

BIOL 4114 Scientific Communication I Fall 2023

Meeting time: Wednesday 12:20 – 1:15 PM

Meeting classroom: WT Brookshire Hall, room 00133

Instructor: Tanya Brown, Ph.D., Assistant Professor of Biology

Office: HPR 103

Office Hours: Wednesday 10:00 AM – 12:00 PM, 2-3 PM or by appointment.

Email: tanyabrown@uttyler.edu

Phone: 903.566.5812

Course Description: Current topics in biology. Reports on research published in professional journals. Oral presentation required.

In this course, I want you to learn how to use online resources to find primary research articles on a science topic of your choice and then be able to effectively communicate this scientific research to the general public. You will also give feedback to another member of the class on their written communication. We will focus on written communication and oral communication geared toward the general public.

Scientific Communication II (Spring semester) will focus on communicating research to peers/scientists.

Course Learning Objectives: By the end of the course, students should be able to:

- Search and retrieve peer-reviewed research articles.
- Comprehend and summarize peer-reviewed research articles
- Conduct a peer review of an article written by you peer
- Formulate intelligent questions when presented scientific research.
- Effectively communicate peer-reviewed research to the public.

Required Course Materials: No required textbook.

Grading: Your grade will be based on four assignments and attendance. The grade distribution is:

Assignment 1 = 20%

Assignment 2 = 20%

Assignment 3 = 10%

Assignment 4 = 20%

Assignment 5 = 20%

Attendance = 10%

Total 100%

****All late assignments will incur a 10% per day penalty.****

Grading	
Percentage	Grade

90-100%	A
80-90%	B
70-79%	C
60-69%	D

< 59%	F
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Assignment 1: DUE Sept. 24th 11:59 PM. Pick a topic in the field of Ecology and/or Evolution and find and download **three** peer-reviewed research articles. At least one of the articles must have been published in the past three years (2021-2024). Write a brief summary (250-300 words) on your topic that includes why you are interested in the topic and how each of your chosen articles relate to that topic. Please include in-text citations as well as a References or Works Cited section. Submit your summary and research articles (as **FOUR** PDFs) via Canvas. This will be your podcast topic, therefore, make sure you are interested in the topic.

How do I select a good topic? I suggest you visit a couple of the major journal websites and read recent titles/abstracts and see if one of them sounds interesting. Here are a few of my favorite journals:

Science (<https://science.sciencemag.org/>),
Nature (<https://www.nature.com/nature/research>),
Evolution (<https://onlinelibrary.wiley.com/journal/15585646>),
Ecology (<https://esajournals.onlinelibrary.wiley.com/journal/19399170>),
BMC Biology (<https://bmcbiol.biomedcentral.com>),
Molecular Biology and Evolution (<https://academic.oup.com/mbe>).

Assignment 2: DUE Oct. 8th 11:59 PM. Write a “news” article on your most recently published article from assignment 1. This “news” article (500-700 words) should relate the significance of the results to the general public. It should be formatted to appear like a news article and include at least one image or figure. Here are some questions to consider: What are the broader implications of this research to the public? How does this article further our knowledge in its research field?

Assignment 3: DUE Oct 22nd 11:59PM. Peer Review of a classmates news article. You will review a classmates news article using a rubric found on canvas. These reviews will be sent back to the writer to help them prepare for the Podcast.

Assignment 4: DUE Nov. 7th 11:59 PM. First Podcast due. This will be the first part of the overall assignment. Each pair of students will be assessed on their performance as a 1) host (interviewer) and 2) expert guest (interviewee). I will assign groups and the order you will perform each role will be based on your last name. The person with the last name that appears first alphabetically will host the first podcast and then will be the “expert” in the second podcast due Nov. 28th. The host will introduce the expert guest and ask questions. The expert guest will present and answer questions on their topic and research articles from Assignments 1.

There are several ways to record your podcasts. Students can use Zoom to record the podcast if

they want to be able to show a figure or simply a cover slide (you are NOT required to appear in the Zoom video). I will discuss other software that you can use to create and improve your podcast as well as specific elements important to a podcast in lecture. Regardless of the recording method, you will upload your completed podcasts to Canvas under the respective assignment.

Assignment 5: DUE Dec 3rd 11:59 PM. Part two of the podcast project.

Attendance: Attendance is worth 10% of your grade. You may miss **ONE** lecture without losing points. Attendance will be checked during each class meeting. I am required to provide attendance data for Financial Aid, midterm, and final grades submissions; therefore, it is critical that you attend our class meetings. If you cannot attend for reasons of Illness or other acceptable situations, please contact me to determine the best course of action.

Artificial Intelligence (AI)

AI will not be used in this class. To best support your learning, you must complete all graded assignments by yourself to assist in your learning. This exclusion of other resources to help complete assignments includes artificial intelligence (AI). Refrain from using AI tools to generate any course context (e.g., text, video, audio, images, etc) for an assignment or classroom assignment.

Tentative Course Schedule

Day	Topic
Aug. 28 th	Introduction to course – Overview of Literature
Sept. 4 th	* Dr. Glavy – “Types of Talks & Strategies: Seminars, conferences, job, and elevator talks”
Sept. 11 th	* Dr. Glavy – Research talk: “Early design of Microscopes”
Sept. 18 th	Literature Comprehension/ Searching
Sept. 25 th	Choosing an audience and peer review/ meet your partner
Oct. 2 nd	How to effectively communicate to the public - writing
Oct. 9 th	How to effectively communicate to the public - verbal
Oct. 16 th	Podcasts / meet with your partner
Oct. 23 rd	Podcast tips
Oct. 30 th	*Career Success Coach – Job/Internship search strategies & Resume writing
Nov. 6 th	Podcasts / meet with your partner
Nov. 13 th	*Biotech program overview/ Formulating thought provoking questions
Nov. 20 th	Sci Comm and social media / meet with your partner
Nov. 27 th	<i>No Classes</i> – Thanksgiving Holiday
Dec. 4 th	Improve!

Census Date: September 9th.

According to the UT Tyler Handbook of Operating Procedures: "The information contained in the course syllabus, other than the grading criteria and absence and make- up policies, may be subject to change with reasonable advance notice as long as the change is without prejudice to the students."

Student Resources

Resources to assist you in this course

- [UT Tyler Student Accessibility and Resource \(SAR\) Office](#) (provides needed accommodations to students with document needs related to access and learning)
- [UT Tyler Writing Center](#)
- [The Mathematics Learning Center](#)

- [UT Tyler PASS Tutoring Center](#)
- [UT Tyler Supplemental Instruction](#)
- [Upswing \(24/7 online tutoring\) - covers nearly all undergraduate course areas.](#)
- [Robert Muntz Library Links to an external site.](#) and [Library Liaison](#)
- [Canvas 101](#) (learn to use Canvas, proctoring, Turn It In and other software)
- LIB 422 -- Computer Lab where students can take a proctored exam
- [The Career Success Center](#)
- [UT Tyler Testing Center](#)
- [Office of Research & Scholarship Design and Data Analysis Lab](#)

Resources available to UT Tyler Students

- [UT Tyler Counseling Center](#) (available to all students)
- [My SSP App](#) (24/7 access to Student Support Program counseling through phone or chat and online wellness resources available in a variety of languages)
- [Student Assistance and Advocacy Center](#)
- [Military and Veterans Success Center](#) (supports for all of our military-affiliated students)
- [UT Tyler Patriot Food Pantry](#)
- [UT Tyler Financial Aid and Scholarships](#)
- [UT Tyler Registrar's Office](#)
- [Office of International Programs](#)
- [Title IX Reporting](#)
- [Patriots Engage](#) (available to all students. Get engaged at UT Tyler.)

University Policies and Information

- **Withdrawing from Class** - Students, you are allowed to [withdraw](#) (drop) from this course through the [Withdrawal Portal](#). Withdrawing from classes can impact Financial Aid, Scholarships, Veteran Benefits, Exemptions, Waivers, International Student Status, housing, and degree progress. Please read this page, speak with your instructors, consider your options, and speak with your instructor. UT Tyler faculty and staff are here for our students and often can provide additional support options or student assistance. Please read the implications for withdrawing from a course and the instructions on using the Withdrawal portal on the [Registrar's Withdrawal page](#).

Texas law prohibits students who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. This includes courses dropped at other 2-year or 4-year Texas public colleges and universities. Consider the impact withdrawing from this class has on your academic progress and other areas, such as financial implications. We encourage you to consult your advisor(s) and financial aid for additional guidance. CAUTION #1: Withdrawing before census day does not mean you get a full refund. Please see the [Tuition and Fee Refund Schedule](#) CAUTION #2: All international students must check with the [Office of International Programs](#) before withdrawing. All international students are required to enroll full-time for fall and spring terms. CAUTION #3: All UT Tyler Athletes must check with the Athletic Academic Coordinator before withdrawing from a course. CAUTION #4: All veterans or military-affiliated students should consult with the [Military and Veterans Success Center](#).

- **Final Exam Policy**: Final examinations are administered as scheduled. If unusual circumstances require that special arrangements be made for an individual student or class, the Dean of the appropriate college, after consultation with the faculty member involved, may authorize an exception to the schedule. Faculty members must maintain student final examination papers for a minimum of three months following the examination date.
- **Incomplete Grade Policy**: If a student, because of extenuating circumstances, is unable to complete all of the requirements for a course by the end of the semester, then the instructor may recommend an Incomplete (I) for the course. The "I" may be assigned in place of a grade only when all of the following conditions are met: (a) the student has been making satisfactory progress in the course; (b) the student is unable to complete all coursework or final exam due to unusual circumstances that are beyond personal control and are acceptable to the instructor, and (c) the student presents these reasons before the time that the final grade roster is due. The semester credit hours for an Incomplete will not be used to calculate the grade point average. The student and the instructor must submit an Incomplete Form detailing the work required and the time by which the work must be completed to their respective department chair or college dean for approval. The time limit established must not exceed one year. Should the student fail to meet all of the work for the course within the time limit, then the instructor may assign zeros to the unfinished work, compute the course average for the student, and assign the appropriate grade. If a grade has yet to be assigned within one year, then the Incomplete will be changed to

an F, or NC. If the course was initially taken under the CR/NC grading basis, this may adversely affect the student's academic standing.

- **Grade Appeal Policy:** - Disputes regarding grades must be initiated within sixty (60) days from the date of receiving the final course grade by filing a Grade Appeal Form with the instructor who assigned the grade; this is separate from the Application for Appeal form submitted to the Student Appeals Committee, which does not rule on grade disputes as described in this policy. If the student is not satisfied with the decision, the student may appeal in writing to the Chairperson of the department from which the grade was issued. In situations where there is an allegation of capricious grading, discrimination, or unlawful actions, appeals may go beyond the Chairperson to the Dean of the college from which the grade was issued, with that decision being final. The Grade Appeal form is found in the [Registrar's Form Library](#).

Disability/Accessibility Services: In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA), the University of Texas at Tyler offers accommodations to students with learning, physical, and/or psychological disabilities. If you have a disability, including a non-visible diagnosis such as a learning disorder, chronic illness, TBI, PTSD, ADHD, or a history of modifications or accommodations in a previous educational environment, you are encouraged to visit <https://hood.accessiblelearning.com/UTTyler> and fill out the New Student application. The Student Accessibility and Resources (SAR) office will contact you when your application has been submitted and an appointment with the Assistant Director Student Accessibility and Resources/ADA Coordinator. For more information, including filling out an application for services, please visit the SAR webpage at <https://www.uttyler.edu/disability-services>, the SAR office located in the University Center, # 3150, or call 903.566.7079."

Military Affiliated Students: UT Tyler honors the service and sacrifices of our military-affiliated students. If you are a student who is a veteran, on active duty, in the reserves or National Guard, or a military spouse or dependent, please stay in contact with your faculty member if any aspect of your present or prior service or family situation makes it difficult for you to fulfill the requirements of a course or creates disruption in your academic progress. It is important to make your faculty member aware of any complications as far in advance as possible. Your faculty member is willing to work with you and, if needed, put you in contact with university staff who are trained to assist you. The [Military and Veterans Success Center \(MVSC\)](#) has campus resources for military-affiliated students. The MVSC can be reached at MVSC@uttyler.edu or via phone at 903.565.5972.

- **Academic Honesty and Academic Misconduct:** The UT Tyler community comes together to pledge that "Honor and integrity will not allow me to lie, cheat, or steal, nor to accept the actions of those who do." Therefore, we enforce the [Student Conduct and Discipline policy](#) in the Student Manual Of Operating Procedures (Section 8).

FERPA - UT Tyler follows the Family Educational Rights and Privacy Act (FERPA) as noted in [University Policy 5.2.3](#). The course instructor will follow all requirements to protect your confidential information.

- **Absence for Official University Events or Activities:** This course follows the practices related to approved absences as noted by the Student Manual of Operating Procedures ([Sec. 1 - 501](#)).
- **Absence for Religious Holidays:** This course follows the practices related to [Excused Absences for Religious Holy Days as noted in the Catalog](#).
- **Campus Carry:** We respect the right and privacy of students who are duly licensed to carry concealed weapons in this class. License holders are expected to behave responsibly and keep a handgun secure and concealed. More information is available at <http://www.uttyler.edu/about/campus-carry/index.php>.