

ADV 4930: STEM RESEARCH & APPLICATION

Instructor: Taylor S. Vasquez, MA

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Office Hours: By appointment. Meetings can be held in person or via Zoom.

Office: G042

Class Schedule: Fridays, periods 4-6 (10:40AM – 1:40PM)

Classroom: WEIM 1074

COURSE DESCRIPTION

This course provides students with an immersive experience conducting health and relational communication research. As a group, students will brainstorm and implement a research study that broadly investigates how clinicians' professional stress impact the communication and relational quality with their spouse. 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 and academia.

COURSE OBJECTIVES

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

- Translating scientific content for a lay audience
- Evaluating relational health communication phenomena 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 meets in-person once a week, with a 3-hour block on Fridays (10:40AM-1:40PM). Generally, the first portion of class will focus on readings/lectures, and the latter portion will be dedicated to skills training, activities, and guest speakers.

This course is designed to be taken multiple times as part of the Undergraduate Research Immersion Program in the STEM Translational Communication Center (STCC). First-time

students will participate in weekly classes and activities as detailed below to gain research experience and to take part in a guided research project.

Students have the option of enrolling in this course again but may substitute 15 hours a week of participation in ongoing research projects in the STCC in place of other course requirements. This option requires the prior approval of the course instructor and the STCC.

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

Annotated Bibliography (100 points): Annotated bibliographies are helpful tools for organizing relevant information from scientific literature. Your task will be to find 8-10 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 8-10 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.

Research 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 (50 Points): One critical step of conducting behavioral research is ensuring you are following all ethical procedures. That being the case, we will walk through the process involved to get a study approved by the Institutional Review Board (IRB) before we begin a 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 and Poster (250 Points): Engaging with scholarly communication scholars 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. In addition, a major part of presenting research findings is the creation of a research poster. We will work together to produce such a poster, which will then be presented either in class or, if possible, at the Fall URAP symposium.

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

NOTE: The main focus of this class is to provide you with research skills training, and to involve you in a communication-based research project. Because I want you to have input into that work and we will develop a study together, I anticipate needing to change or shift some of the topics presented here to suit our needs. Any changes will be announced in class and posted to the class Canvas page.

Week 1

August 26th: Introductions & overview of course
 Finding and storing scientific literature

Week 2

September 2nd: Understanding scientific research
 Introduction to social science research
 Reading scientific literature
Guest Speaker: April Hines, research librarian

Week 3

September 9th: Health and the Importance of Communication
VIRTUAL CLASS Understanding relational health communication

Week 4

September 16th: Designing a Research Study
 Introduction to the Institutional Review Board
Activity: Identifying a research question and key variables
Guest Speaker: Carma L. Bylund, PhD, FACH
Topic: Doctor-Patient Communication: Managing Conversations about Online Cancer (Mis)Information
Due by 11:59 PM: Annotated Bibliography

Week 5

September 23rd: Introduction to Quantitative Research
 Group Project Workshop
Activity: Begin IRB Training, IRB section write-up
Guest Speaker: TBD
Topic:

Week 6

September 30th: Survey Research Methods
Activity: Survey practice for project

Due: IRB Section Write-Up & Training

Guest Speaker: Kevin Wright, PhD

Topic:

Week 7

October 7th:

Introduction to Qualitative Research

Activity: Qualitative interview practice

Guest Speaker: TBD

Topic:

Week 8

October 14th:

Basic statistics

Overview of data analysis software

Guest Speaker: Eliana DuBosar, MA

Activity: Practice using SPSS

Guest Speaker: Gemme Campbell-Salome, PhD

Topic:

Week 9

October 21st:

Group project workshops

In-Class Case Study: [*The Art of the Possible*](#) (1 hour)

[Class Presentations \(Sign-up TBD\)](#)

Week 10

October 28th:

Group project workshops

In-Class Case Study: *Encanto* (90 minutes)

[Class presentations \(Sign-up TBD\)](#)

Week 11

November 4th:

Analyzing Research Findings

Guest Speaker: Amanda Kastrinos, PhD

Topic: Introduction to Turning Point Analysis

Week 12

November 11th:

NO CLASS. Happy Veteran's Day!

Week 13

November 18th:

VIRTUAL CLASS

Group project workshops

Designing research poster & writing an abstract

Week 14

November 25th:

NO CLASS. Happy Thanksgiving!

Week 15

December 2nd:

In-Class Presentation of Findings

[Due by 11:59PM: Research Poster & Abstract](#)