
Instructors:

Student hours and locations are on Sakai

Megan Plenge, mfplenge@unc.edu

Troy Sadler, tsadler@unc.edu

Deen Freelon, freelon@email.unc.edu

TA: Nicholas Gerstner, ndgerstn@live.unc.edu

TA: Evan Jones, patlabor@live.unc.edu

TA: Heewoo Lee, heewoo@unc.edu

TA: Tyler Souza, tsouza@unc.edu

Description of Course:

How can you distinguish “good” science and “bad” science in the world around you?

This course focuses on scientific literacy, the defining characteristics of “good” science, and how to identify logical fallacies and heuristic shortcuts that make legitimate science difficult to discern. We will discuss best practices for science educators and journalists to effectively communicate accurate scientific knowledge.

This semester we will focus on media coverage of COVID-19 and climate change.

Course Resources:

- **Readings:** All readings will be posted on Sakai.
 - **Sakai:** Please review the Sakai Page THOROUGHLY, as communication, course materials, and assessments will be administered using this platform.
-

Course

Assessment &

Grading Scale:

Class Activities:	15%
Sakai Forums:	15%
Quizzes:	20%
Group Project: Media Critique Video	15%
Group Project: Science Teaching Tool	15%
Final Paper:	20%

		C+	77-79
A	93-100	C	73-76
A-	90-92	C-	70-72
B+	87-89	D+	67-69
B	83-86	D	60-66
B-	80-82	F	below 60

Target Audience and Course Prerequisites:

- This course is appropriate for science- and non-science majors who are interested in looking at science from the perspective of the media and educators. Directions to go after this class include:
 - **Earth, Marine and Environmental Sciences undergraduate degree**
 - <https://emes.unc.edu/undergraduate-program/>
 - <https://e3p.unc.edu/academics/undergraduate-program/>
 - **The School of Education’s MAT program**—get a Master’s in Education in one year.
 - <https://ed.unc.edu/academics/programs/master-of-arts-in-teaching/about-the-program/>
 - **The Environment and Science Communication M.A./B.A. Dual Degree**
 - <https://esc.web.unc.edu/>
-

Student Learning Objectives

- Capacities-based learning objectives for this course. Students will be able to...
 - Compare and contrast three distinct ways of addressing a question
 - Use data and evidence to apply key methods of and concerns associated with data science
 - Situate Ideas and experiences in global contexts
 - Collaborate with others for mutual benefit

- Content-specific learning objectives for this course. Students will be able to...
 - Differentiate between science and pseudoscience
 - Identify common misconceptions about the nature of science
 - Analyze methods, assumptions, and presentation of scientific data
 - Identify the different types of logical fallacies
 - Distinguish real news from and mis/dis-information
 - Understand how media shapes public perception
 - Critique media articles covering scientific issues
 - Design teaching tools that help learners understand scientific issues
 - Apply these learnings to case studies in climate change and COVID-19
-

Attendance:

Please be aware that you are bound by the Honor Code when making a request for a University approved absence. No right or privilege exists that permits a student to be absent from any class meetings, except for these University Approved Absences:

1. Authorized University activities
2. Disability/religious observance/pregnancy, as required by law and approved by Accessibility Resources and Service and/or the Equal Opportunity and Compliance Office (EOC)
3. Significant health condition and/or personal/family emergency approved by the Office of the Dean of Students, Gender Violence Service Coordinators, and/or the Equal Opportunity and Compliance Office (EOC).

Please consult your **contact instructor** as soon as possible about any absence that requires modification of due dates. Non-University Approved Absences may be accommodated at the instructor's discretion and with appropriate paperwork.

Class Activities (15%):

Class activities include all learning activities, in and out of class, that do not fit into the Sakai forum, quiz, or project categories. Assignments may be graded based on good-faith completion or accuracy. Some activities will be completed in groups; evidence of attendance is required to receive a group grade for these activities.

- Class activities are posted to the "Lectures & Assignments" Sakai page with submission instructions.
- Class activities are weighted based on the length or difficult of the activity.
- Students have a 1-week window in which to submit class activities with a late penalty.
- Some in-class activities require the use of internet-capable devices, e.g. ipad, phone, computer.

Poll Everywhere questions may be done in class and all students are required to be registered in UNC's Poll Everywhere account.

- Instructions for registering can be found at: <https://poll.unc.edu/>
- If you have registered for Poll Everywhere at UNC before, you do not need to re-register.

Class Activities: Missed/Late Assignment Policy:

If you miss class, please check the Sakai page to see if you need to make up any class activities.

- Follow activity instructions for completion and submission and submit within one week of the due date for late credit.
 - **Late penalties: -10% off per business day late to a maximum of -50%**
 - If you have a University-approved absence, are ill, or otherwise have a need to extend the due date for an assignment, please speak to your group's **contact instructor** as soon as possible.
-

Sakai Forum (15%)

Individual forum posts completed on Sakai. Topics will be given at least one week in advance. See course timeline for due dates.

- Instructions and rubric for grading are available in the “Logistics & Assignments section of Sakai.
- Forum posts are writing assignments that require you to answer prompts relating to assigned readings. Forum assignments include writing responses to other student posts as well as the original question prompt.
- Forum posts will be graded based on writing style, content understanding, critical analysis, and utilization of appropriate resources to justify your position/response, if appropriate.

Sakai Forum: Missed/Late Assignment Policy:

If you do not post to the forum by the posted due date, you may:

- Submit within one week of the due date for late credit.
 - **Late penalties: -10% off per business day late to a maximum of -50%**
 - If you have a University-approved absence, are ill, or otherwise have a need to extend the due date for an assignment, please speak to your group’s **contact instructor** as soon as possible.
-

Quizzes (20%)

Individual, open-note quizzes administered via Sakai. Learning objectives/content covered in quizzes will be provided at least one week in advance. See course timeline for due dates.

- Quizzes may consist of both multiple-choice and short answer questions.
 - Quizzes must be completed individually. See “honor code” policy for more details.
 - Quizzes will have specified open and close dates and times. For on time credit, you must complete the quiz within the window.
 - Quizzes will be timed at 2 minutes per question. Students with ARS accommodations will be granted additional time according to their accommodations.
-

Group “Deep Dive” Project (15%)

Group project in which students will critically analyze and evaluate science articles.

- Instructions and rubric for grading are available in the “Logistics & Assignments section of Sakai.
 - This project will be comprised of multiple components, each with a different point value, rubric, and due date
 - Groups of 4-6 students will work together. Some out of class work may be required.
 - One component of the project will be a group evaluation. Evaluation scores from your group members will be taken into account when assigning final project grades.
 - **Late submissions of group project components must be discussed with your group’s contact instructor.**
-

Group “Teaching Tool Project” (15%)

Group project in which students will create a tool to educate others about an emerging scientific issue

- Instructions and rubric for grading are available in the “Logistics & Assignments section of Sakai.
- This project will be comprised of multiple components, each with a different point value, rubric, and due date
- Groups of 4-6 students will work together. Some out of class work may be required.
- One component of the project will be a group evaluation. Evaluation scores from your group members will be taken into account when assigning final project grades.
- **Late submissions of group project components must be discussed with your group’s contact instructor.**

Final Paper (20%)

Individual writing assignment. More details and a rubric will be made available to you at least 2 weeks prior to the final exam date/due date.

A note on credit hours: According to UNC and federal regulations, one credit hour represents a minimum of three hours of student academic work for approximately fifteen weeks for one semester of credit. As a 3-credit hour course, you are expected to do 9 hours of work for this class per week.

Students requiring accommodations: The University of North Carolina at Chapel Hill facilitates the implementation of reasonable accommodations, including resources and services, for students with disabilities, chronic medical conditions, a temporary disability or pregnancy complications resulting in difficulties with accessing learning opportunities. All accommodations are coordinated through the Accessibility Resources and Service Office, Tel - 919-962-8300 or Email - accessibility@unc.edu. Relevant policy documents as they relate to registration and accommodations determinations and the student registration form are available at: <https://accessibility.unc.edu/about-ars/policies/student-and-applicant-accommodations>

Academic honesty: Academic integrity is at the heart of Carolina and we all are responsible for upholding the ideals of honor and integrity. All suspected instances of academic dishonesty will be reported to the honor system. Your full participation and observance of the Honor Code is expected.

- Open-note assignments: You may only use your own notes. You may not collaborate with others.
- Written assignments: Plagiarism is prohibited. Use only your own words, and attribute material written by others appropriately.

If you do not understand some aspect of the Honor Code, or how it applies to this course, ask! *Ignorance does not exempt you from its consequences.* If an honor violation is identified, the instructor will follow the honor system procedures outlined here: <https://studentconduct.unc.edu/honor-system/honor-system-procedures>

Mental Health Support: UNC-Chapel Hill is strongly committed to addressing the mental health needs of a diverse student body. The Heels Care Network website (<https://care.unc.edu>) is a place to access the many mental resources at Carolina. CAPS is the primary mental health provider for students, offering timely access to consultation and connection to clinically appropriate services. Go to their website <https://caps.unc.edu/> or visit their facilities on the third floor of the Campus Health building for an initial evaluation to learn more.
