

Chemistry Seminar, Chem 4112 Spring 2016 CRN 27622 (UCA core, Z)

Fridays 1:00 – 2:50 or 2:00 – 2:50 pm

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Web Page:
<http://faculty.uca.edu/patrickd/chem4112/main4112.htm>

Office hours **Drop in times: M 12-1 Tu 3-4 W 1-3** Other times available by appointment.
Use this time. It works best if you come prepared to my office with specific questions.

Materials Nothing to buy. Must have access to MS Powerpoint (own a copy or use UCA access).

Course Description Formal presentation and discussions of current topics in chemistry by faculty and upper-division chemistry students. One hour of lecture per week. Prerequisite: CHEM 4450 or 4460. This course is the department's capstone course (Z). Therefore you must "(1) write well, using sound grammar in a clear style, (2) relate knowledge obtained in previous courses to the topic of the seminar, (3) be substantive to illustrate a better understanding of the topic presented, and (4) use a relevant resource to back up their opinion of the quality of the research presented by each speaker. Two of your assignments will require you to do this.

Course Objectives Develop skills in formal oral presentation of chemical information, including original research and information from the primary chemical literature.

Departmental Seminar Chemical professionals will be presenting seminars throughout the semester. Consult the course website for the most current schedule. These talks enrich the department by presenting some of the latest concepts and research from academic laboratories and industry. These professionals also offer the opportunity for personal discussion of their work and their profession with seminar attendees. Free pizza lunches are available for students to converse with these speakers on the days of their seminars.

Seminar Topics The best seminars result when speakers are intimately connected to their subject matter. Therefore, research students must present summaries of their original chemical research with faculty at UCA. Students working for the same faculty mentor must present different talks. Students not conducting research may choose a topic based on primary literature sources. You are encouraged to use faculty in the department for feedback and to help formulate your topic. All seminar titles, topics, abstracts must be approved by the instructor.

Primary Literature Resources Your tuition is paying for subscriptions to ACS journals in electronic format. These can be accessed through the library website under "databases." Other databases are also available through the Torreyson website. Scifinder, Pubmed, etc. Multiple primary literature sources (articles), not Wikipedia, are required and must be referenced.

Policies 1. Attendance

Watching other people present is one of the most effective ways to plan your own presentation. Attendance is therefore an integral part of your development as a speaker and therefore also your grade in this course. Students may miss no more than one external Friday seminar and one peer seminar. Additional absences will result in point deductions.

2. Academic misconduct

Sources of information and assistance must be referenced. Acknowledge the helpful input of peers and faculty mentors. Do not present artwork or figures from web sources without referencing the URL source.

Responsibility as audience member Proper attention given to seminar speakers is a minimum expectation and professional courtesy. This includes arriving on time, turning off communication devices, and being attentive during all presentations.

You must sit in the first three rows of the classroom. No lurking in the back.

You are expected to ask questions during seminars of your peers. Students will be "volunteered" to ask questions if no one speaks up.

Critiques Of external speakers

Brief critiques of all external speakers are due to me by 6 pm the Monday immediately following a seminar. These must be submitted using the only form linked to my course page

Each critique will consist of:

1. Your thoughtful general impression of the presentation, its organization and flow, and quality of the slides.
2. Something new you learned during the talk.
3. One thing you might change if *you* were presenting the same talk yourself.

Two of these critiques require a bit more to satisfy your chemistry (Z) capstone experience. See online form.

Your Formal Presentation

Deadlines:

- Topic selection cleared with me: Jan 22
- Title and 150 word abstract submitted online: Feb 5
- Final presentation submitted online as a virus-free MS PowerPoint file: Mar 4

Your peers from previous semesters developed an excellent list of criteria to judge talks. This resulted from them in the audience and grew from their likes and dislikes. These are summarized on the course website. You should seriously address these as you prepare.

Logical flow: Great science poorly presented is diminished. A complete talk usually begins with background, leading into the presentation of pertinent results, and followed by the important conclusions that can be drawn from those results. Background information must give context for the work. Why is this work important to the chemical community or the greater world? What problem(s) is this work addressing? It should describe any experimental techniques or methods that might not be common to the experiences of a typical chemist or your particular audience. Pertinent results should be presented in an organized manner, including clear spectra or summary tables. A running outline is one way to maintain organization during a talk. Plan smooth transitions between a slide just presented and the next one about to appear. You must present clear conclusions that logically flow from the talk. Acknowledge help from peers and faculty mentors.

Reach the audience: Know your audience. Remember what you appreciate when *you* are in the audience. Avoid overly busy slides and excessive tables of results. One effective method is to plan your talk around what you anticipate would be likely questions to arise from the audience. Make eye contact with your audience as you speak to the whole room.

Questions: Questions are *desirable*. An audience with questions demonstrates that you reached them and piqued their interest. No questions means you took too long, boredom set in, you missed the audience, or you didn't draw them in.

Practice (!!): Practice with your peers, with supportive faculty mentors, with me. Use my office time.

Time: 20 min \pm 2 min, including time for questions. *Plan* therefore on speaking for about 18 min.

<u>Formal presentation grading:</u>	Aesthetics/Organization	50 points
	Knowledge of subject (as communicated)	50
	Speaking ability (eyes, voice, hands)	40
	Development of Concepts (logical flow)	20
	Time (20 min \pm 2 min, relaxed or rushed)	20
	Questions	20

Overall Course Grade

• fix these slides	5 % of overall grade
• 3-slides, 3-min presentations (2)	10
• attendance at external talks	10
• critiques of external talks	10
• formal critiques, Z experiences (2)	10 (one of an external speaker, one of CNSM poster in April)
• attendance/participation at peer talks	10
• formal presentation	45
total	100 % possible

Grades: **A** 100 – 89% **B** 88 – 79 % **C** 78 – 69 % **D** 68 – 57 % **F** <57 % of possible

UCA adheres to the requirements of the Americans with Disabilities Act. A student with a documented disability (e.g., physical, learning psychiatric, vision, hearing, etc.) who needs to arrange reasonable accommodations must at the beginning of the semester contact the instructor and UCA Office of Disability Services at 450-3135.

Class Schedule see online announcements for additional information

Date		Major Deadlines
Jan 8	Introduction, semester plans, advice	
15	NO CLASS	
22	Fix what's wrong with these slides assignment Three slides-three minute seminars: general chemistry	Topic cleared with me
29	Daniel Baker, University of Memphis 2:00 – 2:50 pm	
Feb 5	Allen Apblett, Oklahoma State University 2:00 – 2:50 pm	Title, Abstract submitted
12	William Eckenhoff, Rhodes College 2:00 – 2:50 pm	
19	J. T. Coleman, FBI (Little Rock) 2:00 – 2:50 pm	
26	Three slides-three minute seminars: student's choice	University of Memphis U-grad conference Feb 27
Mar 4	Sureshbabu Dadiboyena, Nat. Ctr. for Tox. Research 2 – 2:50 pm	Complete talk submitted
11	2 student seminars	
18	3 student seminars	ACS National in San Diego Mar. 13-17
25	SPRING BREAK	
Thu 31	D. J. Martin, Texas A & M University 1:40 – 2:30 pm	
Apr 1	3 student seminars	
8	3 student seminars	
15	no class because of CNSM poster session*	CNSM poster symposium HPER Center Apr. 15
22	STUDY DAY no class	

*This requires a formal critique.