Policies:**Attendance:**

Students are expected to attend class and actively participate.

Exams:

There are no traditional examinations in this course. Grades will be based on attendance, the quality of the work, and timely completion of the requirements (see Grading, below).

Plagiarism Policy:

Plagiarism is defined as the use of another's intellectual property without correct citation of the author. Intellectual property includes electronic, spoken, and print media. Students are expected to cite all sources used in oral and written presentations. Citations should be referenced according to the Columbia Guide to Style (see: http://www.columbia.edu/cu/cup/cgos/idx_basic.html for more information). Cases of plagiarism will be dealt with severely. The minimum penalty is a grade of 0 for the assignment in question, and cases may be referred to the Department Chair and/or Dean for further action.

Grading:

It is expected that students will complete all of the Learning Objectives listed above.

Grading is A - F. Grades will be assigned based on performance on the required activities listed below. Each course requirement is assigned a point value and students will earn all or a portion of these points depending on the quality of the work. Oral presentations will be graded in accordance with the rubric distributed in class.

Required Activities and Scoring

Mentor agreement and topic form completed on time	5
Draft PowerPoint submitted on time (see schedule)	5
"Ready to Present" signed by mentor and returned on time	5
Abstract (submitted one week prior to seminar)	5
Seminar Grade	40
Short presentations	15
Attendance and Critiques	25
Total	100

Letter Grades (points)

A: 90 – 100

B: 80 – 89

C: 70 – 79

D: 60 – 69

F: < 60

Support Services:

Support can be obtained through the University of Alaska Library system, online resources, and the instructor. Additional services are available through Student Support Services (<http://www.uaf.edu/sssp/>) at UAF.

Speaking Lab: Students are strongly encouraged to make use of the Speaking Lab located in the Department of Communication Speaking Center (Gruening, Room 507). The Speaking Center is a student-oriented service provided to facilitate the preparation of public presentations. Students can obtain expert assistance in all aspects of public speaking, including assistance with organization, refinement, and delivery of their presentation. It is possible to record and watch a practice presentation together with a Speaking Center coach, who can offer constructive feedback. The Speaking Center is open to all students enrolled in an oral intensive course.

<http://www.uaf.edu/comm/>

Speaking Center Hours of Operation

See www.uaf.edu/speak for updated information.

Disabilities Services:

We will work with the Office of Disabilities Services (<http://www.uaf.edu/disability/>; 203 WHIT, 474-7043) to provide accommodations for students with disabilities. If you have a disability and require special assistance, please contact the instructor within the first week of the course so that arrangements can be made without delay.