

## Science/Health Communication: MMC 6409 - 29148

Fall 2024

**(Syllabus subject to change based on the best interests of students' learning in the course)**

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### **Basic Information**

**Instructor:** Haoran “Chris” Chu

**Email:** chu.h@ufl.edu (Preferred method of communication. Please include MMC6400 in the subject line.)

**Office Phone Number:** 352-294-9115

**Class Periods:** 1098 Weimer, Monday, Period 7-9, 1:55 PM – 4:55 PM

**Office Hours:** Monday 12:55 PM – 1:55 PM, 4:55 PM – 5:55 PM or by appointment, 2066A Weimer

### **Course Descriptions**

This course is an intensive exploration into the realm of communication techniques, theories, and strategies pertaining to scientific and health-related contexts. The course is designed to develop a deep and holistic understanding of the complex dynamics of public engagement, message framing, risk communication, and health literacy. In this course, students will delve into critical issues like misinformation in science and health, how to translate complex scientific information for lay audiences, ethics in health communication, and the impacts of cultural, societal, and psychological factors on how scientific and health information is interpreted and acted upon.

Lectures and readings will provide theoretical and practical insights, drawing from the fields of communication studies, psychology, public health, and sociology. However, the heart of this course is the active participation and in-depth discussion of students. A significant portion of the class will be devoted to discussions, case studies, and critique of real-world science communication strategies, where students will have the opportunity to exercise critical thinking, debate, and collaborative problem-solving.

The course encourages students to actively engage with contemporary topics and scenarios, linking academic knowledge to current science and health communication challenges. As a result, by the end of the course, students will not only acquire a comprehensive understanding of the principles of science and health communication but will also be equipped with practical skills to effectively communicate scientific and health-related matters in their professional careers.

This course is essential for those aiming to pursue a career in scientific or health education, public health advocacy, science journalism, policymaking, or any role that involves interpreting and disseminating scientific or health information to a variety of stakeholders.

**Note:** Students' active participation and contribution to class discussions are critical to the success of this course, fostering an environment of shared learning and intellectual growth. As such, students are expected to come prepared to each class, having thoroughly engaged with the reading materials.

### **LEARNING MATERIALS**

- No text is required. However, you expected to read all assigned readings, including any that are added later in the semester and those suggested by your fellow students.
- Readings for each week will be made available on Canvas or emailed to you, on occasion.
- For your own research and interest, check out academic journals such as *Science Communication*, *Public Understanding of Science*, *Health Communication*, *Journal of Health Communication*, *American Journal of Public Health*, & *Social Science and Medicine*.

**Please Note:**

- This syllabus and other course content are subject to change based the best interest of student learning. Changes will be announced on Canvas and via email. It is **YOUR RESPONSIBILITY to check your UF email regularly.**

**COURSE OBJECTIVES**

By the end of this course, students will be able to:

- **Conceptualize and Interpret:** Understand, interpret, and critically evaluate the theories, models, and key concepts within the field of science and health communication.
- **Analyze and Critique:** Engage in critical analysis of different modes of communication, including their construction, distribution, and reception, within the context of scientific and health discourse.
- **Contextual Understanding:** Develop a nuanced understanding of the social, political, cultural, and ethical contexts that shape and are shaped by science and health communication.
- **Effective Communication:** Design, implement, and assess effective science and health communication strategies that are appropriate to the topic, audience, and context.
- **Practical Application:** Translate theoretical understanding into practical skills, preparing for roles in health and science communication that require synthesizing complex information, anticipating public reactions, and responding to communication challenges.

**GRADING CRITERIA**

**NOTE:** Please understand that **points and percentages are different units.** The total point of this course is 1,000 and the total percentage is 100%. Therefore, 10 points are equal to 1 percent. All the following grading criteria (including extra credit) are based on the point system (1,000 points). All assignment due dates can be found in the course schedule attached to this syllabus.

- **Class Participation/Attendance** (100 points/10 percent)
  - Students are expected to come to class prepared to discuss the readings for that day. You may respond to questions posed by me and other students in their response papers and presentations, or ask questions related to the readings. Comments on the topics, theories, and specific research articles are also encouraged. You are expected to participate in the discussions during your presentation week and the weeks in which you have submitted a response paper.
- **Discussion Leader** (200 points/20 percent)
  - Each week, you will be responsible for leading the discussion on one of the assigned papers. Given the class size, each student will select a paper they want to focus on for the week. Your role is to highlight the key issues, arguments, and findings from the paper and guide the class in a discussion that explores the implications, critiques, and connections to broader themes in health and science communication. When leading the discussion, assume that your classmates have done the reading. Instead of summarizing the paper extensively, focus on facilitating a conversation that explores the important issues and raises critical questions.
  - Please read all the assigned readings for the week, but you will only need to present the core arguments and findings of the paper you are leading and solicit comments and questions from the class regarding the article.
  - You are encouraged to meet with me the week before your scheduled discussion to discuss your approach or clarify any questions. If you wish to suggest an additional article or

propose switching the assigned paper with another, please let me know at least a week in advance.

- A discussion outline should be submitted to me by **8 pm on the Sunday** before class.
- You will have two free passes that you can use for weeks when you are unable to lead the discussion. If you plan to use a free pass, please notify me during the paper assignment in the class before the week you wish to skip.
- You will sign up for the discussion week and topic during the class meeting the week before, based on your interests. If you wish to use one of your two free passes for a week when you cannot lead the discussion, please notify me during the paper assignment in the preceding class.
- **Discussion Questions** (150 points/15 percent)
  - From week 2 to week 13, for each paper you are not leading, you should post three (or more) discussion questions to the corresponding discussion boards on Canvas **by 8 pm on the Saturday** before class. These questions should stimulate thoughtful discussion and help us explore the key issues in the readings.
  - A good discussion question might address common themes across the readings, explore differences in theories or approaches, critique the methodology, discuss real-world applications, or link the paper to previous topics or readings. Clarification questions (e.g., definitions of terms or explanations of statistical methods) are important but should be reserved for in-class discussion rather than posted on the discussion board.
  - Discussion questions will be graded weekly, with each set worth 20 points. You will receive a 10-point bonus if you complete at least 7 sets of discussion questions throughout the course.
  - During weeks when you choose to write a response paper, you can summarize the questions proposed in your response paper and submit them as your discussion questions.
- **Response Paper** (200 points/20 percent)
  - In keeping with the seminar design, you will be asked to read a considerable amount of original or in-depth materials before each class. To facilitate this, you will write short response papers (2 double-spaced pages max.), raising questions or issues for discussion or responding to questions I may pose. There is no need to cite core readings, but external references should be properly cited. Response papers should NOT simply summarize the readings, but reflect your own thinking based on the readings.
  - Please note that you need to read the readings even if you are not submitting a response paper.
  - Starting week 2, these short papers are due by **8 pm on Canvas the Sunday** before the relevant class. You may choose any week during week 3-14 to submit **FOUR response papers** in total.
  - Each response paper is worth 50 points and will be graded based on merit.
- **Research Project** (350 points/35 percent)
  - At the start of the semester, we will discuss and decide as a class whether to pursue a collaborative research project as a team or to proceed with individual research papers/proposals. This discussion will take place during the first week of class, and the decision will be made democratically, based on class consensus.
  - **Option 1: Collaborative Research Team Project**
    - If the class chooses the collaborative approach, we will work together as a research team to develop a project that has the potential to result in a publication or

conference presentation. During the first two weeks, we will brainstorm and select a research topic and specific research questions. We will then collaboratively design the study, develop stimuli and questionnaires, conduct a literature search, and write the paper.

- **Phase 1: Literature Review (100 points/10 percent)** – The first product of our project will be a systematic literature review that lays the foundation for our research. Each team member will be responsible for researching and writing about specific aspects of the literature relevant to our research question. This product will result in a comprehensive review section that integrates all contributions.
  - **Phase 2: Stimuli & Questionnaire Design, Pre-registration & IRB (100 points/10 percent)** – The second product involves the design of research stimuli and questionnaires, as well as completing pre-registration (if applicable) and preparing the IRB submission. Each student will take on specific tasks within this phase, contributing to the creation of the study materials and ensuring all ethical requirements are met.
  - **Phase 3: Paper Writing or Extended Abstract (100 points/10 percent)** – The final product will be either a full research paper or an extended abstract suitable for submission to a conference or journal. Tasks will include writing, editing, and integrating all sections of the paper. Each team member will contribute to different sections, and the final product should be a cohesive, well-argued piece of scholarly work.
  - **Overall Contribution (50 points/5 percent)** – Throughout the semester, your overall contribution to the project will be evaluated. This includes your participation in team meetings, collaboration on tasks, responsiveness to feedback, and your role in ensuring the successful completion of each phase. Your contribution will be assessed through peer evaluations and my observations.
- **Option 2: Individual Research Paper/Proposal**
    - If the class opts for individual research papers/proposals, each student will develop a research paper or proposal on a science or health communication topic of their choice. The paper/proposal should include a compelling rationale for the study, a systematic literature review leading to research questions or hypotheses, and a proposed or applied research method section, along with references in APA style.
    - Depending on the feasibility of the research you are proposing, you may conduct the research during the semester or use the assignment as an opportunity to develop the foundation of a research that may serve as your next study or even your thesis. No need to worry if you are unsure about how “feasible” a study has to be – I will go over the processes involved in conducting a research study during the semester. The overall process of the research paper/proposal is broken into three phases.
    - **Phase 1: Literature Review (100 points/10 percent)** – The first product of your project will be a systematic literature review that lays the foundation for your research. You will craft a 5-8 page literature review that provides a thorough exploration of your topic, identifies gaps in the existing research, and suggests potential research questions or hypotheses.
    - **Phase 2: Research Design (100 points/10 percent)** – The second product involves developing a detailed methods section that outlines your research plan,

including the design of any stimuli or questionnaires. Justify your methodological choices and describe how you would handle ethical considerations, including preparing for IRB approval if necessary.

- **Phase 3: Paper Writing or Extended Abstract (100 points/10 percent)** – At this phase, you will expand what have drafted so far into a complete research paper or proposal, synthesizing your literature review, research questions or hypotheses, and methodology into a coherent document..
- **Overall Performance (50 points/5 percent)** – Throughout the semester, your overall performance will be evaluated. This includes your responsiveness to feedback, and your role in ensuring the successful completion of each phase. Your contribution will be assessed through my observations.

**COURSE GRADING SCALE AND PERCENTAGES**

<b>Grading Items</b>	<b>Points</b>	<b>Percentage Allocation</b>
Class Participation/Attendance	100	10%
Discussion Leader	200	20%
Discussion Questions	150	15%
Response Papers	200	20%
Research Project	350	35%
Total point	1,000	100%

**Letter Grades:**

93.5-100%	A	83.5-87%	B	73.5-77%	C	63.5-67%	D
90-93.4%	A-	80-83.4%	B-	70-73.4%	C-	60-63.4%	D-
87.1-89.9%	B+	77.1-79.9%	C+	67.1-69.9%	D+	0-59.9%	E

**LATE/MISSED SUBMISSION**

Late submission in general will not be accepted. Discuss with me in advance if you are not able to submit an assignment on time due to exceptional reasons.

**USE OF GENERATIVE AI**

In the context of academic integrity, it's essential to highlight that while we will be discussing and exploring the role of new media and AI in health and science communication, the use of generative AI tools for the creation of course assignments is strictly prohibited. This includes but is not limited to, AI-driven content generation, automated essay writing, and other related technologies. All assignments for this course must be the original work of the student. You are expected to complete all assignments independently, with due diligence and respect for academic standards. Any suspected use of AI in assignment creation will be thoroughly investigated and may result in academic penalties.

## **QUESTIONS ABOUT YOUR GRADES**

I am more than happy to talk with you about your grade and discuss the strengths and weaknesses of your graded work. That said, I require a 24-hour “cool off” period. We will not discuss your grade until we both have time gather our thoughts and have a productive conversation. After the initial 24 hours, students have one week to meet with the instructor to discuss the grade. If the student does not meet with the instructor **within a week**, then the instructor considers the matter closed. All discussions regarding grades are conducted in person, in my office.

## **EFFORT VS. EXCELLENCE**

You do not receive a grade for how hard you worked, only on the final product. Instructor grades your work on the degree of excellence it demonstrates. Make no mistake about the relationship between the two, as hard work often results in solid evaluations. That said, just because you spent “10 hours in the library” before a test or a group project doesn’t guarantee you a good grade. You have to study properly, address assignment requirements, and the like in order to assure a solid grade. I will help out in every way I can along the way and ALWAYS want you to do well. Don’t hesitate for a second to reach out to me (just don’t do it at the last second!).

## **UNIVERSITY HONESTY POLICY**

UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code (<https://www.dso.ufl.edu/sccr/process/student-conducthonor-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel.

## **COURSE EVALUATION**

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 <https://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 <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

## **STUDENTS REQUIRING ACCOMODATIONS**

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

## **COPYRIGHT STATEMENT**

Materials in this course—unless otherwise indicated—are protected by United States copyright law [Title 17, U.S. Code]. Materials are presented in an educational context for personal use and study and should not be shared, distributed, or sold in print—or digitally—outside the course without permission. Students may not record, reproduce, screenshot, photograph, or distribute any video, audio, or visual content from this course. This restriction includes but is not limited to live discussions, discussion boards, posted course materials,

course evaluation form, visual materials that accompany lectures/discussions, such as slides and whiteboard notes, etc.

### **VIDEO RECORDING**

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

### **MISCELLANEOUS**

- The instructor reserves the right to make any changes to the syllabus, schedule, assignments, readings, forms, lecture topics, assessments, and any other course content if deemed necessary to facilitate classroom management and to achieve the learning objectives for the course. Students are responsible to stay aware of these changes.
- Only students enrolled in this course may attend (and receive credit for) this class.
- I take plagiarism very seriously. Any evidence of plagiarism or cheating will result in an “E” for the course and disciplinary action. Do not submit the same work to more than one class. Do not adapt work from another class for this class. Do not adapt someone else’s work and submit it as your own. This course requires original work, created at this time, for this purpose.