CHEM 4001-201 January 2023

CHEM 4001-201 Chemistry Seminar

Spring 2023 (F: 1:00 – 1:50 pm) Bolin 304

Instructor: Dr. Elizabeth A. Machunis-Masuoka Office: Bolin Science Hall, 307D Email: *elizabeth.masuoka@msutexas.edu* Course Materials: Materials can be downloaded from D2L Office Hours: MT 8:00 – 10:00am; W 11:00am – 1:00pm

Grading:

Presentation	60%
Attendance at all seminars	20%
Abstract for presentation	20%

Grading Scale:

A: > 90%; B: 80 – 89%; C: 70 – 79 %; D: 55 – 69 %; F < 55%

Computation of your grade: The overall grade for this course will be calculated based on the following: (i) reviews from the faculty and fellow students; (ii) the quality of your presentation; (iii) attendance; (iv) abstract of the presentation. (Dressing professionally is strongly recommended.)

Online Resources:

The goal of this class is to help you learn to give better science presentations and to learn to speak more comfortably in front of audiences. Preparation is key. Writing is an important part of this, even if you are just trying to put together a PowerPoint to present. Here are some resources to look at if you need help (there are many more online): <u>PLoS Writing Center</u> <u>Advanced Research Methods</u> (UCLA Library) <u>Giving a Good Scientific Presentation</u> (Elsevier Author Services)

Important Deadlines:

- 1. Title and paper selection are due on **February 10th**, **2023**. If presenting your research, please provide a title.
- 2. An abstract of your talk is due one week prior to your presentation date, sent to me by email. The abstract should follow a **standard format** (see below).
- 3. **Two weeks** before your scheduled presentation, you should check with your professor(s) to clarify any problems you do not understand as well as proof-read your PPT slides. This will provide enough time for you to make any changes that may arise in your talk. Please take the time to prepare.

Researching a Paper to Present:

The topic for your presentation should be taken from the current (< 5 years) chemistry literature or from a field in which CHEMISTRY is the major component. Inorganic, Organic, Biochemical, Analytical, and Physical Chemistry are the traditional areas from

which papers should be selected. Literature searches can be made using a variety of search engines, including **Scifinder Scholar** and PubMed (see the end for how to self-register and sign-in to **Scifinder**). Choose a paper you feel interested in and get its electronic copy either by download or through the interlibrary loan process provided by Moffett Library. See D2L for resources on how to use the new library website.

Presenting Undergraduate Research:

If you are involved in undergraduate research and in your last semester, you will present your research instead of a paper from the literature. You will also write up your research as a mock paper for submission to the department. Structure your presentation as you would if you were presenting a paper from the literature. Your introduction will essentially place your research within larger context, so you will need to do a mini literature review (which will also go into your research paper). The present methods, results, interpretation, and future directions of the research. Null results or incomplete results are still results, so present them.

Format of the Abstract:

The abstract is to be limited to 200 words describing the topic in detail to outline the intent or subject matter of the presentation put into original wording **by the presenter**. In other words, your abstract is NOT to be a mimic of the abstract in the paper. If you are submitting an abstract on your research, follow the same format as a paper abstract. For any abstract, you must introduce the topic, the question/hypothesis of the research, the methodology and results, an interpretation of the results and where it fits into the broader research, and sometimes a statement of future work needing to be done (depends on the paper and/or research). Read abstracts from multiple papers to get a feel for how abstracts are put together. *My advice:* write your abstract long, and then refine it down to the 200 words; this is far easier than trying to write tight to begin with. Submit the abstract electronically to <u>elizabeth.masuoka@msutexas.edu</u> in MS Word format.

Format of the Presentation:

Please keep in mind the following:

- 1. Your presentation (via PPT) must be 18 22 minutes in length. Deviation from this time interval may result in a deduction from your score.
- 2. You need to practice your talk at least five times prior to your formal presentation in order to be comfortable enough with the presentation to do it well.
- 3. Be prepared, professional and, confident in your talk. Doubt, hesitancy, stammering these are all signs of a lack of preparation.
- 4. Keep your voice strong enough to project to the room and make eye-contact with the audience. Do not stare at your slides or the floor/ceiling.
- 5. DO NOT simply read your PPT at any time. DO NOT read off of notecards, paper, phones, or computer screens while presenting. You need to know your presentation well enough that you don't need all of the aids.

Further Suggestions:

- Any printed matter on a slide should help make a point about the subject. Professional presentations will not contain superfluous images, or elaborate color schemes. White (or very light) backgrounds with black text are most common. Color fonts or bold type are frequently used to emphasize a point in a list of information.
- Use fonts that are easily seen (24 36 point) that is, do not crowd the slide with large amounts of text that require 12-point font to get it all on the slide. A slide is to present a basic, clear concept that is expounded upon verbally. Whitespace should dominate the slide, not words. Pictures go a long way to simplifying your talk.
- 3. Some points to remember about a slide presentation are to organize, organize, and organize. A professional presentation should include title, introduction, experimental section, results and discussion, conclusion and acknowledgments. Graphical methods (flowcharts, etc.) paired with the result obtained from use of the method is generally the cleanest way to present the work.
- 4. Timing is about 2 3 minutes per slide for experienced presenters. This suggests that there be no more than 6 to 10 slides for a talk of this length (20 minutes). However If everything to be said is on slides, you will lose the impact a presentation should have. Practice!
- 5. The presenter should speak to the audience. **Reading slides to the audience is crass and should be avoided at all costs**. To prevent this situation, practice the talk in a room alone. Professional presentations are typically rehearsed about 5-6 times. This will give the confidence and contact with the topic that is needed for good verbal presentation. It will also help determine how many slides are necessary.
- 6. After preparing your presentation, it is an excellent idea to prepare to answer questions about the subject of the presentation. Some background reading on the topic is essential.
- 7. Practice voice and diction. Clear diction and enough volume are essential in being understood during a presentation.

Registering for Scifinder Scholar:

- Each user of SciFinder must self-register to get a unique login. The process is simple. Follow this web link: <u>https://origin-</u> <u>scifinder.cas.org/registration/index.html?corpKey=785E6756X86F350ABX1B82</u> 60F610FF9664B9 and follow the instructions on the screen to self-register.
- 2. Once you have successfully registered and answered the email they send to you, you can access Scifinder directly at: <u>https://scifinder.cas.org</u>