

This course is designed to introduce key issues in the responsible conduct of research (RCR), following the research process from inception to planning, conducting, reporting, and reviewing chemical and biochemical research. Specific issues covered include peer review, authorship practices, and scientific publications; data acquisition, ownership, sharing, management, and interpretation; rigor and reproducibility; conflicts of interest; intellectual property; and collaborative research.

The course is open to all Chemistry graduate students, trainees from other programs who must complete RCR training to fulfill fellowship or training grant requirements are also welcome to participate.

### **Course Information**

Instructor-

Prof. Michael E Harris, PhD

Office - 302F SFH

Email - [harris@chem.ufl.edu](mailto:harris@chem.ufl.edu); Or use Canvas email 3. Phone - 352-392-0541

Office Hours – Tuesday and Thursday, 2-3pm

If you cannot meet at this time please contact the instructor for an appointment

Meeting time and place

FRIDAY, Period 8 – (3:00 PM - 3:50 PM)

SFH 322 conference room

### **1. Learning Objectives**

- a. Introduce ethical principles like honesty, integrity, objectivity, accountability, and respect for others that underpin responsible research conduct.
- b. Develop skills for ethical reasoning and decision making when faced with ethical dilemmas in research.
- c. Identify types of research misconduct (fabrication, falsification, plagiarism) and consequences.
- d. Understand policies and procedures for reporting and addressing misconduct.
- e. Outline proper data acquisition, recording, storage, retention, ownership, analysis, interpretation, and sharing practices.
- f. Appreciate the importance of rigor, reproducibility, and transparency in research.
- g. Describe the Criteria for authorship and outline responsible publication practices.
- h. Appreciate the shared responsibilities of mentors and mentees in fostering a positive research environment.
- i. Introduce resources for effective mentorship and communication strategies and conflicts of Interest
- j. Understanding conflicts of interest (financial, personal) and managing them appropriately.
- k. Appreciate principles of collaborative research across disciplines and institutions.
- l. Gain understanding of intellectual property, data sharing, and technology transfer issues.

**2. Attendance 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: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

3. **Accommodations** Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, [www.dso.ufl.edu/drc/](http://www.dso.ufl.edu/drc/)) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

4. **Course Materials**

a. Textbook: There is no formal textbook. For the most up-to-date information for this course, please use only the links provided in the Resources section of the course eLearning site (Canvas).

b. Lectures: PowerPoint presentations if used in class are available on-line at the course eLearning site.

c. Reading Assignments: Please read the assigned chapters and view the on-line lectures before each session. Assigned readings associated with each seminar include case scenarios and discussion questions dealing with the relevant ethical issues. Please think about how you would answer these questions before each team-based learning session, as your team will be discussing similar scenarios in some detail.

5. **Grading.**

a. Course grade will be based on: participation in class discussion

b. Current UF grading policies.

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

7. **Online course evaluation process** Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>.

8. **Materials and Supplies Fees** None.

CHM 6934 | Responsible Conduct of Chemical Research.

Fall 2024 Dates: FRIDAY | Period 8 (3:00 PM - 3:50 PM)

8/22/24 - 12/04/24

Location: SFH 323

Instructor: Dr. M. E. Harris; [harris@chem.ufl.edu](mailto:harris@chem.ufl.edu)

1	8/23/24	Intro to RCR & Overview of topics
2	8/30/24	Mentor/Mentee Responsibilities and Relationships
3	9/6/24	Data management
4	9/13/24	Authorship and publication
5	9/20/24	Collaborative Research
6	9/27/24	cont
7	10/4/24	Peer review
8	10/11/24	AI, Data Manipulation and Plagiarism
9	10/18/24	Homecoming no classes
10	10/25/24	cont
11	11/1/24	Civility issues in research environments
12	11/8/24	Intellectual Property and Tech Transfer in a University Setting
13	11/15/24	cont
14	11/22/24	Contemporary Ethical Issues