UW OSHKOSH CHEM 491: Chemistry Seminar II Syllabus

Fall 2025

Seminar meetings: Fridays 1:50 – 2:50 p.m., Halsey Science 266; 1 credit

Seminar Director Dr. Jonathan Gutow HS 412 920-424-1326 gutow@uwosh.edu

office hours: MWF 10:15 – 11:15, T 10 – 11, Th 12:15 – 1:15 or by appointment

Course Description and Course Responsibilities:

The student will work with a faculty member advisor to prepare and give an oral presentation involving the student's own research or a critical analysis of recent scientific literature on an agreed-upon chemical topic. Prerequisite: CHEM 490. Incompletes in 490 must be cleared before taking CHEM 491.

Chemistry Seminar I and II are the required senior capstone courses for all Chemistry majors. The paper you wrote in CHEM 490 will be the basis for an oral presentation in CHEM 491.

<u>Learning Outcomes</u>: Students in Chemistry Seminar II will be able to:

- 1. read and understand technical material;
- 2. prepare effective scientific talks;
- 3. find career opportunities for persons with chemical training.

<u>Role of the Seminar Director</u>: The seminar director is responsible for scheduling seminars and collecting evaluations from students and faculty. The seminar director has the ultimate responsibility for assigning course grades.

Role of the Faculty Advisors: The faculty advisor will guide the student in preparing an oral presentation. Additionally, the faculty advisor has the responsibility of "rehearsing" the presentation with the student. The faculty advisor will report to the seminar director whether the student has met the deadlines.

Role of the Student: Each student is responsible for scheduling all appointments with his/her advisor, and for meeting all deadlines (see schedule). The student must ensure that the seminar is professionally done and meets all the requirements described in this syllabus. Rescheduling may only be arranged in the case of illness or other excused absences.

<u>Attendance Policy:</u> Each student is required to attend <u>all</u> seminars, and evaluate the student speakers. Whenever possible, you are expected to attend class synchronously, either onsite or virtually. Students attending via Zoom should put questions in the chat.

If you need to miss a class during our regular meeting time, please notify the instructor before class via email. To make up an absence, a student must (1) watch the recording; (2) complete an evaluation form for the seminar (if a student seminar); and (3) write a two-page report (double spaced, 12 point font, 1 inch margins) containing a summary of the presentation, and at least two questions that you would have liked to ask the speaker. This report will be due within one week of the absence.

Process for Seminar Preparation



Due Date	assignment						
In class 9/5/25	Select seminar date						
Before 1:50 PM 9/12/25	Advisor meeting 1: plan presentation						
9/14/25	Submit outline and draft seminar announcement to Canvas						
Before 1:50 PM 9/19/25	Advisor meeting 2: discuss outline and abstract						
9/21/25	Submit draft slides using figures from references to Canvas						
Before 1:50 PM 9/26/25	Advisor meeting 3: discuss slides						
2 weeks before seminar	Advisor meeting 4: practice your talk						
10 days before seminar	Submit final version of seminar announcement to Canvas						
1 week before seminar	Advisor meeting 5: practice your talk again						
seminar day	Present a well-rehearsed, professional seminar						
I week after seminar	Advisor meeting 6: debriefing						

Additional Assignments:

• career planning assignments, due 9/12 and 9/21

General Guidelines for Seminar Presentations: Each student will present a well-rehearsed, professional quality seminar. Students will construct and make effective use of appropriate visual aids (usually PowerPoint or Google Slides). Students are not to use a written script and should keep use of notes to a minimum. The seminar presentation should last 40-50 minutes. It will be followed by a question and answer period of 10-15 minutes. The use of videos for illustrative purposes is permitted but these should not take up more than 5 minutes of presentation time. Seminars will be livestreamed and recorded using Zoom.

You will develop a presentation outline with your advisor, which will probably include

- 1. a short introduction of yourself, usually performed by the seminar director;
- 2. a brief overview of the presentation;
- 3. background important definitions, historical work, placement of the topic within the field of chemistry;
- 4. detailed descriptions of experiments, the data they produced, and how they confirm or contradict hypotheses (this may be from published papers and/or your own research);
- 5. conclusions what does it all mean, where is it going in the future, etc.;
- 6. acknowledgements;
- 7. references.

Tips for your slides:

- Keep it simple, elegant, and professional. Limit the use of elaborate backgrounds, animations, transitions, and sounds.
- Practice the "no more than 4 by 4" rule when possible = 4 bullets with 4 words.
- Do not plan to read your slides to the audience. There should be a balance between you and the slide content, otherwise, you are not needed!

Student Appearance: Students should treat their seminars as formal, professional presentations; this should be reflected in personal appearance. Note that the Career Closet at Career Services will give each student four free clothing items per semester.

Announcement: Use the **Seminar Announcement Template** (.dotx) in Canvas. It can be edited in Word. Do not reduce the font sizes. You will need to provide the following information:

- 1. Date, seminar title, speaker's name, advisor's name;
- 2. Abstract. This will normally begin with a few sentences of background information to orient the reader to your topic and one or more sentences discussing the relevancy of your topic. The abstract will then conclude with a brief discussion of the major points you intend to make. (Be sure to cite appropriate literature in your text.);
- 3. Five selected references, preferably from recent primary literature, in ACS format.

You must upload a final version to Canvas 10 days before your seminar to allow time for duplication and distribution to Chemistry faculty and seminar students. Announcements will also be posted on bulletin boards in the Departments of Chemistry, Physics & Astronomy, and Biology.

Campus Resources can be found at the One Stop for Student Success link in Canvas. The *Writing Center* is a relaxed, friendly place to get free feedback on assignments such as papers, resumes, presentations, and speeches.

It is the University's policy to provide reasonable accommodations to students who have documented disabilities that may affect their ability to participate in course activities or to meet course requirements. If there are aspects of the instruction or design of this course that result in barriers to your inclusion, please notify the seminar director as soon as possible. For more information about *accommodations*, visit the Dean of Students Office's <u>Center for Accessibility and Disability Resources</u>.

<u>Grading</u>: Students and faculty attending your seminar will be asked to evaluate your seminar and to recommend an overall grade. A copy of the evaluation form appears on page 6. The seminar director will consider these recommendations and assign a preliminary grade. Note that grades will be lowered if the minimum 40 minute length is not met. Those deductions can be found at the bottom of the Seminar Paper Evaluation form. The preliminary grade will be reduced by any demerits due to late assignments or unexcused absences. Each absence that is not made up will result in a reduction by one-third of a letter grade.

If you are not prepared to present your seminar on the date assigned to you, then your course grade will be reduced by two letter grades. Exceptions will be made only in cases of illness or injury that is officially excused through the Dean of Students Office. If missed presentation deadlines result in a failing grade, you will be required to repeat CHEM 491 and meet all course requirements to graduate.

Incompletes will be granted only when required by University policy. Specifically, the student must have completed two-thirds of the assigned work. This consists of a rough draft of the seminar presentation, which the student's advisor and the seminar director deem acceptable.

Academic Honesty: The University of Wisconsin Oshkosh is built upon a strong foundation of integrity, respect, and trust. All members of the university community have a responsibility to be honest and the right to expect honest from others. Any form of academic dishonesty is unacceptable to our community and will not be tolerated. The State of Wisconsin Administrative Code states: "Students are responsible for the honest completion and representation of their work, for appropriate citation of sources and for respect of others academic endeavors." (§ UWS 14.01)

Plagiarism (representing the work/words of others as your own) or cheating on any assignment will lead to a zero on that assignment, with no opportunity for a make-up or extra credit. The best way to avoid issues of plagiarism is keep track of all sources you read or skim, and work through multiple rough drafts with your advisor. Offenses will be reported to the Dean of Students. A second offense will lead to an F in the course and disciplinary action by the Dean of Students. These sanctions will be applied in accordance with state statutes as specified in UWS 14.01 – 14.06. For more details see the information on the Dean of Students Office website and the portions of Wisconsin State Law referenced there.

Professional Working Environment

The classroom is a professional working environment and you are expected to act in a professional manner. UW Oshkosh is committed to providing the safest campus possible for our students, faculty and staff. Students experiencing any form of prohibited discrimination or harassment, including but not limited to sex or gender based violence, can report it by contacting Equal Opportunity, Equity & Affirmative Action/Title IX office (920-424-1166), or Dean of Students office (920-424-3100).

If you choose to contact one of these offices, your information will be private but may not remain confidential. There are employees on campus that are required and trained to handle confidential information. Students who desire anonymity should share with or report to a confidential employee. These employees include Counseling Center Employees, the Campus Victim Advocate (https://www.uwosh.edu/cvpp), and Student Health Center Employees. You can also find more information on policies and resources at https://uwosh.edu/hr/policies-procedures/.

Students are advised to see the following URL for disclosures about essential consumer protection items required by the Students Right to Know Act of 1990: https://uwosh.edu/financialaid/consumer-information/

Speaker _____

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Reviewer _____

STUDENT SEMINAR EVALUATION FORM

Adv anced	i In	termediate			Novice				Not A	Applical	ble			
A or B			C or D			F		NA						
aluation	Criteria	(Assessme	ent level	leave blas	nk if NA)	1								
dv I N	Abst	ract Qualit	у											
Adv I N		Literature references (N: no primary or recent sources; I: some primary and recent sources; Adv: mostly primary and recent sources)												
dv I N	Organ	Organization of Seminar (N: no clear organization, I: followed an outline, Adv: very logical)												
Adv I N		Delivery (N: volume and/or speed problems, grammatical errors, extra words, reading from visual aids; I: fewer problems; Adv: almost no problems)												
Adv I N		Quality of figures (N: hand drawn, poor photocopies, I: photocopies related to topic, Adv: clear figures that support the presentation)												
Adv I N		Depth of coverage (N: common knowledge; I: not familiar to most undergraduates; A: not familiar to many professors)												
Adv I N		Scientific accuracy (N: errors that undergraduates should not make; I: errors that professors should not make; Adv: no significant errors)												
Adv I N		Work in context of discipline (N: No connection; I: generalized connection; Adv: technical/ logical connection of topic to collective field)												
Adv I N	I: Int	Synthesis & application of knowledge (N: Ignores need for interpretation or conclusions; I: Interpretations provided without conclusions or conclusions drawn without interpretation; Adv: Interprets and draws conclusions of own or other's work)												
Adv I N	I: car	Ability to answer questions (N: uncomfortable or can't answer appropriate questions; I: can answer some questions and not upset if can't answer; Adv: can answer questions or give leads to find information)												
Adv I N		Use of appropriate nomenclature, mechanisms and/or mathematical representations (N: incorrect, I: correct on standard usage, Adv: correct on uncommon usage)												
commer	ided Gra	de (circle d	one)											
Λ	A-	B+	В	B-	C+	С	C-	D+	D		F			
. Comm	ents	1			1			'	I					
. Overal erage of	l Grade (above gi	Calculated ades	by Semin + length	nar Direc	ctor: ta letter g	+ missed de	eadline d	lemerit _						
verage of above grades + length aximum Length Demerit listed as fra			30-34		25-29 min		20-24 min		<20 minutes					
		-1/3			-1			-2 1/3		-4 (auto F)				

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