

BIOL 6301-029

Writing science (plant ecophysiology): How to write papers that
get cited and proposals that get funded
Spring 2024

1 Course Description

This course focuses on the approaches to writing papers and proposals in the field of plant ecophysiology. The course will be guided by the book "Writing science: How to write papers that get cited and proposals that get funded" by Josh Schimel (see below). The course will involve reading discussions of book chapters as well as writing assignments. The writing done should be for papers or proposals that the students are actively working on and, as such, the course is designed for advanced plant ecophysiology graduate students.

2 Expected Learning Outcomes and Objectives

Upon completion of this class, students are expected to be able to:

- (1) Understand and discuss best practices for writing papers and proposals in plant ecophysiology
- (2) Demonstrate effective writing of scientific ideas and results

2.1 Class Time and Location

Day and time: Mondays 4:00-5:20 PM, Fridays 1:00-2:20 PM

Experimental Sciences Building II (ESB II) first floor conference room.

2.2 Instructor

Dr. Nick Smith

ESB II Room 402D

806-834-7363

nick.smith@ttu.edu

Meetings by appointment

2.3 Recommended Texts

"Writing science: How to write papers that get cited and proposals that get funded" by Schimel (2012)

3 Mode of Instruction

All instruction will be done face-to-face.

4 Course Materials

All course materials, including lecture slides, readings, activities, and code will be posted to a GitHub repository for the course. The primary repository address is https://github.com/SmithEcophysLab/biol6301_writing_spring2024.

5 Attendance Policy

Attendance is strongly recommended. Course assessments will be done during class (see below).

6 Course Assessment

6.1 *Participation and engagement*

Being an active and engaged participant in the class will benefit your understanding of material as well as your peers'. Examples include asking questions, providing feedback, and facilitating discussion. Participation and engagement of each student will be monitored during each class period.

6.2 *Chapter discussion lead*

Each student will be asked to lead the discussion of one chapter during the semester.

6.3 *Writing assignments and peer evaluation*

On most weeks, students will complete and turn in a writing assignments. Assignments will be done to build towards a completed manuscript or proposal. Often, students will evaluate the writing of their peers each week.

7 Grading

Participation and Engagement: 40%

Chapter discussion lead: 10%

Writing assignments and peer evaluation: 50%

8 Grading Scale

A: $\geq 90\%$

B: 80 – 90%

C: 70 – 80%

D: 60 – 70%

F: \leq 59.9%

9 Missing In-class Activities

Students will be required to be in class to receive in-class activity points. Please contact Dr. Smith if you plan to miss class for a university function *prior to class*. If class is missed due to an illness, please let Dr. Smith know as soon as possible.

9.1 Illness Based Absence Policy

If at any time during this semester you feel ill, in the interest of your own health and safety as well as the health and safety of your instructors and classmates, you are encouraged not to attend face-to-face class meetings or events. Please review the steps outlined below that you should follow to ensure your absence for illness will be excused. These steps also apply to not participating in synchronous online class meetings if you feel too ill to do so and missing specified assignment due dates in asynchronous online classes because of illness. If you are ill and think the symptoms might be COVID-19-related:

- Call Student Health Services at 806.743.2848 or your health care provider. After hours and on weekends contact TTU COVID-19 Helpline at [TBA].
- Self-report as soon as possible using the Dean of Students COVID-19 webpage. This website has specific directions about how to upload documentation from a medical provider and what will happen if your illness renders you unable to participate in classes for more than one week.
- If your illness is determined to be COVID-19-related, all remaining documentation and communication will be handled through the Office of the Dean of Students, including notification of your instructors of the period of time you may be absent from and may return to classes.
- If your illness is determined not to be COVID-19-related, please follow steps below.

10 Special Considerations

Texas Tech Policies Concerning Academic Honesty, Special Accommodations for Students with Disabilities, Student Absences for Observance of Religious Holy Days, Accommodations for Pregnant Students, and other policies may be found on at this link: <https://www.depts.ttu.edu/tlpdc/RequiredSyllabusStatements.php>.

11 Creating Livable Futures

This class is part of a campus-wide initiative called Creating Livable Futures, which is sponsored in part by the Texas Tech Center for Global Communication. As such, one of our objectives is to prepare you to communicate, in a fully interdisciplinary and global way, the challenges posed by pressing issues that speak to our collective wellbeing and sustainability. You will be asked to translate and communicate the work of leading thinkers on sustainability, and to expand discussing those materials through research experience and experiential learning. These objectives will be met through discussion leads and the review paper.

Your progress in communicating about global issues will be evaluated according to the Center for Global Communication rubric, so you will be invited to participate in one or more Creating Livable Futures activities outside of class that will complement class content. Planned Creating Livable Futures activities include participating in and attending speaker events and conferences, edit-a-thons, blogging and publication opportunities, student organizations, a book club, and even small scholarship opportunities for research.

You'll be informed of relevant opportunities and activities as they arise over the course of the semester.

12 Schedule

January 12: Discuss syllabus, class goals, and class objectives

January 15: NO CLASS

January 19: Discuss Chapter 1, identify and introduce "published paper" and "short articles" that will be worked on over the course of the semester

January 22: Discuss Chapter 2, begin Exercises 2.1 and 2.2

January 26: Discuss Exercise 2.1, complete peer evaluation of Exercise 2.2

January 29: Discuss Chapter 3, begin Exercises 3.1 and 3.2

February 2: Discuss Exercises 3.1 and 3.2

February 5: Discuss Chapter 4, begin Exercises 4.1 and 4.2

February 9: Discuss Exercises 4.1 and 4.2

February 12: Discuss Chapter 5, complete Exercise 5.3, begin Exercises 5.1 and 5.2

February 16: Discuss Exercises 5.1 and 5.2

February 19: Discuss Chapter 6, begin Exercises 6.1 and 6.2

February 23: Discuss Exercises 6.1 and 6.2

February 26: Discuss Chapter 7, begin Exercises 7.1 and 7.2

March 1: Discuss Exercises 7.1 and 7.2

March 4: Discuss Chapter 8, begin Exercises 8.1 and 8.2

March 8: Discuss Exercises 8.1 and 8.2

March 11: NO CLASS

March 15: NO CLASS

March 18: Discuss Chapter 9, begin Exercises 9.1 and 9.2

March 22: Discuss Exercises 9.1 and 9.2

March 25: Discuss Chapter 10, begin Exercises 10.1 and 10.2

March 29: Discuss Exercises 10.1 and 10.2

April 1: Discuss Chapter 11, complete Exercise 11.3, begin Exercises 11.1 and 11.2

April 5: Discuss Exercises 11.1 and 11.2

April 8: Discuss Chapter 12, complete Exercise 12.3, begin Exercises 12.1 and 12.2

April 12: Discuss Exercises 12.1 and 12.2

April 15: Discuss Chapter 13, complete Exercise 13.3, begin Exercises 13.1 and 13.2

April 19: Discuss Exercises 13.1 and 13.2

April 22: Discuss Chapter 14, complete Exercise 14.3, begin Exercises 14.1 and 14.2

April 26: Discuss Exercises 14.1 and 14.2

April 29: Discuss Chapters 15-17