Seminar in Chemistry
CHEM 4940/8800 (1.0 credit)
Course Syllabus – Spring 2021

Instructor:
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Time and Location: Fridays 3:30 to 5:00 pm.

Instruction Mode: Seminars will be held on **Webex** every **Friday starting at 3:30 pm**. The seminars will not be recorded, so students must attend the lectures live online (see missed seminar policy).

Course Prerequisites: Departmental Approval.

Expected Learning Outcomes:

1. Apply critical thinking skills while listening to a seminar. This will be assessed using short-answer questions that students need to complete for each seminar they attend.

2. Gain broader knowledge of different subfields of chemistry. This will be assessed using short-answer questions, where the students should try to display their understanding of the significance of the research, methodologies used, and results for each seminar.

3. Gain in-depth knowledge of at least one topic related to a seminar presentation. This outcome will be assessed using a report that the students will submit at the end of the semester that discusses in more depth a topic they learned about from one of the seminars.

General Instructions:

1. **Attendance and punctuality (40% of grade):** If you have more than <u>two</u> absences for CHEM 8800 (or more than <u>three</u> absences for CHEM 4940), makeup is required, or your grade will be affected. See the missed seminar policy on the next page for more details. Being late to seminar by more than 10 mins will count as an absence unless there is a valid excuse.

2. **Short-answer questions for each seminar talk (30% of grade):** For each seminar attended, each student will have to reply to the following four questions on iCollege:
    a) What is the general scientific problem or research question that this seminar speaker is addressing?
    b) Does the speaker present a hypothesis or potential solution to the problem? If so, what does this hypothesis/solution entail?
    c) Briefly describe the methodology employed by the speaker to test the hypothesis or solve the problem. If several methods are used, list some of the main ones used and describe one of them.
    d) Summarize one significant result discussed in the talk and its potential impact on science or our understanding of that field.
   If no major hypothesis/problem/results are discussed in this talk, you may instead write a summary discussing **four main points** presented in the seminar talk.

   Students should write 2-3 sentences (not much more than that) to answer each of questions a-d. A Microsoft Word document file of the questions will be available on iCollege at the start of the semester that students may use as a template. **Students should submit their answers to these questions directly on iCollege within one hour of attending the talk, by 5:30 pm**. However, I strongly recommend completing the

questions **during** (or immediately after) each seminar. Points will be deducted for late submissions. The number of points deducted will increase with number of times a student submits assignments late.

No short-answer questions need to be submitted for missed seminars. If you attend 100% of seminars and submit short-answer questions for all of them, the lowest two grades will be dropped (or lowest three grades for chem 4940 students).

3. **In-depth summary report on one of the seminar talks (30% of grade):** Each student should write a summary report for one seminar of their choice. This could be a seminar that the student finds interesting or a topic they would like to learn more about. The in-depth report should include the following:
    -   (5 pts) Summary of research goals and findings presented in the seminar.
    -   (10 pts) Discussion of the research's potential contribution/impact on that subfield of chemistry.
    -   (10 pts) Discussion of a topic you learned from that seminar that you did not know before (could be a chemical problem, hypothesis, or method that you found interesting).
    -   (5 pts) The report should be concise, clearly written, properly referenced, start with a brief introduction and end with an overview or conclusion section.

    The report is expected to be **at most** 750 words for CHEM 8800 students (at most 500 words for CHEM 4950 students), excluding references and figure captions. It is recommended that the students refer to literature by the seminar speaker as well as any other literature to help them better understand the topic and discuss it in the report. The report should be fully referenced and should demonstrate an understanding of the subject material. Lower grades would be assigned to reports showing only a superficial understanding or just repeating what was said in the seminar without any added discussion. This report is due by **5:00 PM, Monday, April 26th, 2021**.

4. The course syllabus provides a general plan for the course; deviations may be necessary. Refer to the seminar schedule on the GSU Chemistry website for any late-breaking changes.

Missed Seminar Policy: If you have more than <u>one</u> absence for CHEM 8800 (or more than <u>two</u> absences for those taking CHEM 4940), makeup is required. Please discuss with either instructor before or immediately after the missed seminar on ways to substitute missed seminars to ensure that your grades will not be affected by the absence. Possibilities for make-up (**with prior consent from the instructors**) include Chemistry special seminars, the Center for Diagnostics and Therapeutics (CDT) seminars (held on Mondays), Molecular Basis of Disease (MBD) seminars, Biology Department seminars (on Fridays) or Brain and Behavior program seminars.

Student Integrity Policy: All assignments, exams and tests taken must represent the student's individual, unaided efforts. Receiving unauthorized outside information or offering unauthorized information to another student during an examination is cheating. Any suspected offenses may be referred to the Department of Chemistry and the College of Arts and Sciences for appropriate action. Students should be particularly familiar with how to avoid plagiarism in academic writing. Written work submitted in this class that are fully or partially plagiarized will receive a maximum grade of 50% or will be given an automatic 0%, at the discretion of the instructors. More information about plagiarism and how to avoid it can be found here (see section links on the left-hand side): http://research.library.gsu.edu/c.php?g=666018&p=4683714

GSU students have free access to Grammarly, which provides grammar, spelling, and citation monitoring (i.e. automatically checks for plagiarism). I strongly recommend using it!
https://technology.gsu.edu/technology-services/it-services/training-and-learning-resources/grammarly/

Grading:

Criteria	%
Attendance	40%
Short-answer questions (all seminars)	30%
In-depth summary report (one seminar)	30%

Students can be assured of the following grades by attaining these scores:

>98%	**A+**	84%	**B+**	74%	**C+**	60%	**D**
90%	**A**	80%	**B**	70%	**C**	Below 50%	**F**
87%	**A-**	77%	**B-**	67%	**C-**		

Last Day to Withdraw: Tuesday, March 2nd, 2021.
The University requires faculty, on a date set by the Provost after the mid-point of the course,
1. to give a WF to all those students who are on their rolls but no longer taking the class, and
2. to report the last day the student attended or turned in an assignment.

Schedule: Seminars are on **Fridays**, from **3:30 – 5:00 pm** (~60 min talks ~10 min time for questions)

The tentative schedule is shown below (TBD = to be determined).

Date	Speaker	University	Host
Jan 15	Introduction to the course		
Jan 22	Dr. Suazette Mooring	Georgia State University	Dr. Samer Gozem
Jan 29	Dr. Matthias Waegele	Boston College	Dr. Samer Gozem
Feb 5	Dr. Huw Davies	Emory University	Dr. Kostiantyn O Marichev
Feb 12	Dr. Jeremy Mills	Arizona State University	Dr. Jun Yin
Feb 19	Dr. Liming Zhang	UC Santa Barbara	Dr. Kostiantyn O Marichev
Feb 26	Dr. Ginger Schultz	University of Michigan	Dr. Suazette Mooring
Mar 5	TBD	TBD	
Mar 12	TBD	TBD	
Mar 19	None (Spring break)		
Mar 26	TBD	TBD	
Apr 2	TBD	TBD	
Apr 9	No talk		
Apr 16	Dr. Allan Gamble	University of Otago	Dr. Binghe Wang
Apr 23	TBD	TBD	