## Chemistry Seminar, Chem 4112 Spring 2021 CRN 27622 (UCA core, Z)

Fridays 1:00 – 2:50 or 2:00 – 2:50 pm Man 102

**Instructor** Dr. Patrick Desrochers

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Virtual Office Drop in Zoom times: TBD

**hours** 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. Pre-Corequisite: 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 relevant resources to support opinions of the quality of the research presented by each speaker. Two of your assignments will require you to do this.

Web Page:

http://faculty.uca.edu/patrickd/chem4112/main4112.htm

Course Objectives

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

Departmental Seminars

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.

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.

#### 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, joining with your microphone mute, camera on, and being attentive during all presentations.

You are expected to ask questions during seminars of your peers. Students will be "volunteered" to ask questions if no one speaks up. You can also submit questions using the chat feature of Zoom.

# 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 form linked to our Blackboard 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: Feb 5
- Title and 150 word abstract submitted online: Feb 19
- Final presentation submitted online as a virus-free MS PowerPoint file: Mar 12

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 carefully address these as you prepare.

**Talk Formats:** All presentations (external speakers and students) will be given via Zoom. I will allow individual speakers to share their screen with the audience during the talks. You should use the laser pointer feature of Powerpoint to POINT to items being discussed on your slides. Talks will be recorded by me.

**Logical flow:** Great science poorly presented is diminished. Background information must give context for the work. Why is this work important to chemists or the 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:** 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.

**Questions** are *desirable*. An audience with questions means 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** with your peers, with supportive faculty mentors, with me. Use my office time.

**Time:** 20 min including time for questions. *Plan* therefore on speaking for about 16-18 min.

Formal presentation grading:_	<ul> <li>Aesthetics/Organization</li> </ul>	50 points
	• Knowledge of subject (as communicated)	50
	<ul> <li>Speaking ability (eyes, voice, hands)</li> </ul>	40
	• Development of Concepts (logical flow)	10
	<ul> <li>Outline and conclusions used effectively</li> </ul>	10
	• Time (20 min, relaxed or rushed)	20
	• Questions	20

All will submit their presentation in final form on March 12 via BB.

# Overall Course Grade

•	fix these slides, how to give a talk	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
G	rades: <b>A</b> 100 – 89% <b>B</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 www daily outline for additional information

Date	Activities	<b>Major Deadlines</b>
Jan 22	Introduction, semester plans, advice	
29	General Chemistry topic (3 min)	
Feb 5	Sibrina Collins Lawrence Technological University	Topic cleared with me
12	Samuella Sigmann Appalachian State University	
19	Robert Latour Clemson University	Title, Abstract submitted
26	Elizabeth Papish University of Alabama	
Mar 5	Student choice topic (3 min)	
12	Feedback, discussion day	Complete talk submitted
19	1 pm 3 student seminars & 2 pm 3 student seminars	
26	SPRING BREAK	
Apr 2	1 pm 3 student seminars & 2 pm 3 student seminars	
9	1 pm 3 student seminars & 2 pm 3 student seminars ACS National v	rirtual format Apr 5-16
16	1 pm 3 student seminars & 2 pm 3 student seminars Apr 12 final d	ate to drop with a W.
23	1 pm 3 student seminars & 2 pm 3 student seminars	
30	STUDY DAY no class. Grades will be ready May 7.	
	CNSM Poster Session TBD during covid*	

<sup>§</sup> These two speakers require a background literature search. See the graded assignments link for the form to use.

<sup>\*</sup>This poster session requires a formal critique.