



# Discovering Research & Communicating Science

IDH 3931

Tuesdays 10:40-11:30; Thursdays 9:35-11:30

## Course Overview

IDH 3931 will provide the research and professional development skills necessary for students to succeed in STEM disciplines. This course will include experts from a variety of disciplines to speak about their research, available undergraduate research opportunities, and what skills they believe are essential for success. Students will gain valuable experience in effective oral and written communication skills, designing research posters, understanding the grant application process, and developing collaborative working relationships.

## Instructor Contact Information

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## Class Period & Times

Tuesday Period 4 (10:40-11:30)  
Thursday Periods 3,4 (9:35-11:30)

## Office Hours

Wednesday 2-3pm. Additional hours may be arranged by appointment.

## Course Materials

There are no assigned textbooks for purchase. All readings will be provided by instructor.

## E-learning site

Course announcements, assignments, calendars, and communications are all available through the UF E-learning system in Canvas at <http://elearning.ufl.edu/>

Please note: this is a tentative syllabus and is subject to revision at any time. The most current version will always be available on the course website in Canvas, and students will be notified of any changes made.

## Weekly Course Schedule

Topics	Assignment Due
Week 1: Course Introduction; Center for Undergraduate Research; CV & Biosketch	TBA
Week 2: Understanding Research: research proposals; introduction to scholarly communication; Open Access	TBA
Week 3: Responsible Conduct of Research	TBA
Week 4: Scholarly Communication & Research	TBA
Week 5: Scholarly Communication & Research (con't)	TBA
Week 6: Searching Scientific Information	TBA
Week 7: Citizen Science & Data Visualization	TBA
Week 8: Data Management & Analysis	TBA
Week 9: Posters & Presentations	TBA
Week 10: Funding: grants	TBA
Week 11: Perspectives: careers in research	TBA
Week 12: Graduate & Professional Admissions	TBA
Week 13: Communicating Science: oral & written	TBA
Week 14: Poster Presentation No class on Thursday (Happy Thanksgiving!)	TBA
Week 15: Class Presentations	TBA
Week 16: Course Wrap Up and Class Brunch	

## Course Objectives

By the end of this course students will:

- Effectively search the scientific literature for appropriate resources
- Evaluate resources for authority, currency, objectivity, accuracy, and coverage
- Discuss STEM research ethics including plagiarism, data falsification, and data fabrication
- Use citation management software to develop bibliographies
- Write clear, concise abstracts that convey information accurately
- Recognize the shift in scholarly communication in the scientific community that has led to Open Access publication options
- Map the process of submitting an academic article to an academic journal
- Locate undergraduate research opportunities at the University of Florida and understand how to prepare for graduate school
- Develop skills for effective scientific communication
- Create a scientific poster presentation that visualizes a topic of interest
- Present a research proposal

## Course Policies

### Attendance

Attendance at class lectures is 5% of your overall grade and is required. You will be responsible for any assignments given out during class. While in class, please turn off your phone ringer and do not text or surf the web during class.

### Late Assignments

Late assignments will not be accepted. Please contact either instructor if you have a medical or other emergency excuse as soon as possible.

### Assignment Submission

Assignments will be submitted via Canvas, unless otherwise specified by the instructors.

### Academic Honor Code

Students are expected to uphold the Academic Honor Code published in the Undergraduate Catalog (<http://www.registrar.ufl.edu/catalog/policies/students.html>). Please become familiar with the policies of the Honor Code (<http://www.dso.ufl.edu/sccr/honorcodes/honorcode.php>) as all violations will be reported to the Dean of Students office.

### Accommodations

Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

### **Assignment Breakdown**

Research Lab field trip & summary = 5%

Abstracts (10) = 20%

Create a CV = 5%

Annotated Bibliography = 10%

Poster = 15%

Presentation = 15%

Research Proposal = 20%

Class Participation = 10%

### **Numerical Grades**

93-100 = A

90-92 = A-

87-89 = B+

83-86 = B

80-82 = B-

77-79 = C+

73-76 = C

70-72 = C-

67-69 = D+

63-66 = D

60-62 = D-

<60 = F