CHM 6180 SCIENTIFIC COMMUNUCATION

Instructor: M.E. Harris | JHH302F | harris@chem.ufl.edu | office hours: Friday, 10am-12noon

Learning Objectives:

After taking this course the trainee will be able to:

1. Develop a set of original research aims that address a significant problem or gap in knowledge in chemical biology
2. Select experimental, synthetic and/or computational methods appropriate for addressing their research aims, and describe how they will be applied.
3. Employ basic principles of English language grammar, style, and composition in their scientific communication.
4. Understand the general format for research proposals using NIH NRSA guidelines as example.
5. Use appropriate standards of professional communication in providing constructive criticism. (format and content of review)
6. Be able to write a career development plan with specific training objectives.
7. Provide a brief oral presentation describing the background and goals of their proposed research

Course overview:

- The curriculum is intended to support the development of a trainee's thesis research proposal with primary emphasis on the written RESEARCH PLAN document.
- Class topics focus on basic steps in the writing process and are organized to guide the trainee through composing their research proposal in a systematic manner.
- Workshop sessions will involve presentation and discussion of progress in writing their proposal document. There are specific benchmark assignments throughout the semester culminating in submission of a completed RESEARCH PLAN.
- *Key to success will be review of the outlines and drafts of these documents by the trainee's thesis advisor over the course of their development!*
- All students will meet together for the Class sessions. For the Workshop sessions, there will be two groups (A and B) that will meet separately.
- At the end of the semester each group will serve as a Study Section review panel to evaluate and provide written critiques the submitted proposals from the alternate group.

Textbooks:

Schimel, J. Writing Science. 978-0199760244

An excellent resource on the mechanics of storytelling and clarity in scientific writing. I think it is worth acquiring a copy. (ca. $30 on Amazon).

Reif-Lehrer, L. Grant Application Writer's Handbook, 4th ed. 978-0763716424

An excellent resource for the beginning NIH/NSF grant writer, also provides comprehensive outline of important points and guidance for more experienced faculty. Great, but needs an update since 2005 publication. (ca. $30 used on Amazon, but consider waiting for new edition)

Alley, M. The Craft of Scientific Presentations. 978-1441982780

Some sections very useful and will be provided as scanned PDF for class. I have a loaner copy.

Evaluation:

Zoom sessions are not recorded, but audio presence is required

The participation portion of your grade for this class will be calculated on the basis of your attendance and your participation in class activities. Since the pedagogical approach of this course depends heavily on student engagement and interaction, you are required, at a minimum, to participate in class activities through the audio function of Zoom. Your video presence is invited as well.

Grades will be assigned based on completion of the Writing Assignments, participation in Class, Workshop, and Review Panel sessions

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting https://disability.ufl.edu/students/get-started/. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Information on current UF grading policies for assigning grade points may be found here: catalog.ufl.edu/UGRD/academic-regulations/grades-gradingpolicies/.

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at gatorevals.aa.ufl.edu/public-results/ .