Chemistry 591\592 : Seminar in Inorganic/Analytical Chemistry (1 credit)
Spring 2018

Friday 3:10-4 pm in Fulmer 438

Syllabus

Instructor: Prof. Zachariah Heiden Troy 230 509-335-0936 zachariah.heiden@wsu.edu

Office Hours: by appointment
Website: The course website and gradebook will be maintained in Blackboard (https://learn.wsu.edu/)
Course Materials: *The Craft of Scientific Presentations: Critical Steps to Succeed and Critical Errors to Avoid* by Michael Alley (ISBN 978-0387955551) (optional)

Format: Students will be expected to present a 50 minute seminar based on the literature **or** on their own research, and participate in the discussion of those presented by other students.

Expectation for Student Effort: Graduate students are required to give several talks during their academic career: 1) a talk during their first year of graduate school (preferably during Spring) on a literature subject; 2) the defense of their proposal (traditionally during Fall of the third year); 3) the defense of their degree. Students receive credits for each of these events.

Attendance by all Analytical and Inorganic Chemistry Division graduate students is required. Attendees are required to fill out an evaluation for the speaker. If for any reason you will not be able to attend, you must notify the seminar chair in advance.

Student Learning Outcomes *(SLOs)*

Chemistry 591\592 is designed to advance students toward the WSU Learning Goals, especially Scientific Literacy, Critical and Creative Thinking, Quantitative Reasoning, Communication, and Information Literacy. This course will provide graduate students the opportunity to demonstrate their knowledge in inorganic or analytical chemistry through an oral presentation and questions to seminar speakers. The level of the course assumes an entering graduate student with a B.S. in Chemistry with some experience with the topic of inorganic or analytical chemistry.

By the end of the course it is expected that every student will:

1) Be able to create a 50 minute presentation discussing a literature topic or their current research.
2) Cite the chemical literature where appropriate.
3) Introduce a current topic in inorganic\analytical chemistry so that it can be understood by a first year graduate student.
4) Present and defend possible interpretations of the results and the design of any further studies that would clarify the interpretation.
5) Respond to questions from the audience in a way that demonstrates depth of understanding of the material.
6) Prepare an abstract including references describing the main points/highlights of the seminar.
7) Ask questions during presentations given by others that show understanding of the presentation and how it relates to other work.

Assessment

Student Learning Outcomes At the end of this course, students should be able to:	Course Topics/Dates The following topic(s)/dates(s) will address this outcome:	Evaluation of Outcome: This outcome will be evaluated primarily by:
Create a 50 minute presentation in PowerPoint or similar presentation software that is clear with appropriate graphics. Cite the literature as appropriate. Introduce a current topic in Inorganic or Analytical Chemistry so that it can be understood by a first year chemistry graduate student. Present new research results, either from the literature or from the student's own work. Present and defend possible interpretations of the results and the design of any further studies that would clarify the interpretation. Respond to questions from the audience in a way that demonstrates depth of understanding of the material. Prepare an abstract including references describing the main points/highlights of the seminar.	Student's own presentation	The presentation will be evaluated by the audience and the faculty based on attached evaluation criteria (see attached sheet)
Ask questions during presentations given by others that show understanding of the presentation and how it relates to other work.	Presentations by others	The student will be expected to attend and ask questions at each presentation. Absence or lack of participation will result in a lower grade (see Grading Scheme).

Grading Scheme:		
	Short Abstract	**3 pts**
	Long Abstract	**10 pts**
	Evaluation of other Presentations	**2 pts**
	Presentation Evaluations	**50 pts**

Grade Ranges: 65-58 pts A, 57-49 pts B, 48-40 pts C, 39-30 pts D, 29-0 pts F

Tentative Course Schedule:

The first week of Chem 591\592 will contain a seminar given by the instructor describing tips on giving a seminar. The subsequent weeks will contain seminars given by the students in the class and invited speakers.

Dates	Presenter/Presentation
January 12, 2018	Presentation on Presentations
January 19, 2018	No Seminar
January 26, 2018	Guy Dutech
February 2, 2018	No Seminar
February 9, 2018	Creighton King
February 16, 2018	Ian Neil
February 23, 2018	David Otto
March 2, 2018	Brena Thompson
March 9, 2018	Megan Hawkins
March 12-16, 2018	**Spring Break (No Class)**
March 23, 2018	Nate Buzitis
March 30, 2018	Margaret Reece
April 6, 2018	Matthew Huber
April 13, 2018	Chris Dugan
April 20, 2018	Mitchell Friend
April 27, 2018	Jacob Markut
April 30 – May 4, 2018	Finals Week (No Class)

Grading Policy

A student will earn an A for a presentation that clearly demonstrates understanding a current topic and presents it in a clear manner with technical proficiency. The course grade will be lowered by one step (i.e. B+ to B) for each unexcused absence or lack of participation in the discussion after a presentation (see grading scheme). Late work will not be accepted.

Topic Selection and Abstracts

Literature Talks: Choose a topic wisely, discussing it with your advisor and the inorganic/analytical student seminar instructor. You must get approval of the seminar topic from your advisor and the instructor. You can choose a topic in virtually any area of inorganic or analytical chemistry, but you cannot discuss a topic that has been presented within the last five years, unless there have been significant advances since the previous presentation. You can pick a subject that is tangential to your own research project, but it should not be on the same subject as your research project. Current, interesting, and timely topics of interest to a range of students and faculty are ideal. A good approach is to find a review and 3-6 recent (within the last five years) papers to discuss. A topic choice should be made at least a month prior to the seminar date.

Research Talks: The topic/title should be brief yet sufficiently descriptive of your research project.

Abstracts: Literature Seminars will require two abstracts. **Research Seminars** will require only one abstract, as the research proposal, thesis, or progress report will count as the long abstract. The short abstract will summarize your literature topic/research in one paragraph (about 100-500 words) and will need to be submitted to Stacie Olsen-Wilkes (stacie37@wsu.edu) in Fulmer 305B and the class instructor by 5 pm on the Monday before your seminar. Failure to submit the abstract by the deadline will result in an automatic failure of the class. For students doing a literature seminar, the second abstract (long abstract) should be single spaced and no longer than 2 pages. The long abstract must include:

1. Title, 2. Your name, 3. Seminar Date, 4. At least one figure / graphical material, 5. A brief summary of your seminar highlighting the main results, and 6. References. A sample long abstract can be seen on Blackboard. It is highly recommended that you have several of your peers as well as your advisor read over your abstracts before submission. Your long abstract will need to be submitted to Stacie Olsen-Wilkes (stacie37@wsu.edu) in Fulmer 305B and the class instructor by 5 pm on the Monday before your seminar, so that it can be included in the seminar announcements. The purpose of the long abstract is to provide a record of the literature talk topics that have been previously presented.

Presentation

Presentations must be practiced at least one time with your advisor and research group prior to the formal presentation. It is highly recommended that you practice as often as it takes to perfect the talk. The benefits of practicing your talk out loud in front of a live audience cannot be overemphasized. Your talk should be 50 minutes long and presented using a graphical format (such as PowerPoint).

A student of your choosing or a faculty member will introduce you. You should coordinate with the individual that you choose to introduce you to provide information about your background. On the day of your talk, it is your responsibility, prior to your scheduled time, to gather all necessary materials such as projectors, microphone, pointer, and make sure they work. Be prepared for questions during and after your talk. These often serve to clarify unclear points, check further advances in the field, and check your thoroughness in researching your chosen topic. Please make sure that the individual that you choose to introduce you is aware that they are in charge of moderating the open question and answer session after the presentation.

Evaluation of the Presentation

You must contact the instructor by 5 pm on the Friday following your presentation to schedule a time to follow-up regarding your evaluation. The speaker will receive the evaluation forms and meet with the instructor to discuss the performance. The positive and negative aspects of the presentation will be discussed based upon the student and faculty comments so that the seminar can be a learning experience to prepare for future scientific talks.

Evaluation of Other Presentations

Seminar attendees are required to fill out an evaluation form for each presentation, to provide constructive criticism to the speaker. Evaluation forms will be reviewed and unproductive comments (including, but not restricted to slandering) will not be tolerated. All evaluations must be given to the instructor within 24 hours of the presentation to receive credit for the evaluation. Evaluations turned in after 24 hours will receive no credit.

Attendance Policy: All graduate students currently enrolled in the Inorganic or Analytical Chemistry division are required to attend each CHEM 591/592 seminar. Attendance will be verified through the evaluation form that each attendant is required to fill out.

Students with Disabilities

Reasonable accommodations are available for students with a documented disability. If you have a disability and need accommodations to fully participate in this class, please either visit or call the Access Center (Washington Building 217; 509-335-3417) to schedule an appointment with an Access Advisor. All accommodations MUST be approved through the Access Center. For more information contact a Disability Specialist.

Academic Integrity

You are encouraged to work with your classmates as you prepare your seminar. However, each student must present a unique seminar. No copying will be accepted. Students who violate WSU's Standards of Conduct for Students will receive an F as a final grade in this course, will not have the option to withdraw from the course and will be reported to the Office Student Standards and Accountability. Cheating is defined in the Standards for Student Conduct WAC 504-26-010 (3). It is strongly suggested that you read and understand these definitions.

This course requires attendees to fill out an evaluation form to provide feedback to the speaker. Students who provide unproductive comments, including but not restricted to slandering, will fail this particular assignment and will be contacted by the instructor to discuss the comments. A second offense will be reported to the Office of Student Conduct.

Safety and Emergency Notification

Washington State University is committed to enhancing the safety of the students, faculty, staff, and visitors. It is highly recommended that you review the Campus Safety Plan (http://safetyplan.wsu.edu/) and visit the Office of Emergency Management web site (http://oem.wsu.edu/) for a comprehensive listing of university policies, procedures, statistics, and information related to campus safety, emergency management, and the health and welfare of the campus community.