

ADV 4930-05EG: STEM RESEARCH & APPLICATION

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Office Hours: Monday: 2:00-4:00 PM or by appointment

COURSE DESCRIPTION

This course provides students with an immersive experience conducting science and health communication research. As a group, students will brainstorm and implement a research study that broadly investigates whether humor is an effective message strategy to promote attitudinal change. Throughout the course, students will engage in a variety of research activities, including reading and evaluating peer-reviewed literature, writing an annotated bibliography, drafting material for the Institutional Review Board, and submitting an abstract to an undergraduate research symposium. The overarching goal of this course is to foster students' critical thinking to promote effective science translation. While engaging in research, students will hone a variety of skills, which are delineated below, that are transferrable to both industry or academia.

COURSE OBJECTIVES

This course aims to cultivate students' abilities across the below key areas:

- Translating scientific content for a lay audience
- Evaluating the utility of humor in a science/health context through social science methods
- Delivering oral presentations to engage with a target audience
- Navigating the Institutional Review Board process
- Engaging with collaborators in a professional research community
- Producing a scientific abstract to summarize a research study

REQUIRED READING

Course reading will be uploaded to e-learning underneath the "Module" tab for each week. Each week will have required and recommended reading. It is expected that you complete all required reading by the beginning of class. You will be evaluated on reading completion and critical thinking based on your written and verbal reflections in class.

COURSE STRUCTURE

This class is a 3-hour block that spans across lunch time (10:40AM-1:40PM). To ensure everyone is refueled and fresh for class, we will take one 15-minute lunch break. Please feel free to excuse yourself at any point during class for emergencies or to use the restroom.

TECHNOLOGY POLICY

Despite the benefits of technology, it can be a difficult task to break away from it (social media, anyone?). In this class, we will attempt to separate from technology occasionally by having dedicated times when we put away devices during class. If I see you with your phone or computer out during a designated "No Technology" time, I will remind you once. After this first reminder, I will begin deducting 5-points from your total course grade each time I see you using a technological device during an unapproved time. At many points during class, you will have class assignments that do allow (or even require) technology. During these periods, you are expected to use technological devices for course-related tasks only.

GRADING

You will be graded on a 1,000-point scale:

A : 925-1000	C: 725-774
A-: 900-924	C-: 700-724
B+: 875-899	D+: 675-699
B : 825-874	D: 625-674
B-: 824-800	D-: 600-624
C+: 775-799	E: 599 and below

Note about grading and assignments: You will notice that you are not evaluated with tests or quizzes. Instead, the below assignments are intended to urge you to think critically, and apply your growing knowledge to a shared research study. Rubrics will be provided for each assignment on e-learning.

ASSIGNMENT BREAKDOWN

Brief Annotated Bibliography (100 points): Annotated bibliographies are helpful tools for organizing relevant information from scientific literature. Your task will be to find 3-5 peer-reviewed scientific articles that provide relevant information for our group project. After reading each article, you will identify the salient aspects of the study, which you will summarize in a brief paragraph (3-5 sentences). You will produce a total of 3-5 paragraphs. Examples of annotated bibliographies will be provided to you in class.

Attendance/Participation (200 points): You are expected to attend class and arrive on time, unless you have a documented excuse or religious holiday. This class will revolve around in-class activities and discussions, so you will also be graded on your participation in class. If speaking up in class is something that you are less comfortable doing, you can supplement your participation by posting comments on the discussion board in e-learning. Please let me know if you would like to take advantage of this opportunity.

Class Presentation (200 points): Each student will choose one peer-reviewed article related to the group project for their class presentation. You will be responsible for reading through this article and presenting the main findings to the class. Before presentations begin, we will discuss the main sections of a research study as a group to prepare you for this presentation. You will be evaluated through a posted rubric that focuses on your understanding of the content, ability to translate science for a lay audience, and presentation skills.

Weekly Reflections (200 points): Each week, you will be assigned one or more readings for class. Your task is to digest the material and think critically. You will not be asked to recall specific details or memorize. For example, rather than memorize the nuanced findings of a particular study, it would be more advantageous for this class for you to process the gist of the paper and apply one main finding to the current group study. Keeping “depth” instead of “breadth” in mind, you will be asked to produce a brief reflection when you enter class. These reflections will provide us with initial discussion material about the readings.

Institutional Review Board Section Write-Up & Training (100 Points): One critical step of conducting behavioral research is ensuring you are following all ethical procedures. That being the case, our group project will be reviewed and approved by the Institutional Review Board (IRB) before we begin the study. Gaining experience drafting materials for the IRB is a helpful skill for understanding some of the administrative aspects of submitting a research study. Each student will be assigned one section to draft for the IRB. Assistance will be available during office hours or by appointment.

Undergraduate Research Symposium Abstract Submission (200 Points): Engaging with a scholarly communication is a key step in the research process. In this class, you will work as a group to produce an abstract (~500 words) to summarize the group research study. Each student will describe their contributions to the research abstract. If accepted, it is expected students will present their work at the URAP Symposium in a professional manner.

Extra Credit: In this course, you will have the opportunity to receive extra credit by participating in a research study in SONA. This experience will give you experience being on the “participant side” of a research study. More details about extra credit will be announced in class.

Note about deadlines: The process of conducting research is not always linear, and we may encounter challenges or unexpected obstacles as we move through the process. That being the case, please know that the deadlines and schedule included in this syllabus may change. Any changes will be announced in class and posted to e-learning.

ADDITIONAL INFORMATION

Attendance Policy

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>.

Students with Disabilities Statement

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, 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.

Online Course Evaluations

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/>.

CLASS SCHEDULE

- January 7th: Introductions & Overview of Course
Activity: Finding and storing scientific literature
- January 14th: Understanding the public health issue
Introduction to Message Design Experiments
Activity: Identifying a research question and key variables
- January 21st: NO CLASS-Holiday
- January 28th: The role of humor in science and health communication
Activity: Brainstorm flyer design
Due: [Brief Annotated Bibliography](#)
- February 4th: Designing a Research Study
Introduction to the Institutional Review Board
Activity: Complete IRB Training
- February 11th: IRB Workshop
Due: [IRB Section Write-Up & Training](#)
- February 18th: Introduction to Data Analysis Software
Activity: Practice using SPSS & NVivo
- February 25th: Class Presentations
Due: [Oral Presentation](#)
- March 4th: NO CLASS-Spring Break
- March 11th: Writing a Research Abstract
Presenting at an academic conference
- March 18th: Analyzing Research Findings
Due: [Draft 1 of URAP Abstract](#)
- March 25th: Creating a Scientific Poster
Activity: Print Scientific Poster
Due: [Draft 2 of URAP Abstract](#)
- April 1st: Giving a Scientific Presentation
Activity: Practice Presentations
- April, 4, 2019: Undergraduate Research Symposium**
- April 8th: Scientific Writing & Publishing Research

April 15th: Practical & Theoretical Implications of Science/Health Communication Research

April 22nd: Application of Research to Industry