Seminar in Chemistry CHEM 4940/8800 (1.0 credits) Course Syllabus – Fall 2019

Instructors:

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Time and Location: Fridays 3:30 to 4:30 pm, PSC 101.

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. <u>Attendance (40% of grade):</u> 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 <u>required</u> or your grade will be affected. See the missed seminar policy on the next page for more details on missing more than the permitted number of seminars.
- 2. Short-answer questions for each seminar talk (30% of grade): For each seminar, each student will have to write or type up a document answering the following four questions:
 - 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 which students may use as a template if they like. Students should submit their answers to these questions as pdf files to a designated folder on iCollege by 3:30 pm Friday of the following week. In other words, each student has one week to complete these answers (although we recommend

completing them during or right after each seminar). The files should be uploaded using the following file name: StudentLastName_SpeakerLastName_Fall2019.pdf.

- 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. We will not enforce any specific format, although we suggest that each student include four sections along these lines:
 - Summary of research goals and findings presented in the seminar.
 - Discussion of the research's potential contribution/impact on that subfield of chemistry.
 - 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).
 - Overview / Conclusion.

The report is expected to be at most 1500 words for CHEM 8800 students (at most 1000 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 (ACS-style) 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, December 9, 2019**.

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 <u>before or immediately after</u> <u>the missed seminar</u> 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: The short-answer questions and in-depth report must all represent your individual, unaided efforts. Receiving unauthorized outside information or offering unauthorized information to another student is considered cheating. Any suspected offenses may be referred to the Department of Chemistry and the College of Arts and Sciences for appropriate action.

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 the following scores:

94%	A+	84%	B+	74%	C+	60%	D
90%	Α	80%	В	70%	С	Below 50%	F
87%	Α-	77%	B-	67%	C-		

Last day to withdraw: Tuesday, October 15th, 2019

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.