

ZOO 4926/ZOO 6927 – Writing Scientific Papers

Fall, 2019

1. Class Meeting Times and Location

Day/ Time: Fridays; Periods 6-7 (12:50-2:45)

Location: Weimer Hall, Room 2056

2. Instructor

Dr. James Gillooly
Department of Biology
Office: 409 Carr Hall
Office Hours: by appointment
E-mail: gillooly@ufl.edu

3. Course Goals, Structure and Expectations

A. Course Goals and Structure

This 2-credit course will focus on how to effectively communicate science in writing. We will begin by considering how to develop a scientific narrative, and relate this narrative to scientific data/content. The course will then consider the basic “rules” for presenting scientific research, and how to improve clarity, conciseness and cohesion in making scientific arguments. The course will be presented in a workshop-style format. Students will be asked to lead and contribute to discussions of readings, make brief presentations, critique the work of others, and most all, to write.

The course will include mini-lectures by the instructor, student-led presentations and discussions of assigned readings, interactive in-class exercises, and writing assignments. The overarching goal of the writing assignments is to complete a short scientific paper using your own data by the end of the semester. Completing this paper through a series of revisions will be a primary focus of the course.

B. Course Expectations.

This course will be run in a workshop-style format that requires student participation. Thus, it is imperative that students attend all class sessions, and come prepared to fully participate each week. Each week, all students are expected to participate in discussions. In addition, each student will be asked to lead 1-2 discussions over the course of the semester, and make 1 brief presentation on their own research. For the writing, students are expected to work to complete a fully-referenced scientific manuscript of at least 1500 words by the end of the semester. This paper will be written and revised in stages based on the feedback received from the instructor and other students.

4. Course Resources

a. Textbook

Writing Science: How to write papers that get cited and proposals that get funded, Joshua Schimel. Oxford University Press, 2012.

b. Course Website (e-Learning)

Class material including the syllabus, lecture slides, and other information related to the course will be posted on the course e-Learning website (<http://lss.at.ufl.edu>). The course is found under “e-Learning in Canvas”. Students are responsible for **all** announcements made in lecture and/or posted on the course website for this class. For help with e-Learning, call the UF Computing Help Desk at 352-392-4357, or visit the e-Learning support website: <https://lss.at.ufl.edu/help.shtml>.

5. Assessments and Grading

a. Grades will be determined based on the following:

Assessment	Total Point	% of Total Points
Discussion Participation and Preparation	100	25
Presentations	100	25
Scientific Paper	200	50
TOTAL	400	100.00

Minimum grade cutoffs are listed below. These cutoffs will not be raised; in other words, if you receive 90% of the possible points, you are guaranteed to earn an A grade. Final scores will NOT be rounded (i.e., 89.99% is not 90%). There will be no late research papers accepted. Attendance will be considered as part of the participation grade, except in extenuating circumstances.

Point Range (%)	Letter Grade
≥ 90.00	A
≥ 86.66	A–
≥ 83.33	B+
≥ 80.00	B
≥ 76.66	B–
≥ 73.33	C+
≥ 70.00	C
≥ 66.66	C–
≥ 63.33	D+
≥ 60.00	D
≥ 56.66	D–
< 56.66	E

Note that the current UF policy for assigning grade points is available at the following undergraduate catalog web page: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>.

6. Academic Honesty

All students registered at the University of Florida have agreed to comply with the following statement:

"I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University."

In addition, on all work submitted for credit the following pledge is either required or implied:

"On my honor I have neither given nor received unauthorized aid in doing this assignment."

If you witness any instances of academic dishonesty in this class, please notify the instructor or contact the Student Honor Court (392-1631) or Cheating Hotline (392-6999). For additional information on Academic Honesty, please refer to the University of Florida Academic Honesty Guidelines at: <https://catalog.ufl.edu/ugrad/current/advising/info/student-honor-code.aspx#honesty>.

7. Time Commitment

The UF College of Liberal Arts and Sciences assumes that each student will devote 3-4 hours per week per credit-hour to each course, including class time. As this course is 2 credits, each student should therefore expect to devote 4-6 hours per week to this course outside of class.

8. Accommodations for Students with Disabilities

Students who will require a classroom accommodation for a disability must contact the Dean of Students Office of Disability Resources, in Peabody 202 (phone: 352-392-1261). Please see the University of Florida Disability Resources website for more information at: <http://www.dso.ufl.edu/drc/>. Note that the student should provide documentation of a requirement for accommodation **by the second week of classes**. No accommodations are available to students who lack this documentation. It is the policy of the University of Florida that the student, not the instructor, is responsible for arranging accommodations when needed. Once notification is complete, the Dean of Students Office of Disability Resources will work with the instructor to accommodate the student.

9. Counseling Center

Many students experience test anxiety and other stress related problems. "[A Self Help Guide for Students](#)" as well as a diverse array of support systems are available through the UF Counseling and Wellness Center (3190 Radio Road, 392-1575, <http://www.counsel.ufl.edu/>).

10. Readings and Recommended Books

Articles:

1. "Two Minutes to Impress", *Nature*, Kwok
2. "Crafting an Elevator Pitch",
<https://sharingscience.agu.org/craft-an-elevator-pitch/>

3. "How to Write Consistently Boring Scientific Literature", *Oikos*, Sand-Jensen
4. "Writing a Clear and Engaging Paper for All Astronomers", *Nature*, Sage
5. "The Infectiousness of Pompous Prose", *Nature*, Gregory
6. "The Functional Ecology Short Guide to Scientific Writing", *Functional Ecology*
7. "The Science of Science Communication", *American Scientist*, Gopen and Swan
8. "Me Write Pretty One Day", *Journal of Cell Biology*, Wells
9. "Ten Simple Rules for Structuring Papers", Kording and Mensh
10. "How to Write a Scientific Paper", Bradshaw.
(<https://conservationbytes.com/2012/10/22/how-to-write-a-scientific-paper/>)
11. "An Editor's Advice for Writing a Good Scientific Paper", *Science*, Sacha Vignieri
(https://storify.com/mark_scheuerell/editor-s-tips-to-writing-a-good-scientific-paper)
12. "Gut Instinct", *Science*, Mervis

Recommended Books:

- 1) *Houston, We Have a Narrative*. Randy Olson, University of Chicago Press.
- 2) *Science Research Writing For Non-Native Speakers of English*. Hilary Glasman-Deal. Imperial College Press.
- 3) *Escape from the Ivory Tower: A Guide to Making Your Science Matter*. 2nd Edition. Nancy Baron.