

# Communicating Science

## Syllabus

*"We have also arranged things so that almost no one understands science and technology. This is a prescription for disaster. We might get away with it for a while, but sooner or later this combustible mixture of ignorance and power is going to blow up in our faces."*  
– Carl Sagan

**Welcome** to Communicating Science! I look forward to getting to know each of you as we explore the intersections between science and society this semester. This course is for you, so if there are specific ways that I can support you as you work toward your goals, please let me know.

**Course Description.** For students seeking to develop practical skills in communicating science across broad platforms. Students will be asked to think critically about science outreach strategies and actively participate in class discussions. Course topics include science writing, crafting effective presentations, matching audience and form, and using online media for science communication. The course will culminate in student-led science communication projects. *Prerequisites: 100 level majors science class. 3(3-0) credits.*

### Course Meetings.

Monday, Wednesday, Friday    11:30 am – 12:20 pm    *ISC 137*

**Instructor.**    Dr. Mackenzie Geringer    ISC 255    [gerringe@geneseo.edu](mailto:gerringe@geneseo.edu)

**Office Hours.**    Mon. 10:30 –11:30 am; Wed. 10:30 – 11:30 am, 1:30 – 2:20 pm;  
and By Appointment

Office hours are your time for getting questions answered, course expectations clarified, advice on pursuing opportunities or careers in science and more! Office hours will be held in ISC 239. Please email me ([gerringe@geneseo.edu](mailto:gerringe@geneseo.edu)) or chat before/after class if you have questions or would like to set up a meeting outside of office hours.

## Learning Objectives

Throughout this course, we will:

- Learn and implement inclusive, accessible ways to communicate science to diverse audiences.
- Understand and use storytelling techniques across multiple platforms.
- Gain confidence, experience, and practical strategies for presentations.
- Hone writing, editing, and reviewing skills.
- Develop strategies for the critical consumption and evaluation of science news and other media.
- Engage with new and creative outlets for science communication.

## How this course fits into your biology education...

This course will help you work toward the following Biology Program Learning Outcomes:

- *Biology Learning Outcome 3.* Students will be able to communicate biological ideas from literature or their own laboratory investigations to audiences of biologists and non-biologists in a variety of formats including written reports, poster and oral presentations. *Level:* Mastery.
- *Biology Learning Outcome 4.* Students will recognize the importance of scientific integrity and ethical research and applications of biology to science policy. They will be able to work independently and in teams for life-long learning. *Level:* Mastery.

## Integrative and Applied Learning in Communicating Science

This course serves the following Integrative and Applied Learning objectives:

- Integrate multiple bodies of knowledge with their personal experience by asking meaningful questions about real-world problems.
- Apply skills, theories, and methods gained in academic study, professional experiences, and/or co-curricular experiences to new situations.
- Reflect upon changes in their learning and outlook over time and integrate into their future endeavors based on that self-reflection.

*“It would be possible to describe everything scientifically, but it would make no sense; it would be without meaning, as if you described a Beethoven symphony as a variation of wave pressure.”*

– Albert Einstein

**Course Materials.** Our required course textbook is *Writing Science*. Joshua Schimel, 2011. There is a digital copy available through the library course reserves. This eBook is limited to three users at one time, so please log out when you are finished with the reading for that day. We will explore additional readings, videos, and podcasts, provided

via Brightspace. Please note that readings may be subject to change given current events: you will be given as much notice as possible about any changes. Any course software and websites will be free to access. You are encouraged to seek out and interact with science media on your own throughout the semester, including reading science news and following science accounts on social media. Attending Biology seminars and other talks is highly encouraged.

**Course Expectations.** Much of the value of this course will come from our in-class activities and discussions. Therefore, attendance is expected when safe and possible for you to do so and active participation will be part of your course grade. In class, you will not be graded on whether your answers are right or wrong, engage with the course materials and activities to the best of your abilities to receive in-class participation credit. Contribute to at our Brightspace discussion posts to support your participation credit. If you cannot join a synchronous class session, please plan on and completing an alternative response on Brightspace. Submit any participation make-up assignments to Brightspace within one week of your absence. Please reach out to me to discuss potential or needed extended absences. The earlier you get in touch about questions or concerns, the more options we will have.

You, the expert. For nearly all course assignments, you will focus on a science topic of your choosing. Choosing something that you care about is a great way to get the most out of this course. You will read and evaluate primary literature on the topic, then synthesize your knowledge in writing, illustration, and presentation. Further details on expectations, strategies, and resources will be provided in class and on Brightspace. Please do not hesitate to reach out if you have any questions.

Options for our COVID-19 discussions. We will have the opportunity to discuss some of the science communication and social challenges that have been highlighted in the COVID-19 pandemic. The pandemic has impacted us all, in ways deep and personal. While current events are important to discuss and understand, it can be very difficult to participate in academic conversations about crises we are still enduring. If you need to step away from or sit out a discussion on the pandemic, you may do so without penalty. In cases where you choose to opt out of a discussion, there will be an alternative reading and short response on the topic you will complete instead. It is your responsibility to ask for the alternative assignment by the end of the day of our discussion. In class, please remember that we don't know one another's stories and be mindful and respectful. Please let me know if you have questions or concerns regarding the difficult topics that we will address this semester.

## Assignments & Grading.

Course grades will be based on the following assignments, out of a total of 300 points. Detailed expectations, rubrics, and resources are available on Brightspace. Further assignment descriptions and resources will be provided during our class meetings.

Introductions	Aug. 30 <sup>th</sup>	10 points
Compose two thoughtfully written paragraphs introducing yourself, your interests in science, and your goals.		
Semester Topic Proposal	Sept. 11 <sup>th</sup>	20 points
Write a two-paragraph summary of your semester topic, referencing at least one scientific journal article you will use as a source. What scientific questions would you like to investigate this semester?		
Mini-Paper		80 points
Write a mini-literature review on your topic from three studies, developing best practices in science writing. The paper will be short to give you time to thoughtfully revise your writing.		
Annotated References	Sept. 20 <sup>th</sup>	10 points
Mini-Paper Introduction	Sept. 27 <sup>th</sup>	10 points
Mini-Paper	Oct. 11 <sup>th</sup>	15 points
Mini-Paper Peer Reviews	Oct. 18 <sup>th</sup>	15 points
Revised Mini-Paper	Nov. 1 <sup>st</sup>	30 points
Skills Brief Presentations	Throughout the Semester	20 points
Practice your presentation strategies by teaching the class a science communication skill! Topics and basic materials will be provided, communicate the information in a format of your choosing. Sign up for a topic in class on Aug. 30 <sup>th</sup> .		
Scientist Spotlight Post	Oct. 25 <sup>th</sup>	10 points
Develop your social media science communication skills by creating a post to highlight the work of an active scientist.		
Infographic	Nov. 8 <sup>th</sup>	25 points
Create a beautiful and informative infographic to visualize your topic. The infographic should be clear and well-supported with scientific evidence.		

Elevator Pitch	Nov. 15 <sup>th</sup>	<i>20 points</i>
Use short-form communication to distill your topic, pitch your project, and engage your audience. Record your talk and write a short reflection on what you learned from watching the recording. Present your pitch during our class session.		
SciFi as SciComm Response	Dec. 6 <sup>th</sup>	<i>10 points</i>
Write a short response to a piece of science fiction or climate fiction and reflect on its potential and limitations in communicating science.		
SciComm Project		<i>65 points</i>
How will you communicate your topic beyond written papers and presentations? Define your audience and design a SciComm project to engage them with your topic. You will give a talk during the final period, introducing your topic and summarizing your project. Students who wish to may work in pairs for the final project; see instructor for expectations.		
Project Update	Nov. 22 <sup>nd</sup>	<i>15 points</i>
Final Talks	Dec. 16 <sup>th</sup>	<i>40 points</i>
Final Talk Reviews	Dec. 16 <sup>th</sup>	<i>10 points</i>
Participation	Every Class	<i>40 points</i>
Earn full credit for participation by attending class and engaging in discussions and activities to the best of your ability. You will not be evaluated on whether your insights are “right” or “wrong” during discussions, rather by your demonstrated willingness to think critically and be actively involved. If you are unable to join a class session, complete a participation make-up assignment by the date of the next check-in (below). To help you actively engage, to identify study and participation strategies that work well for you, and to make participation assessment transparent, you will submit a check-in on Brightspace every two to three weeks by the end of the day. Check-ins will be a place to keep track of attendance or asynchronous make-ups, readings, discussion and in-class engagement, and will serve as another forum for content or course expectations questions. Check-in dates are: 9/6 ( <i>7 pts</i> ), 9/20 ( <i>7 pts</i> ), 10/4 ( <i>5 pts</i> ), 10/25 ( <i>7 pts</i> ), 11/8 ( <i>7 pts</i> ), 12/6 ( <i>7 pts</i> ). Please reach out if you have questions or concerns about participation expectations.		

*Grade Breakdown.* Letter grades are displayed in Brightspace throughout the semester to help you track progress toward your goals. Grades in the course are set as follows, without rounding. A 100–94%; A- <94–90%; B+ <90–87%; B <87–84%; B- <84–80%; C+ <80–77%; C <77–74%; C- <74–70%; D <70–60%; E <60%.

## Resources & Policies.

Course Policies. Late assignments and make-up assignments will be accepted only with extenuating circumstances, discussed in advance of the deadline. If you have an emergency or foresee a scheduling conflict on an assignment or presentation, please contact me as soon as possible and we may be able to work something out on a case-by-case basis. The earlier you reach out about issues, the more options we have. You can typically expect email responses from me within one business day. Grade review requests for assignments are available only within two weeks of receiving feedback.

SUNY Geneseo's Commitments, Mission, and Values. SUNY Geneseo has several core documents that articulate our shared commitments and learning objectives. These include:

- [SUNY Geneseo Mission, Vision and Values](#)
- [Community Commitment to Diversity, Equity, and Inclusion](#)
- [Geneseo Learning Outcomes for Baccalaureate Education](#)

Land Acknowledgment. Land acknowledgements are expressions of sorrow and remembrance to those whose historic territory one resides on. Geneseo resides on the homeland of the Seneca Nation of Indians and Tonawanda Seneca Nation. We are encouraged to learn more about these original occupants and those indigenous to other places we have lived. You may consider using the Native Land app and/or websites such as [sni.org](http://sni.org) to learn more about the community of more than 7,000 enrolled Indigenous Peoples.

Academic Support Services. The campus provides a range of support services to help students thrive in their classes. These services include:

- Tutoring, both drop-in and by-appointment, with student tutors in the [Writing Learning Center](#), the [Math Learning Center](#), and a range of department-based tutoring centers
- Online tutoring through the [SUNY-wide STAR-NY system](#)
- [Supplemental Instruction](#), in which trained student assistants review lecture material from specific classes

Information on times and locations is available through the [Campus Learning Centers website](#).

The Navigate Student App is the student-facing platform that offers a wide range of resources including study buddies, to do's & events, and more. You can download the Navigate Student App at the Apple or Google Play app store. You can also find the Navigate Student content on your computer: [geneseo.navigate.eab.com](http://geneseo.navigate.eab.com).

We have leveraged SUNY Transformation funds to license CircleIn, a tool to facilitate peer learning. [CircleIn utilizes gamification](#) to incentivize students to better study habits. The development of the CircleIn platform was supported by NSF funding, and research evidence suggests that CircleIn is an effective tool for making academic success more attainable, common, and inclusive. The tool is free for all of our students, and CircleIn provides any tech support needed. You can download the CircleIn App at the Apple or Google Play app store. You can also find CircleIn in your Brightspace page.

Additionally, the college offers peer mentoring programs that are designed to reinforce good academic habits. These include:

- [Academic Peer Mentors in the Office of Advising](#) provide students with promising study strategies and can host on-going appointments with students seeking an "accountability buddy".
- The Leadership in Academic Success workshop series sponsored by the GOLD Leadership Program introduces students to a variety of study skills, time management techniques, and instruction on how to access campus resources for academic and career guidance. A [full list of GOLD workshops](#) can be accessed online.

Accessibility. SUNY Geneseo is dedicated to providing an equitable and inclusive educational experience for all students. The Office of Accessibility (OAS) will coordinate reasonable accommodations for persons with disabilities to ensure equal access to academic programs, activities, and services at Geneseo.

Students with approved accommodations may submit a [semester request](#) to renew their academic accommodations. More information on the process for [requesting academic accommodations](#) is on the OAS website. Questions? Contact the OAS by email, phone, or in-person: [Office of Accessibility Services](#), Erwin Hall 22, 585-245-5112, [access@geneseo.edu](mailto:access@geneseo.edu).

Roles & Responsibilities.

Student: inform the instructor no later than the first week of the semester of any accommodation(s) you will or may potentially require.

Instructor: maintain strict confidentiality of any student's disability and accommodations; support all students to meet the learning objectives of this course.

All course materials are available on Brightspace and in our in-person classes, and I've made every attempt to ensure that they are accessible to everyone. If you have difficulties accessing any materials (including needs for alternative formats), please let me know as soon as possible and I will rectify the situation.

Library Research Help. SUNY Geneseo's Library has an award-winning staff trained in finding the best information using library resources and advanced search strategies. Students may ask questions about using library services, locating materials, or conducting research projects. There is a librarian who specializes in the subject matter for each major. Students can book a research help meeting during the librarians' office hours or [email their questions](#). Learn more at the [Library's website](#).

Academic Integrity and Plagiarism. The library offers workshops to help students understand how to paraphrase, quote, and cite outside sources properly. With your Topic Proposal submission, you'll be asked to complete the Avoiding Plagiarism Tutorial on Brightspace to help clarify expectations. This online course is meant to educate about the importance of using original ideas

and language, and how to incorporate paraphrases and quotes into writing. The complete list of library workshops can be found at [www.geneseo.edu/library/library-workshops](http://www.geneseo.edu/library/library-workshops).

Academic dishonesty includes cheating, knowingly providing false information, plagiarizing, and any other form of academic misrepresentation, including self-plagiarism. Academic dishonesty will not be tolerated in this course. Plagiarism will result in a zero for the assignment and reporting to the college and could be grounds for an E course grade. College policies and procedures regarding academic dishonesty are available at [www.geneseo.edu/handbook/academic-dishonesty-policy](http://www.geneseo.edu/handbook/academic-dishonesty-policy).

I take plagiarism and other forms of academic dishonesty seriously. At its most basic, that means you are responsible for doing your own work. You may not reuse work from other classes, use the work of another person, plagiarize, or use artificial intelligence to help with or generate assignments. I enforce Geneseo's plagiarism policy. You can find more information about the policy here: [Geneseo's Academic Dishonesty Policy](#).

*Unintentional plagiarism.* While the first thing most people think of when they hear the word plagiarism is cheating, you can plagiarize without intending to. Some students plagiarize because they have trouble with paraphrasing or fail to give credit to their sources of information, especially when they search online instead of utilizing assigned material. I believe this class will help you develop and/or strengthen the skills you need to avoid unintentional plagiarism. I am happy to help you if you have questions or are struggling with this. Come talk to me during office hours or by appointment if you have questions or want help. *Ultimately, you are responsible for avoiding plagiarism, but there are many resources and ways to get help.*

*AI, like Chat-GPT.* Because writing is one of the most important tools that we have for actively *thinking* in science, the use of AI tools to produce writing for this course is prohibited and assignments with AI-generated text will not receive credit. You must do your own work, which means that you should not utilize tools like Chat-GPT for any aspect of our course work. Such use is a form of academic dishonesty. Use of such tools is not only cheating, it will also cheat you of the opportunity to learn and develop your own skills. While AI will undoubtedly play important roles in our future society, you will be better able to utilize AI if you have developed your own critical thinking, writing, and analytical skills by doing your own work. If you have any questions about this, please ask.

*Show your work.* Upon request, I expect you to be able to show your work or process for completing assignments. This means, you should keep notes, brainstorming sheets, drafts, outlines, and any other work that you created in the process of writing a paper or completing an assignment.

Student Course Experience (SCE) Survey. During the last two weeks of the semester, students are invited and encouraged to complete a four-item course experience survey through KnightWeb. Responses are completely anonymous at all times, and the results are only shared with instructors after final grades have been submitted. Instructors use the feedback to improve their courses in the



future, and results from the SCE surveys are included in faculty portfolios used in renewal, tenure and promotion decisions. To participate: In a web browser, visit MyGeneseo. Select KnightWeb, Surveys, then SCE (formerly SOFI) Surveys. You are welcome to submit responses for each course listed.

Technology Support. [CIT provides a range of technology support resources](#). For assistance with your computer or mobile device, visit the CIT HelpDesk in Fraser. Geneseo students, faculty and staff have free access to the entire [LinkedIn Learning training library](#) (over 7,500 courses, including tutorials for software, digital tools, web development, programming, and design) through Geneseo's site license.

Getting Help with Navigating Brightspace. CIT has developed a number of resources that can help you learn how to use our new learning management system, Brightspace. All students are automatically enrolled in "[Geneseo's Introduction to Brightspace for Students](#)" course, a course intended to introduce learners to Brightspace and review its basic functionality. Following successful completion of this course, learners will receive a digital certificate of completion that can be provided to faculty members, upon request. There is also the [Student Guide for Brightspace at Geneseo](#) self-help article, which includes links to video tutorials for common tasks. For *technical assistance* with Brightspace, please [email the Brightspace Support Team](#). For questions about a course and its content, please contact the instructor directly.

Religious Observations and Class Attendance. New York State Education Law 224-a stipulates that "any student in an institution of higher education who is unable, because of [their] religious beliefs, to attend classes on a particular day or days shall, because of such absence on the particular day or days, be excused from any examination or any study or work requirements" (see [General Classroom Policies for more information](#)). SUNY Geneseo has a commitment to inclusion and belonging, and I want to stress my respect for the diverse identities and faith traditions of students in my class. If you anticipate an absence due to religious observations, please contact me as soon as possible in advance to discuss your needs and arrange make up plans. The New York State Department of Civil Service maintains a [calendar of major religious observations](#).

Military Obligations and Class Attendance. Federal and New York State law requires institutions of higher education to provide an excused leave of absence from classes without penalty to students enrolled in the National Guard or armed forces reserves who are called to active duty. If you are called to active military duty and need to miss classes, please let me know and consult as soon as possible with the Dean of Students.

Guidelines for Attendance and Public Health. As we continue to deal with variants of the COVID-19 virus and other contagious respiratory illnesses, I share these expectations for classroom attendance and protecting public health. SUNY Geneseo is a residential liberal arts college where we all learn together in a shared space. This classroom community is vital for engaging in discussions, solving problems, and answering questions together. Learning is an active process, and it requires engagement - on my part and yours. I promise to create an interactive and collaborative classroom space, and in return I expect you to attend and engage in the activities when safe for you to do so. To protect one another, if you are sick, please do not come to class. If

your symptoms do not allow you to attend class, stay home (except to go to the health center), rest, and take care of yourself. You can find more [guidelines from the Center for Disease Control](#) for precautions when sick which cover flu, COVID and other illnesses.

I expect you to communicate with me directly about your absences. I can support you to keep up with class if you are out for an illness, but I need you to take responsibility for being transparent and clear in letting me know when you are out and why. Although I can work with you on keeping up, you may miss some course content and extended absences may impact your ability to realize your full potential in this class. For extended absences (more than a couple of days of classes), you should contact the Dean of Students who can assist with reaching out to your faculty.

Bias-Related Incidents.

*We are here to listen, to learn, to teach, to debate, to change, to grow. We should all be safe to pursue these goals at SUNY Geneseo while being who we are. Together, we commit ourselves to pluralism, cultivating a community that respects difference and promotes a sense of inclusion and belonging.*

As this excerpt from our Community Commitment to Diversity, Equity, and Inclusion states, here at SUNY Geneseo, we want to provide a space where everyone feels welcome to learn and grow in their identities as well as in their role as students, faculty, and staff. If in the unfortunate instance you witness or experience an incident of bias, we encourage you to reach out to the [Chief Diversity Officer](#), [Director of Multicultural Affairs](#), and/or our University Police Department. You may also choose to report it through the [bias-related incident reporting form](#). In trying to create an environment that facilitates growth through diverse thoughts and ideas, reporting incidents of bias - including threats, vandalism, and microaggressive behaviors - can help bring a better understanding of our campus climate as well as provide opportunities for learning and restoring harm. Hateful speech or actions will not be ignored in our class.

Everyone has the right to be addressed by the name and pronouns that correspond to their gender identity, including non-binary pronouns, for example: they/them/theirs, etc. Rosters do not list gender or pronouns so you may be asked if you would like to voluntarily indicate the pronouns you use so that I don't make assumptions based on your name and/or appearance/self-presentation (you are not obligated to do so). If you use a chosen name other than what is in KnightWeb, please let me know. Chosen names and pronouns are to be respected at all times in the classroom. Mistakes in addressing one another may happen, so I encourage an environment of openness to correction and learning. We will not however, tolerate repeated comments which disrespect or antagonize students who have indicated pronouns or a chosen name. Chosen name and personal pronouns may evolve over time, so if at any point during our time together you would like to be addressed differently, please let me know.

All-Gender Restroom Access. The nearest all-gender restroom to our classroom is ISC 116.

Student Well-Being is a priority in this class, to support the achievement of academic goals and alleviate stress. Prioritizing well-being can support the achievement of academic goals and alleviate stress. Eating nutritious foods, getting enough sleep, exercising, avoiding drugs and alcohol,

maintaining healthy relationships, and building in time to relax all help promote a healthy lifestyle and general well-being. Your health and wellbeing are foundational to your ability to learn, and if you find that you are feeling unwell (physically or mentally) and it is impacting your ability to complete your coursework, please reach out. In a similar way, I will occasionally ask for some patience and flexibility on your part.

To foster a sense of belonging and connection, a state of financial, mental, emotional and physical stability must be achieved. If you are facing food insecurity, displacement, an emergency, crisis, or health-related or medical expense, you are not alone. Concerns about academic performance, health situations, family health and wellness (including the loss of a loved one), interpersonal relationships and commitments, and other factors can contribute to stress. Students are strongly encouraged to communicate their needs to faculty and staff and seek support if they are experiencing unmanageable stress or are having difficulties with daily functioning. The Dean of Students (585-245-5706) can assist and provide direction to [appropriate campus resources](#). For more information, visit the [Dean of Students Office website](#).

Mental Health Resources. We experience a range of challenges that can impact mental health and thus impact learning; common examples include increased anxiety, shifts in mood, strained relationships, difficulties related to substance use, trouble concentrating, and lack of motivation, among many others. These experiences may reduce your ability to participate fully in daily activities and affect your academic performance. If you or a friend are feeling suicidal, are in mental health crisis, or need someone to talk to, call or text 988. This lifeline provides 24/7, confidential support to people in mental-health related distress.

SUNY Geneseo offers free, confidential counseling for students through Student Health and Counseling, and seeking support for your mental health can be key to your success at college. You can learn more about the [various mental health services available on campus online](#). To request a counseling appointment, please [complete the online form](#).

Parents. Students who are parenting will be supported in this class. I ask that all students work with me to create a welcoming environment that is respectful to all forms of diversity, including diversity in parenting status. All exclusively breastfeeding and early infancy babies are welcome in our class sessions as often as is necessary. For older children and babies, I understand that unforeseen disruptions in childcare and pandemic-related changes often put parents in the position of having to miss class to care for a child. While not a long-term childcare solution, occasionally bringing a child to class to cover gaps in childcare is perfectly acceptable. If babies and children come to class, I ask that you be mindful to avoid disrupting learning for other students. Finally, I understand that often the largest barrier to completing your coursework as a parent is the tiredness many parents feel. While I maintain the same high expectations for all students in my classes regardless of parenting status, I am happy to problem-solve with you in a way that makes you feel supported as you strive for school-parenting balance.

Food Security for SUNY Geneseo Students. There are resources available for students who are food insecure. If you're unfamiliar with the phrase "food insecurity," you can learn more at the following link on Feeding America's website: [Understanding Food Insecurity](#).

[The Pantry at Geneseo](#), our on-campus food pantry, works in partnership with the Geneseo-Groveland Emergency Food Pantry (GGEFP) and is facilitated by interns and volunteers working out of the Office of Student Volunteerism and Community Engagement as well as the School of Business, and the GOLD Leadership and Student Athlete Mentors programs. Any student who is food insecure [can submit a request here](#), to receive a bag of food that will provide them with items that will last a few days, including nonperishables and when available fresh fruits, vegetables, meat, and dairy. Once submitted, interns will connect directly with the student to communicate next steps and the time of your pick up. Pickups will take place in the MacVittie College Union, Room 114 - the GOLD Leadership Center. This program will provide individuals with a bag of food up to once a month. We will do our utmost to ensure anonymity, while also working to destigmatize food insecurity in our community. Students are also able to access the [Geneseo-Groveland Emergency Food Pantry](#) on their own if that is their preference. It is located at 31 Center St. and is open Tuesdays and Thursdays 10 AM - 2 PM and Wednesdays 4 - 6:30 PM. If you have any questions about this process or anything relating to food insecurity, or have a need beyond what is outlined above, please refer to our website or contact us [directly by email](#) or phone at 585-245-5893 or the Dean of Students at 585-245-5706.

Emergency Funding. The college has three sources of emergency funding for students experiencing short-term financial crises. The [Camiolo Student Emergency Loan Fund \(SELF\)](#) provides short-term loans to students for situations both temporary and beyond their control. The SELF was established with the expectation that students who use the fund seek to “pay it forward” as soon as they are able by contributing to the fund so other students can be helped, too. While there is not a legal obligation, the donors hope that student loan recipients respect and honor the value of community and helping others in their time of crisis. The [One Knight Student Aid Emergency Fund](#) assists Geneseo students who are facing financial emergencies mainly related to the COVID-19 pandemic. The fund offers grants (one-time award) depending on a student's documented financial need. For those students expecting a refund from financial aid, a Temple Hill loan of up to \$500 can be offered prior to the approved loan dispersal. If you are experiencing financial hardship, please contact the Dean of Students (585-245-5706), who can assist and provide direction to appropriate campus resources.

US Election Day. Tuesday, November 5<sup>th</sup> is Election Day in the US. Visit [vote.gov](https://www.vote.gov) to register and for further information.

Diversity and Equity. It is my intent to create a learning environment that supports all students. I believe the diversity that you bring to this class should be viewed as a resource, strength, and benefit. I strive to present materials and activities that are respectful of gender identity, sexuality, disability, age, socioeconomic status, ethnicity, race, nationality, religion, and culture. Your suggestions are encouraged to improve the course's effectiveness personally, or for other students or student groups. I recognize that this feedback may not be easy to give. I will listen to feedback in whatever form it is given and work to be mindful of my own power and privilege. For ideas, questions, or concerns related to diversity, equity, and inclusion in the Biology Department, please reach out to [bio-diversity@geneseo.edu](mailto:bio-diversity@geneseo.edu).

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# BIOL 384: COMMUNICATING SCIENCE

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## SCHEDULE

### Week 1: Communicating Science

Aug. 26	Welcome to Communicating Science	
Aug. 28	The Scientific Method	<i>Schimel Ch. 1</i>
Aug. 30	Perceptions of Scientists	
	Due: Introductions	

### Week 2: The Audience

Sept. 2	<i>Labor Day, No Classes</i>	
Sept. 4	Knowing Our Audience	<i>Schimel Ch. 20</i>
Sept. 6	Meet Them Where They Are	<i>Medin et al. 2014, Point of View</i>
	Due: Check In 1	

### Week 3: Story

Sept. 9	Story	<i>Schimel Ch. 2-3</i>
Sept. 11	Narrative	<i>Braiding Sweetgrass: Asters &amp; Goldenrod</i>
	Due: Semester Topic Proposal, Avoiding Plagiarism Tutorial	
Sept. 13	Storyboarding	<i>Schimel Ch. 4</i>

### Week 4: Writing & Rewriting

Sept. 16	References & Reference Management	
Sept. 18	Science Writing	<i>Freeling et al. 2019, PNAS</i>
	<i>Bring an Example Scientific Paper</i>	
Sept. 20	Revision, Concision, & Critique	<i>Schimel Ch. 16</i>
	Due: Three Annotated References for Mini-Paper; Check In 2	

### Week 5: Writing & Rewriting

Sept. 23	Titles, Openings, & Jargon	<i>Schimel Ch. 5</i>
Sept. 25	Challenge & Action	<i>Schimel Ch. 6 &amp; 7</i>

Sept. 27      The Resolution      *Schimel Ch. 8 & 9*  
Due: Mini-Paper Intro

Week 6: **Ethics, Risk, & Science-Informed Policy**

Sept. 30      Ethics in Science Writing      *West & Bergstrom 2021, PNAS; Plagiarism*  
Oct. 2      Distilling, Not Dumbing Down      *Scientific Names, Yong 2023*  
Oct. 4      Communicating Risk & Uncertainty      *Schimel Ch. 18*  
Due: Check In 3

Week 7: **Science News**

Oct. 7      Science Journalism  
*Guest Speaker: Monique Patenaude, Executive Director of  
Content Strategy & Media Relations for SUNY Geneseo*  
Oct. 9      The Same Old Story      *Dr. Bouman & The Black Hole*  
Oct. 11      Critical Media Consumption      *Osborne et al. 2022*  
Due: Mini-Paper

Week 8: **Equity in Science Communication**

Oct. 14      *Fall Break – No Classes*  
Oct. 16      Open Access      *Paywall (Film)*  
*Guest Speakers: Sherry Larson-Rhodes & Max Sparkman,  
Research Instruction Librarians*  
Oct. 18      Racism & Pseudoscience      *Superior Chapters*  
Due: Mini-Paper Peer Reviews

Week 9: **Digital Media**

Oct. 21      Social Media & Science Communication      *Chou et al. 2020*  
Oct. 23      Apps & Games  
Oct. 25      Risk Sciences & Science Consulting  
*Guest Speaker: Wasfia Hoque*  
Due: Scientist Spotlight Post, Check In 4

Week 10: **Data Visualization**

Oct. 28      The Power of Visualization      [BioRender Data Visualization Talk](#)  
Oct. 30      Infographics  
*Bring an Example Infographic*

Nov. 1 Figure Building, *Download/Update R & R Studio Before Class*  
Due: Revised Mini-Paper

Week 11: **Communication, Controversy, & Crisis**

Nov. 4 Climate Change *Climate Emergency Ripple et al.*  
Nov. 6 Climate Change in the News  
Nov. 8 Discussion: Communication & Crisis *Climate Change Talks*  
Due: Infographic, Check In 5

Week 12: **Presentations**

Nov. 11 Public Speaking & Elevator Pitch, *Bring Seminar Reflection to Class*  
Nov. 13 Performance Workshop  
Nov. 15 Elevator Pitches  
Due: Elevator Pitch & Reflection

Week 13: **SciComm Beyond**

Nov. 18 Documentaries *Our Planet; Jones et al. 2019*  
Nov. 20 Science for Young Audiences *Frontiers for Young Minds Article*  
Nov. 22 Unconventional Avenues for Science Communication  
Due: Project Updates

Week 14: **Talk Preparation**

Nov. 25 Preparing for Our Final: Giving Your Best Presentations  
Nov. 27–29 *Thanksgiving Break – No Classes*

Week 15: **Science Fiction & Science Communication**

Dec. 2 Science Fiction as Science Communication *GATTACA (Film)*  
Dec. 4 Science-Inspired Poetry; Optional: Presentation Draft  
Dec. 6 Discussion: SciFi/CliFi as Communication Mechanisms  
Due: SciFi/CliFi Response, Check In 6

Week 16: **The Resolution**

Dec. 9 Reflection: Communicating Science *Schimel Ch. 21*  
Dec. 16 Project Presentations, 8:00 – 11:00 am  
Due: Final Talk Slides; Final Projects by 7 am  
Due: Final Talk Peer Reviews by 5 pm