Syllabus

Course Information

Course Number: VIBS 658

Course Title: Research Methods in Science and Technology Journalism

Section: 600

Time: Mondays, 8:45-11:30 am

Location: VIDI 127

Credit Hours: 3

Instructor Details

Instructor: Yasha Hartberg, B.S., M.S., Ph.D.

Office: VIDI 398

Phone: (979) 458-7816

E-Mail: yhartberg@cvm.tamu.edu

Office Hours: Whenever my door is open or by appointment. To minimize the amount of back

and forth that usually accompanies setting up appointments, please use my appointment calendar: https://app.usemotion.com/meet/hartberg/Standard

Course Description

Welcome to VIBS 658: Research Methods in Science and Technology Journalism. This course is your gateway to understanding how research shapes the stories we tell about science and technology. Whether your future involves conducting your own research or reporting on the discoveries of others, this class provides the conceptual tools you'll need to navigate, evaluate, and apply a variety of research methods.

Our focus isn't on making you an expert in every methodology or diving deeply into any one technique. Instead, we aim to equip you with a broad toolkit—a foundation for understanding the strengths, limitations, and applications of methods commonly used in journalism, communication, and related fields. By engaging with primary literature and real-world examples, you'll see how these methods have been used to explore critical questions in the field.

For those considering a thesis, this course offers a window into the kinds of problems science and technology journalism addresses and how they're studied. For those pursuing internships or careers in science communication, it sharpens your ability to translate complex research into compelling stories for diverse audiences.

Above all, this course is about fostering critical thinking and preparing you to engage with research thoughtfully and effectively—whether as a creator, evaluator, or communicator of knowledge. Let's embark on this journey together!

Course Prerequisites

None

Course Learning Outcomes

After completing VIBS 658, students will be able to:

- 1. Understand, apply, and develop a foundational toolkit for approaching research methods commonly used in journalism, communication, and other related fields, including traditional and emerging methodologies such as artificial intelligence applications.
- 2. Evaluate research on science and technology journalism, identifying strengths, limitations, and biases in study design and reporting.
- 3. Critically analyze research from diverse fields, interpreting statistical analyses, addressing methodological challenges, and assessing the validity and reliability of findings.
- 4. Report effectively on science and technology, emphasizing clarity, accuracy, and engagement while addressing the needs of diverse audiences.
- 5. Examine and integrate the philosophical underpinnings and ethical considerations of scientific research and its communication, fostering an understanding of epistemology, research ethics, and the journalist's role in maintaining public accountability for science.

Textbook and/or Resource Materials

Most of our readings will come from two required sources:

- Mass Media Research: An Introduction, 10th edition, by Roger D. Wimmer and Joseph R. Dominick
- Naked Statistics: Stripping the Dread from the Data, by Charles Wheelan

Note that *Mass Media Research* is an insanely expensive book to purchase new, especially considering its flimsy binding and poor page quality. I therefore *strongly* recommend that you find a used copy, which can usually be found readily online for far less. You would also be fine using an older edition of the book.

Grading Policy

You are all graduate students with proven records of excellent academic achievement—you wouldn't be in this program otherwise. I therefore expect "A" quality work from each of you, characterized by the following:

- Critical Thinking and Depth of Insight: Your assignments should demonstrate thoughtful
 engagement with course materials, reflecting a solid grasp of foundational concepts and the
 ability to apply them meaningfully.
- 2. Clarity and Precision: Whether writing or presenting, your communication should be clear, concise, and well-structured, with attention to detail and adherence to professional standards.
- 3. Originality and Creativity: Your work should showcase your unique perspective, demonstrating creativity in addressing research questions or presenting ideas.
- 4. Thoroughness and Effort: Submissions should be complete, addressing all aspects of the prompt or task, and should reflect diligent effort.

- 5. Responsiveness to Feedback: Incorporate feedback thoughtfully into revisions, demonstrating growth and refinement of ideas and execution.
- 6. Professionalism: This includes proper citation or attribution of sources, adherence to deadlines, and respectful engagement with peers and instructor feedback.

Working from the assumption that you will meet these expectations, I see no need to fret about numerical grades. Instead, I will grade most assignments on a satisfactory/unsatisfactory basis to emphasize learning and growth. If an assignment is marked as unsatisfactory, you will have the opportunity to revise and resubmit it, with the expectation that revisions demonstrate substantial improvement.

Please note that some assignments, such as literature scavenger hunts, will be marked as completion grades and will not receive detailed feedback.

Your grade in VIBS 658 will come from a combination of writing assignments, research summaries, and class participation. The contributions of the various components to your final grade will be as follows:

Writing assignments: 40%
Literature scavenger hunt: 20%
Research summaries: 25%
Participation: 15%

Late Work Policy

Professional life is filled with competing deadlines and conflicts with personal obligations, so you are expected to turn assignments in on time. That said, life happens. If something comes up that will prevent you from meeting an assignment deadline, please let me know in advance so alternative arrangements can be made.

Course Schedule

I will assign readings each week that you should read before coming to class. Prompts for assignments will be given in class and posted to Canvas. Below are tentative due dates for writing assignments. I will try to post most writing assignment prompts two weeks before they're due. If a due date conflicts with major assignments in your other STJR classes, please let me know so I can make adjustments.

Assignment Due Date
Comparative Analysis February 17
Midterm March 24
Ethics Project April 7
Final May 5

University Policies

Attendance Policy

The university views class attendance and participation as an individual student responsibility. Students are expected to attend class and to complete all assignments.

Please refer to <u>Student Rule 7</u> in its entirety for information about excused absences, including definitions, and related documentation and timelines.

Makeup Work Policy

Students will be excused from attending class on the day of a graded activity or when attendance contributes to a student's grade, for the reasons stated in Student Rule 7, or other reason deemed appropriate by the instructor.

Please refer to <u>Student Rule 7</u> in its entirety for information about makeup work, including definitions, and related documentation and timelines.

Absences related to Title IX of the Education Amendments of 1972 may necessitate a period of more than 30 days for make-up work, and the timeframe for make-up work should be agreed upon by the student and instructor" (Student Rule 7, Section 7.4.1).

"The instructor is under no obligation to provide an opportunity for the student to make up work missed because of an unexcused absence" (<u>Student Rule 7, Section 7.4.2</u>).

Students who request an excused absence are expected to uphold the Aggie Honor Code and Student Conduct Code. (See <u>Student Rule 24</u>.)

Academic Integrity Statement and Policy

"An Aggie does not lie, cheat or steal, or tolerate those who do."

"Texas A&M University students are responsible for authenticating all work submitted to an instructor. If asked, students must be able to produce proof that the item submitted is indeed the work of that student. Students must keep appropriate records at all times. The inability to authenticate one's work, should the instructor request it, may be sufficient grounds to initiate an academic misconduct case" (Section 20.1.2.3, Student Rule 20).

You can learn more about the Aggie Honor System Office Rules and Procedures, academic integrity, and your rights and responsibilities at aggiehonor.tamu.edu.

Americans with Disabilities Act (ADA) Policy

Texas A&M University is committed to providing equitable access to learning opportunities for all students. If you experience barriers to your education due to a disability or think you may have a disability, please contact Disability Resources in the Student Services Building or at (979) 845-1637 or

visit <u>disability.tamu.edu</u>. Disabilities may include, but are not limited to attentional, learning, mental health, sensory, physical, or chronic health conditions. All students are encouraged to discuss their disability related needs with Disability Resources and their instructors as soon as possible.

Title IX and Statement on Limits to Confidentiality

Texas A&M University is committed to fostering a learning environment that is safe and productive for all. University policies and federal and state laws prohibit gender-based discrimination and sexual harassment, including sexual assault, sexual exploitation, domestic violence, dating violence, and stalking.

With the exception of some medical and mental health providers, all university employees (including full and part-time faculty, staff, paid graduate assistants, student workers, etc.) are Mandatory Reporters and must report to the Title IX Office if the employee experiences, observes, or becomes aware of an incident that meets the following conditions (see <u>University Rule 08.01.01.M1</u>):

- The incident is reasonably believed to be discrimination or harassment.
- The incident is alleged to have been committed by or against a person who, at the time of the incident, was (1) a student enrolled at the University or (2) an employee of the University.

Mandatory Reporters must file a report regardless of how the information comes to their attention — including but not limited to face-to-face conversations, a written class assignment or paper, class discussion, email, text, or social media post. Although Mandatory Reporters must file a report, in most instances, you will be able to control how the report is handled, including whether or not to pursue a formal investigation. The University's goal is to make sure you are aware of the range of options available to you and to ensure access to the resources you need.

Students wishing to discuss concerns in a confidential setting are encouraged to make an appointment with <u>Counseling and Psychological Services</u> (CAPS).

Students can learn more about filing a report, accessing supportive resources, and navigating the Title IX investigation and resolution process on the University's <u>Title IX webpage</u>.

Statement on Mental Health and Wellness

Texas A&M University recognizes that mental health and wellness are critical factors that influence a student's academic success and overall wellbeing. Students are encouraged to engage in proper self-care by utilizing the resources and services available from Counseling & Psychological Services (CAPS). Students who need someone to talk to can call the TAMU Helpline (979-845-2700) from 4:00 p.m. to 8:00 a.m. weekdays and 24 hours on weekends. 24-hour emergency help is also available through the National Suicide Prevention Hotline (800-273-8255) or at suicidepreventionlifeline.org.