BIOL 4114 Scientific Communication I Fall 2022

Meeting time: Wednesday 12:20 – 1:15 PM  
Meeting classroom: Stewart Hall, Room 00127

Instructor: Matthew Greenwold, Ph.D., Assistant Professor of Biology  
Office: HPR 117  
Office Hours: Mon/Fri 9:30 AM – 11:00 AM or by appointment.  
Email: mgreenwold@uttyler.edu  
Phone: 903.566.6303

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. We will focus on written communication (including social media – twitter) and oral communication geared toward the general public.

Scientific Communication II (next 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
- 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:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percentage</th>
<th>Grade</th>
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<tbody>
<tr>
<td>Assignment 1</td>
<td>20%</td>
<td>90-100%</td>
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<tr>
<td>Assignment 2</td>
<td>20%</td>
<td>80-90%</td>
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<tr>
<td>Assignment 3</td>
<td>25%</td>
<td>70-79%</td>
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<tr>
<td>Assignment 4</td>
<td>25%</td>
<td>60-69%</td>
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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
Assignment 1: DUE Sept. 19th 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 (2020-2022). Write a brief summary (250-300 words) on your topic and how your chosen articles relate to that topic. Submit your summary and the research articles (as 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)
- BMC Biology (https://bmcbiol.biomedcentral.com)
- Molecular Biology and Evolution (https://academic.oup.com/mbb)

Assignment 2: DUE Oct. 10th 11:59 PM. Write a “news” article and a “tweet” 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. The “tweet” (< 200 characters) should be a simple statement to engage the public. 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 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 the 1) host and interviewer and 2) as the expert in their field or 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. 22nd. The interviewer or host will introduce the guest expert and ask questions. The guest expert will present and answer questions on their topic and research articles from Assignments 1 and 2.

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 Zoom video). Another way is to use the Canvas podcast feature. You will upload your completed podcasts to Canvas. I will discuss other software that you can use to improve your podcast as well as the specific elements important to a podcast in lecture.

Assignment 4: DUE Nov 28th 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.

Tentative Course Schedule
<table>
<thead>
<tr>
<th>Day</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Aug. 24&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Introduction to course – Overview of Literature</td>
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<tr>
<td>Aug. 31&lt;sup&gt;st&lt;/sup&gt;</td>
<td>Ms. Christine Forisha – “Online Literature Searches”</td>
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<tr>
<td>Sept. 7&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Dr. Joseph Glavy – “Introduction to the Nuclear Pore”</td>
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<tr>
<td>Sept. 14&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Literature comprehension</td>
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<tr>
<td>Sept. 21&lt;sup&gt;st&lt;/sup&gt;</td>
<td>Literature comprehension / meet your partner</td>
</tr>
<tr>
<td>Sept. 28&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Who is your audience?</td>
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<tr>
<td>Oct. 5&lt;sup&gt;th&lt;/sup&gt;</td>
<td>How to effectively communicate to the public - writing</td>
</tr>
<tr>
<td>Oct. 12&lt;sup&gt;th&lt;/sup&gt;</td>
<td>How to effectively communicate to the public - verbal</td>
</tr>
<tr>
<td>Oct. 19&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Podcasts / meet with your partner</td>
</tr>
<tr>
<td>Oct. 26&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Career Success Coach – Job searching / building a social media brand</td>
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<tr>
<td>Nov. 2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>Podcast tips / meet with your partner</td>
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<tr>
<td>Nov. 9&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Formulating thought provoking questions</td>
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<tr>
<td>Nov. 16&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Sci Comm and social media / meet with your partner</td>
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<tr>
<td>Nov. 23&lt;sup&gt;th&lt;/sup&gt;</td>
<td>No Classes – Thanksgiving Holiday</td>
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<tr>
<td>Nov. 30&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Scientific communication after a pandemic</td>
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Census Date: September 2<sup>nd</sup>.

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."

**University Policies and Information**

- **Withdrawing from Class** - Students you are allowed to withdraw (drop) from this course through the University’s Withdrawal Portal. 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. Make sure to consider the impact withdrawing from this class has on your academic progress as well as the 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.

- **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 are required to 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 lieu 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 course work 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 prior to 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 for a student. 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 complete 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 not been assigned within one year, then the Incomplete will be changed to an F, or to NC if the course was originally taken under the CR/NC grading basis.

Grade Appeal Policy: UT Tyler's Grade Appeal policy requires the completion of a Grade Appeal form for this action to take place. The grade appeal begins with the instructor of your course. If you do not agree with the decision of the instructor, you may then move your appeal to the department chair/school director for that course. If you are still dissatisfied with the decision of the chair/director, you may move the appeal to the Dean of the College offering that course who has the final decision. Grade appeals must be initiated within sixty (60) days from the date of receiving the final course grade. The Grade Appeal form is found on the Registrar's Form Library.

Disability/Accessibility Services: The University of Texas at Tyler has a continuing commitment to providing reasonable accommodations for students with documented disabilities. Students with disabilities who may need accommodation(s) in order to fully participate in this class are urged to contact the Student Accessibility and Resources Office (SAR) as soon as possible to explore what arrangements need to be made to ensure access. If you have a disability, you are encouraged to visit the SAR Portal (https://hood.accessiblelearning.com/UTTyler/) and complete the New Student Application. For more information, please visit the SAR webpage 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 me 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 me aware of any complications as far in advance as possible. I am willing to work with you and, if needed, put you in contact with university staff who are trained to assist you. Campus resources for military affiliated students are in the Military and Veterans Success Center (MVSC). 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 in protecting your confidential information.
• **COVID Guidance:** It is important to take the necessary precautions to ensure a healthy and successful year. UT Tyler continues to urge you to protect yourselves against the flu, COVID and any new threats that may be developing. Be diligent about preventive measures such as washing hands, covering sneezes/coughs, social distancing and vaccinations, which have proven to be successful in slowing the spread of viruses. Encourage those who don’t feel well to stay home, and if they show symptoms, ask them to get tested for the flu or COVID. Self-isolation is important to reduce exposure ([CDC quarantine/isolation guidelines](https://www.cdc.gov)). Please work with your faculty members to maintain coursework and please consult [existing campus resources](https://www.utttyler.edu/about/campus-resources) for support.

• **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](https://www.utttyler.edu/about/student-manual))

• **Absence for Religious Holidays:** Students who anticipate being absent from class due to a religious holiday are requested to inform the instructor by the second class meeting of the semester.

• **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.utttyler.edu/about/campus-carry/index.php](http://www.utttyler.edu/about/campus-carry/index.php).

### Student Resources

**Resources to assist you in this course**

- [UT Tyler Student Accessibility and Resource (SAR) Office](https://www.utttyler.edu/about/sar-office) (provides needed accommodations to students with document needs related to access and learning)
- [UT Tyler Writing Center](https://www.utttyler.edu/about/writing-center)
- [The Mathematics Learning Center](https://www.utttyler.edu/about/math-learning-center)
- [UT Tyler PASS Tutoring Center](https://www.utttyler.edu/about/pass-tutoring)
- [UT Tyler Supplemental Instruction](https://www.utttyler.edu/about/si)
- [Upswing (24/7 online tutoring) - covers nearly all undergraduate course areas](http://www.utttyler.edu/about/upswing)
- [Robert Muntz Library](https://www.utttyler.edu/about/library) and [Library Liaison](https://www.utttyler.edu/about/library-liaison)
- [Canvas 101](https://www.utttyler.edu/about/Canvas101) (learn to use Canvas, proctoring, Unicheck, and other software)
- [Digital Support Toolkit](https://www.utttyler.edu/about/digital-support-toolkit) (for supported courses only. Students are automatically enrolled in the toolkit for supported courses)
- [LIB 422 -- Computer Lab](https://www.utttyler.edu/about/lib-422) where students can take a proctored exam
- [The Career Success Center](https://www.utttyler.edu/about/career-success-center)
- [UT Tyler Testing Center](https://www.utttyler.edu/about/testing-center)
- [Office of Research & Scholarship Design and Data Analysis Lab](https://www.utttyler.edu/about/office-of-research-scholarship-design)

**Resources available to UT Tyler Students**

- [UT Tyler Counseling Center](https://www.utttyler.edu/about/counseling-center) (available to all students)
- [TAO Online Support Center](https://www.utttyler.edu/about/tao-support-center) (online self-help modules related to mental & emotional health)
- [Military and Veterans Success Center](https://www.utttyler.edu/about/military-success-center) (supports for all of our military affiliated students)
- [UT Tyler Patriot Food Pantry](https://www.utttyler.edu/about/patriot-food-pantry)
- [UT Tyler Financial Aid and Scholarships](https://www.utttyler.edu/about/financial-aid)
- [UT Tyler Registrar’s Office](https://www.utttyler.edu/about/registrar-office)
- [Office of International Programs](https://www.utttyler.edu/about/international-programs)
- [Title IX Reporting](https://www.utttyler.edu/about/title-ix)
- [Patriots Engage](https://www.utttyler.edu/about/patriots-engage) (available to all students. Get engaged at UT Tyler.)