



Chemistry Seminar, CHEM482

2 Credit
Spring, 2023

COVID-19 statement

Students should keep up-to-date on the university's policies, practices, and mandates related to COVID-19 by regularly checking [this website](#). Further, students are expected to adhere to the university's policies, practices, and mandates and are subject to disciplinary actions if they do not comply.

General Information

Instructor:	Sarah Ellen Johnston	Office Location:	REIC 180
Email:	Sejohnston2@alaska.edu	Office Hours:	TTh 3-4pm
Telephone:	907-474-5231	*Course Type:	Lecture
**Course Location:	REIC 202	Meeting Time:	TTh 4-5pm

Prerequisites

Prerequisites: COJO F131X or COJO F141X

Course description

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 closed session, the second, open to the public. Preparation of a 40 minute presentation to be delivered twice, first, to others in the course. Oral communication intensive credit is earned upon successful completion of CHEM F482.

In-depth Course description

In this course students will gain experience presenting their research, introducing seminar speakers, critically assessing scientific presentations, and building an effective CV or resume. The goal of this course is to prepare students for a career in chemistry after graduation and expose students to various career paths that chemistry graduates have gone on to following graduation. Tuesdays will be used to discuss topics related to careers in chemistry including communicating research findings, applying for jobs, and internships available after graduation. Students are expected to be doing research in a lab in the chemistry department throughout the semester.

Representative Course Readings/Materials

Throughout this course we will use reading materials from recent blogs in chemistry and ecology that follow the discussion topics of the week. The readings are short, and students are expected to come to class having read these materials. Students in Chem 482 will be required to give a short (3 to 5 minute) talk presentation at the beginning of the semester to introduce their research topic or interests using PowerPoint. The Office Suite is available free through the university for students who do not currently have it. While a personal laptop will improve a student's experience in this course, the chemistry computer lab located in REIC 172 is available with Microsoft Office installed for student use.



Chemistry Seminar, CHEM482

2 Credit
Spring, 2023

Technology Requirements

Regular access to a computer and internet will be needed throughout the semester. Use of your @alaska.edu email address will be necessary so you do not miss important announcements or communications. Communication about the course will be through Canvas.

Course Goals

The goal of this course is to prepare students for graduation by building their presentation skills and assembling a set of materials that will be relevant when applying for a job or graduate school following graduation.

Student Learning Outcomes

1. Demonstrate an ability to listen to a scientific presentation and to ask pertinent questions regarding the material presented.
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. Actively participate in a discussion of strengths and weaknesses of a speaker's presentation and/or the scientific merit of the research presented
4. Provide clear concise written critiques of research and/or journal presentations with respect to presentation style, multimedia and content.
5. Demonstrate the ability to introduce a seminar speaker in a professional and appropriate manner as described by the course directors.
6. Present a seminar presentation for a broad audience including their peers, faculty in the department, and the general campus community.

Instructional Methods

This course will largely be in person discussion and presentation based in person. As this is a seminar course, attending and actively participating in guest seminars will be critical to the course. On Tuesdays, students will learn science communication skills and have workshop days to reinforce these skills. Students are encouraged to bring their own data and research results to these workshops, but practice datasets can be provided to students as needed. Thursday class times will be used for guest speakers. Students in CHEM482 will be required to write and introduction and introduce a speaker at least once during the semester.

Explanation of Student Effort

CHEM 482 is a 2 credit hour course. Attendance to classes and workshops on Tuesdays and seminars on Thursdays is required with in class participation. Grades will be based on participation in the course, a short introduction presentation to their research, speaker introductions, and speaker reviews due after the end of each seminar. Additionally, students in CHEM482 will conclude the semester with a 40 minute presentation of their research. This presentation should be both a general and technical presentation of their research accessible to an audience of their peers, faculty, and the campus community.



Chemistry Seminar, CHEM482

2 Credit
Spring, 2023

Course Calendar

Date	Topic
Jan 17	Intro to Seminar
Jan 19	Guest speaker- Bill Howard (UAF Professor of Chemistry)
Jan 24	Making good figures
Jan 26	Student introduction lightning talks
Jan 31	Figure making workshop
Feb 2	Guest speaker- TBD
Feb 7	Making a talk in PowerPoint
Feb 9	PowerPoint Workshop
Feb 14	Guest speaker- Emily Peterson (UAF grad student)
Feb 16	Guest speaker- Kelly Drew (UAF Professor of Chemistry and Biochemistry)
Feb 21	Career services resume workshop
Feb 23	Guest speaker- Bob Hettich (ORNL research scientist)
Feb 28	Resume workshop
Mar 2	Guest speaker- Paige Kehoe (UAF grad student)
Mar 7	Writing workshop
Mar 9	Guest speaker- Andy Lester (Anesthesiologist)
Mar 21	Cover letters
Mar 23	Guest speaker- Emily Barnett (FL DOH and former Disney chemistry intern)
Mar 28	Cover letter workshop
Mar 30	Guest speaker- Phoebe Zito (UNO Chemistry Dept)
Apr 4	Presentation Prep
Apr 6	Guest speaker- TBD



Chemistry Seminar, CHEM482

2 Credit
Spring, 2023

Apr 11	Presentation Prep
Apr 13	Guest speaker- Meeta Cesler-Maloney (UAF grad student)
Apr 18	Student presentations
Apr 20	Student presentations
Apr 25	Student presentations
Apr 27	Student presentations

Evaluation

Grades in this course will be heavily dependent on attendance and participation. Students will be expected to attend all seminars and workshops, and give a short presentation introducing themselves and their research interests.

It is expected that students will complete all of the Learning Objectives listed above. Grading in this course is on a Pass/Fail basis. A minimum passing grade will be given to students who have completed the following requirements:

1. Passing grade on written critiques. (Defined as a passing grade for 75% of all critiques).
2. Satisfactory attendance at all class sessions. (Attendance of all class sessions unless excused by the instructor and relevant discussion during the question/answer period).
3. Satisfactory performance on seminar introduction. (A well researched and delivered introduction).
4. Satisfactory performance in Tuesday discussions. (A well delivered summary of the written critique when requested along with well thought out responses to questions.)
5. Delivery of a well research seminar.

Course Policies

1.) Expectations On Progress In Coursework

Students in 482 are expected to attend the course meeting times regularly and actively participate in all classes. If a student feels like they are falling behind or needs further help to reinforce course material they can come to office hours or schedule to meet with me.

2.) Attendance, Tardiness, Class Participation, Make-up Exams

Attendance to both Tuesday and Thursday meetings of the class is expected. If students are unable to attend a seminar, they can make up that day by attending another seminar around campus (i.e. IAB Life Sciences Hour, BlaST Biomedical One Health Seminar) or over Zoom and complete the Google Form reviewing the talk they attended within 2 weeks of the missed class. If a student is attending a conference they are excused for the week. Guest speakers put in considerable effort to prepare a seminar, students should respect their time and attend these seminars weekly. Tuesdays will be workshop days. This is a chance for students to get real time feedback on their work and to discuss presentation and publication preparation. During workshop days students should either bring their laptops or use the department computer lab to practice making figures and slides in Excel and PowerPoint.

3.) Plagiarism & Academic Integrity

Academic dishonesty applies to examinations, assignments, laboratory reports, fieldwork, practicums, creative projects, or other academic activities. Examples include, but are not limited to:

- a) presenting as their own the ideas or works of others without proper citation of sources;
- b) utilizing devices not authorized by the faculty member;



Chemistry Seminar, CHEM482

2 Credit
Spring, 2023

- c) using sources (including but not limited to text, images, computer code, and audio/video files) not authorized by the faculty member;
- d) providing assistance without the faculty member's permission to another student, or receiving assistance not authorized by the faculty member from anyone (with or without their knowledge);
- e) submitting work done for academic credit in previous classes, without the knowledge and advance permission of the current faculty member;
- f) acting as a substitute or utilizing a substitute;
- g) deceiving faculty members or other representatives of the university to affect a grade or to gain admission to a program or course;
- h) fabricating or misrepresenting data;
- i) possessing, buying, selling, obtaining, or using a copy of any material intended to be used as an instrument of assessment in advance of its administration;
- j) altering grade records of their own or another student's work;
- k) offering a monetary payment or other remuneration in exchange for a grade; or
- l) violating the ethical guidelines or professional standards of a given program.

For more, see [Students Rights and Responsibilities](#).

4.) Classroom Etiquette and Student Behavior Guidelines.

This class will include seminars and discussions with guest speakers who have taken out a significant amount of time to come speak to the class. As such, I ask that students respect that time by putting their phones, tablets, and computers away and actively listen to the speaker. Content of the speakers' presentations are their intellectual property, do not take photos unless expressly permitted to, emailing the speaker to request slides is the best option.

5.) Extended Absence Policy

Extended absences are defined as missed classes or course work by students beyond what is permissible by the instructor's written course policies. Students may need to miss class and/or course work for a variety of reasons, including, but not limited to:

- bereavement
- personal illness or injury
- serious illness of a friend, family member or loved one
- military obligations
- jury service
- other emergency or obligatory situations

For more information, go to the student handbook or the Center for Students Rights and Responsibilities.

6.) UAF Incomplete Grade Policy:

Your instructor follows the University of Alaska Fairbanks Incomplete Grade Policy:

"The letter "I" (Incomplete) is a temporary grade used to indicate that the student has satisfactorily completed (C- or better) the majority of work in a course but for personal reasons beyond the student's control, such as sickness, has not been able to complete the course during the regular semester. Negligence or indifference are not acceptable reasons for an "I" grade."

For more information, see [the UAF regulations regarding grades](#).

Student Protections Statement

UAF embraces and grows a culture of respect, diversity, inclusion, and caring. Students at this university are protected against sexual harassment and discrimination (Title IX). Faculty members are designated as responsible employees which means they are required to report sexual misconduct. Graduate teaching assistants do not share the same reporting obligations. For more information on your rights as a student and the resources available to you



Chemistry Seminar, CHEM482

2 Credit
Spring, 2023

to resolve problems, please go to the following site:

<https://catalog.uaf.edu/academics-regulations/students-rights-responsibilities/>.

Disabilities Services Statement

I will work with the Office of Disability Services to provide reasonable accommodation to students with disabilities. The Office of Disability Services implements the Americans with Disabilities Act (ADA), and ensures that UAF students have equal access to the campus and course materials. I will work with the Office of Disabilities Services (208 Whitaker, 907-474-5655) to provide reasonable accommodation to students with disabilities uaf.edu/disability/

Non-Discrimination Statement

The University of Alaska is an affirmative action/equal opportunity employer and educational institution. The University of Alaska does not discriminate on the basis of race, religion, color, national origin, citizenship, age, sex, physical or mental disability, status as a protected veteran, marital status, changes in marital status, pregnancy, childbirth or related medical conditions, parenthood, sexual orientation, gender identity, political affiliation or belief, genetic information, or other legally protected status. The University's commitment to nondiscrimination, including against sex discrimination, applies to students, employees, and applicants for admission and employment. Contact information, applicable laws, and complaint procedures are included on UA's statement of nondiscrimination available at www.alaska.edu/nondiscrimination. For more information, contact:

UAF Department of Equity and Compliance
1760 Tanana Loop, 355 Duckering Building, Fairbanks, AK 99775
907-474-7300
uaf-deo@alaska.edu

Student Academic Support

- **[Speaking Center](#)**
 - 907-474-5470
 - uaf-speakingcenter@alaska.edu
 - Gruening 507
- **[Writing Center](#)**
 - 907-474-5314
 - uaf-writing-center@alaska.edu
 - Gruening 8th floor
- **[UAF Math Services](#)** (math fee paying students only)
 - uaf-traccloud@alaska.edu
 - Chapman Building
- **[Developmental Math Lab](#)**
 - CTC, Room 120, 604 Barnette Street
 - Gruening 406
- **[The Debbie Moses Learning Center](#)** at CTC
 - 907-455-2860
 - 604 Barnette St, Room 120
- **[Elmer E. Rasmuson Library](#)** (help with research)
 - 907-474-7481 (phone)
 - 907-341-4404 (text)
 - AskRasmusonLibrary@uaf.libanswers.com
 - 1732 Tanana Loop



Chemistry Seminar, CHEM482

2 Credit
Spring, 2023

- **[Rural Student Services](#)**
 - uaf-rss@alaska.edu
 - [Tutoring Services](#)
 - Main floor Brooks Building
- **[Student Support Services](#)**
 - (907) 474-6844
- **[eCampus Student Services](#)**
 - 907-479-3444
 - toll free 1-800-277-8060
 - [contact staff directly](#)
- **[Veterans Resources Center](#)**
 - 907-474-2475
 - Rm 111, Eielson Building.
- **[Academic Advising Resource List](#)**

Other Student Resources:

- **[Disability Services](#)**
 - 907-474-5655
 - uaf-disability-services@alaska.edu
 - Whitaker 208
- **[Student Health & Counseling](#)** [6 free counseling sessions]
 - 907-474-7043
 - [Appointments](#)
 - Whitaker 203
- **[Center for Student Rights and Responsibilities](#)**
 - 907-474-7317
 - uaf-studentrights@alaska.edu
 - Eielson 110
- **[ASUAF Student Government](#)**
 - 907-474-7355
 - asuaf.office@alaska.edu
 - Wood Center 119

Title IX

University of Alaska Board of Regents have clearly stated in BOR Policy that discrimination, harassment and violence will not be tolerated on any campus of the University of Alaska. If you believe you are experiencing discrimination or any form of harassment including sexual harassment/misconduct/assault, you are encouraged to report that behavior. If you report to a faculty member or any university employee, they must notify the UAF Title IX Coordinator about the basic facts of the incident.

Your choices for reporting include:

1. You may access confidential counseling by contacting the UAF Health & Counseling Center at 907-474-7043;
2. You may access support and file a Title IX report by contacting the UAF Title IX Coordinator at 907-474-6600;
3. You may file a criminal complaint by contacting the University Police Department at 907-474-7721. For more information please visit the [UAF Department of Equity and Compliance](#) webpage.



Chemistry Seminar, CHEM482

2 Credit

Spring, 2023

Any UAF employee or volunteer who reasonably suspects or observes minor abuse or maltreatment is required to report the incident. Reporting procedures are available on the UAF Protection of Minors. Violation of this policy by employees shall be reported as well.

Emergency Notification Plan

Students will receive emergency notifications via phone or email. Please check your uaonline account to confirm your emergency notification settings. for more information, please refer to the student handbook. In cases where you do not have access to your devices, as your instructor, I will take responsibility to relay any emergency notifications.