

**Course Syllabus**  
**Chem 482: Chemistry Seminar**

**Course Name:** Chem 482 Chemistry Seminar  
2 credits, Communication Intensive (see course description below)

**Prerequisites:** Chem 482.

**Location:** Reichardt Building 201B

**Meeting Time:** Tues 4:00 - 5:00, Thurs 4:00 - 5:00

**Blackboard Link:** <http://classes.uaf.edu>  
Please note: Check your blackboard information – **particularly your e-mail address**. Important course information and reminders will be e-mailed via this system. All course materials will be available through Blackboard.

**Instructor:** Dr. Tom Trainor

**Faculty Mentors:** In general all Chemistry and Biochemistry faculty can serve as mentors.

**Office Hours:** T&TH 2-4PM (other times by appointment).

**Office:** Department of Chemistry and Biochemistry  
Reichardt Building  
Room 176

**Phone:** 907 474-5628

**E-mail:** tptrainor@alaska.edu

**Text and Reference Materials:**

**Recommended reference text:**

**The Craft of Scientific Presentations**  
**Michael Alley**  
**Springer -Verlag, New York**  
**ISBN: 0387955550**  
**Publication Date: 2008**

**Course Description:**

This is the second in 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 presentation generally accepted by professional chemists. Class will meet two hours per week, the first hour in open session, the second in closed session. Chem 482 students are required to give one 40 minute oral presentation during the semester on a date scheduled by the instructor, attend all of the other public seminars (Tuesdays) and participate in critiquing presentations by graduate students, chemistry faculty, and their peers during the Thursday session.

**Note:** The oral communication intensive credit is earned upon successful completion of both CHEM F481 and Chem482.

**Course Goals:**

Develop an overall 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 and invited guests.

**Learning Outcomes**

1. Demonstrate the ability to present scientific material during a 40 minute presentation of a peer-reviewed research article.
2. Demonstrate the ability to critically evaluate the research presented in a peer-reviewed article and to answer questions posed by the audience on this research at the end of the presentation.
3. Demonstrate an ability to listen to a scientific presentation and to ask pertinent questions regarding the material presented.
4. Actively participate in a discussion of strengths and weaknesses of a speaker's presentation and/or the scientific merit of the research presented.
5. Provide clear concise written critiques of research and/or journal presentations with respect to presentation style, multimedia and content.

## **Instructional Methods:**

Chem 482 students are required to attend at all class sessions and participation in all class activities in addition to preparing and presenting their individual seminar. Students will be expected to listen to all presentations during the Tuesday public seminar session and to ask relevant and probing questions during the question/answer period. In addition detailed, written critiques of all presentations will be required and all Chem 482 students will be expected to attend and participate in the discussion of these critiques during the Thursday closed session.

Since a large portion of Chem482 is the interpretation, analysis and presentation of a scientific study, the course will utilize a mentorship approach. Mentors are faculty members either within the Chemistry and Biochemistry department, faculty affiliated with the departmental graduate program or unaffiliated faculty or local professionals engaged in chemistry relevant research. Unaffiliated mentors must be approved in advance by the course instructor. Please see the mentors responsibilities below and provide this information to your mentor when you request their assistance.

A second major component of Chem482 is participation in a critical discussion of your presentation. This may involve additional questions regarding the content of the seminar in addition to constructive criticism of your presentation itself. While it can be difficult to accept criticism, it is an essential part of scientific communication and you are expected to conduct yourself in a professional manner during these discussions.

## **Mentor Responsibilities:**

Mentors are responsible for assisting students in choosing relevant topics that are of general interest and at an appropriate level of difficulty. Mentors are responsible for assisting the student in understanding the context of the research, interpreting data and identifying conclusions and impact of the study. It is expected that your mentor will listen to your seminar at least once and offer critical analysis for improving your presentation. You will be required to submit a Mentor form identifying your mentor and topic as indicated on the syllabus. A second mentor approval form will also be required. This form must be signed by the mentor verifying that they have listened to the presentation and it is ready for presentation on your assigned date. This form is due one week prior to your scheduled seminar. Mentors are encouraged to attend your public seminar.

**Course Policies:****Attendance:**

Due to the dependence on participation, students are expected to attend all class sessions.

**Exams:**

There will be no examinations in this course. Grading will be based on attendance, quality work and timely completion of requirements.

**Plagiarism Policy:**

Plagiarism is defined as the use of another's intellectual property without correct citation of the author. Intellectual property includes all electronic, spoken or print media. Students are expected to cite all sources used in oral and written presentations.

Citations should be cited according to the Columbia Guide to Style (see: [http://www.columbia.edu/cu/cup/cgos/idx\\_basic.html](http://www.columbia.edu/cu/cup/cgos/idx_basic.html) for more information).

Cases of plagiarism will be dealt with severely with the minimum penalty being a grade of 0 for the assignment in question. Cases may be referred to the Department Chair or Dean for further action.

**Conduct:**

Your conduct in this course is expected to be professional and respectful at all times. Disruptive or abusive students will be removed from the classroom and may be subject to disciplinary action.

## **Grading and Evaluation of Performance.**

It is expected that students will complete all of the Learning Objectives listed above. Grading in this course is A-F. Grades will be assigned based on successful completion of course requirements as described below. Each course requirement will be assigned a point value and you will receive all or a portion of these points depending upon the quality of your work. Oral presentations will be graded according to the rubric distributed in class. A minimum passing grade will be given to students who have completed the following requirements:

### **Required Activities and scoring:**

Mentor selection and topic form completed on time:	5
"Ready to Present" form signed by mentor and returned on time:	5
Seminar grade	60
Attendance and critiques:	30
Total Points:	100

### **Letter Grades:**

<b>A: 90 - 100 points</b>
<b>B: 80 - 89 points</b>
<b>C: 70 - 79 points</b>
<b>D: 60 - 69 points</b>
<b>F: &lt;60 points</b>

**Speaking Lab.** Students are strongly encouraged to make use of the Speaking Lab. The Speaking Center is a student-oriented service provided to facilitate preparing public presentations. Students can receive coaching in refining their presentation topic, in organizing their presentation effectively, and in practicing their presentation. The Center makes it possible to digitally record and to watch one's practice presentation, receiving constructive feed back from a Speaking Center coach. The Speaking Center is open to all students enrolled in an oral intensive course. The center is located in the Department of Communication (Gruening Rm 507).  
<http://www.uaf.edu/comm/>

### **Disabilities Services:**

We will work with the Office of Disabilities Services (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 special arrangements may be made early.