
Senior Seminar I (CHEM 487) Fall 2025

Dr. Aimee L. Miller

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Office Hours: Caputo 325

Mon: 11:00 - 1:00

Wed: 11:00 - 12:00

Thu: 11:00 - 1:00

Lecture:

Roddy 149 (& 153)

Seminar/Activities:

Mon: 4:00 - 5:00 (& 5:00 - 5:30)

Alternate times by appointment (IP or Remote)

Course Description

CHEM 487 is the first semester course of Senior Seminar (followed by CHEM 488). Students take CHEM 487/488 during their senior year to prepare for completion of their chemistry degree and transition to the professional world. During CHEM 487, students must attend all Chemistry Department seminars and evaluate them using criteria like those used for assessing senior oral presentations. Selection of a seminar topic, identification of references, and assembly of background information will be part of CHEM 487; oral presentations will be given as part of CHEM 488. Additionally, CHEM 487 will include activities that help prepare for a career or further study in chemistry after graduation.

Learning Outcomes

Students who complete CHEM 487 should be able to:

- Evaluate what structures and practices are critical to effective scientific oral presentations.
 - Identify and use scientific literature to interpret a chemical topic and communicate related background, data, and conclusions.
 - Evaluate the quality of scientific literature or sources and differentiate primary research publications from reviews or general information.
 - Develop materials to support entering the workforce or continuing professional studies after completion of a chemistry undergraduate degree.
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Course Policies

Millersville University: *This class adheres to MU guidelines/policies (links to full info in D2L).*

Required Materials: Resources and materials will be distributed in person and via D2L.

Course Attendance: Students are required to attend **ALL** Chemistry Department seminars scheduled during the fall semester. To receive credit, you must arrive on time, behave in a professional manner, and submit an evaluation of the session. Other class activities may be conducted in weeks when no seminar is planned.

Academic Honesty: Students are expected to conduct all course work in an honest and ethical manner, consistent with Millersville policy. Discussions will address issues of plagiarism and appropriate use of citations and artificial intelligence for professional work.

Cooperative Environment: Students are expected to be actively engaged in seminars and activities; questions and contributions to discussion are essential. Repeated disruptive behavior (like tardiness, chatting, or cell phone noise/use) may be cause for dismissal from class and may affect final grade assignments. Students with special concerns are encouraged to speak with me and/or take advantage of campus resources, including the Office of Learning Services, the Tutoring Center, or the Counseling Center.

Activities: Course meetings will be used for activities related to either preparing oral presentations to be delivered to the Chemistry Department in spring or transitioning to professional pursuits after graduation. Students are expected to complete all assignments and to interact respectfully with peers during group work. Detailed instructions for projects will be distributed via D2L. Late assignments will not earn full credit.

Grading

Department Seminar Attendance & Evaluations	25 %
Activities Attendance & Participation	20 %
Presentation Preparation Activities	40 %
<u>Professional Development Activities</u>	<u>15 %</u>
Total	100%

Letter Grade Correlation

<i>Grade</i>	<i>Total %</i>	A	93.0-100	A-	90.0-92.9
B+	87.0-89.9	B	83.0-86.9	B-	80.0-82.9
C+	77.0-79.9	C	73.0-76.9	C-	70.0-72.9
D+	67.0-69.9	D	63.0-66.9	D-	60.0-62.9
F	<60.0				

Tentative Schedule

Date	Activity/Seminar	Important Dates/Deadlines
Aug 25	Course Introduction (with dinner)	
Sep 1	<i>Labor Day (no class)</i>	
Sep 8	Murley Fellowship Presentations & Department Picnic	Senior Seminar Topic Selected
Sep 15	Scientific Resources Discussion	
Sep 22	Seminar: Dr. Andrew Dixon (MU class of 2011) Physical/Analytical Atmospheric Chemistry	
Sep 29	Career Services Presentation	Seminar Resources Identified
Oct 6	Seminar: Dr. Minjoung Kyoung (UMBC) Bioanalytical Chemistry	Tue, Oct 7- Job Fair
Oct 13	<i>Fall Break (no class)</i>	
Oct 20	<i>TBD</i>	Professional Development Assignment
Oct 27	Seminar: Dr. Kevin Owens (Drexel) Analytical Chemistry	Tue, Oct 28- Grad School Fair
Nov 3	Seminar: Dr. Julie Fenton (PSU) Nanoscale Studies	Seminar Outline Constructed
Nov 10	<i>TBD</i>	
Nov 17	Seminar: Dr. Matt O'Reilly Organic Synthesis/Biological Evaluation	
Nov 24	<i>TBD</i>	Professional Development Assignment
Dec 1	Peer Group Practice Talks	Seminar Background Slides
Dec 8	Final Class Meeting	