

Scientific Writing and Presenting FOR 6934 - 3 credits

Instructor	Dr. Victoria M Donovan Email: victoria.donovan@ufl.edu Office: Rm 4918, Building 4900 Office hours: Mondays 9:00-10:00 am or by appointment
Course location/time	Room: 4903, Building 4900 Date/Time: Thursday, 12:30-3:30 pm CT
Course description	This course will guide graduate students through the process of scientific writing. Students will select a project of interest for which there is existing data. With this data, we will cover developing sound objectives, writing a scientific manuscript including basic analyses, developing figures, and then presenting scientific results at a conference.
Course Prerequisites	Graduate Student Standing
Textbook	There is no required text for the course.

Learning Outcomes

By the end of this course, each student will be able to:

- Describe academic honesty and authorship attribution and accountability.
- Conduct an international search of relevant scientific literature and create an annotated bibliography.
- Generate clear and reasonable research objectives.
- Critically assess and interpret research findings.
- Create and carry out tasks, goals, and deadlines.
- Write and format a scientific manuscript.
- Create a scientific poster or presentation for a scientific meeting.

Course Evaluation and Performance

Literature Review (10%)

Preliminary Literature Review- 5%

Final Literature Review- 5%

Scientific Manuscript (55%)

Methods- 5%

Results- 5%

Discussion with edited Methods and Results - 5%

Introduction - 5%

Edited Discussion – 5%

First Draft Paper Submission- 15%

Final Paper Submission- 20%

Literature Critiques (5%)

Peer Review Participation (15%)

Methods, Results, Discussion, Introduction -2% each

Full Paper Draft 1 & 2 -3.5% each

Poster or Oral Presentation (10%)

Grading Scale (%)

A 100% to 94%

A- 93.99% to 90%

B+ 89.99% to 87%

B 86.99% to 84%

B- 83.99% to 80%

C+ 79.99% to 77%

C 76.99% to 74%

C- 73.99% to 70%

D+ 69.99% to 67%

D 66.99% to 64%

D- 63.99% to 61%

E 60.99% to 0%

Literature Review (10%)

An extensive literature review is a never-ending process required of all researchers. The literary arena contains a surplus of recent and historic articles in the field of ecology and new articles are released daily. You will be advised on how to conduct an extensive literature review. You should aim to include regional, national, and international publications that pertain to your research project. Priority is given to articles published in peer-reviewed, indexed scientific journals. Articles in the grey literature (i.e. non-peer reviewed) may be included but should be used sparingly. It is important to include recent publications (last 5 to 8 years) as well as older and historic articles in your literature review. Aim for a balanced mix.

Three of the most popular search engines for scientific publications are Web of Science, JStor, and Google Scholar (links provided below).

<http://apps.isiknowledge.com>

<http://www.jstor.org>

<http://scholar.google.com>

You will submit an initial literature review with a minimum of 10 primary literature sources. You will continue to add sources to your literature review throughout the class. You will submit a final literature review containing a minimum of 25 primary literature sources.

Scientific Manuscript (55%)

The goal of this course is to write a scientific article that can be submitted to a peer-reviewed journal. Peer-reviewed scientific publications are one of the most revered ways to communicate data, ideas, and theories to audiences. As such, publishing a scientific article is one of the primary means by which professors and graduate students are assessed by their current and future employers.

You will write a scientific article that is correctly formatted for an appropriate, peer-reviewed scientific journal. This process will be broken down step by step in each class to assist you in understanding the importance and purpose of each section of a research paper, and in writing such sections for peer-reviewed literature. You will submit sections of the scientific paper throughout the course so you can have multiple drafts reviewed by the instructor and your peers.

We will discuss what warrants authorship of a scientific paper in class, and students are expected to fulfill these requirements to be an author on any work submitted at the end of the course.

Literature Critiques (5%)

Each student will select a manuscript published in the scientific literature for literature critiques. Each critique will be focused on a specific section of a manuscript that we learned about in a previous class (Methods, Results, Discussion, Introduction, Abstract). Critiques will be presented during class. No written content needs to be submitted. Paper(s) selected for critiques need to be added to Canvas no later than 2 days before critiques are due, so that other members of the class can read the paper in preparation to critique presentations.

Peer Review Participation (15%)

Students will conduct reviews and provide edits to their classmate's work using track changes in Microsoft Word, which will be handed in and graded. Both students and instructors will be involved in grading their classmates' efforts in peer-review. Peer review will occur before your section is due to the instructor so that peer edits can be integrated into the paper.

For each peer review, students will exchange written paper sections. Each student will review the others' work and provide edits, comments, and suggestions. These edits will be exchanged with adequate time for each student to make the appropriate changes and submit their written section to the course instructor for grading at the start of the next class.

Poster or Oral Conference Presentation (10%)

Students will create a conference poster or research presentation (12 minutes in length) which they will give to the class. Students will be required to select a conference of interest to them and follow guidelines for the poster or presentation (within the bounds of the assignment) of that conference.

Reading List

There are no required textbooks for this class. Readings may be provided on Canvas as part of class assignments.

Course Logistics

Students may access lectures, assignments, readings, and supporting materials through the course Canvas site as they become available.

Technology Requirements:

- A computer or mobile device with high-speed internet connection.
- A webcam, headset and/or microphone, and speakers.
- Latest version of web browser. Canvas supports only the two most recent versions of any given browser. [What browser am I using?](#)
- Installation of proctoring software may be required and will be provided if so.

Class Outline

This syllabus represents current plans and objectives for this course. As the semester progresses, changes may need to be made to accommodate timing, logistics, or to enhance learning. Such changes, when communicated clearly, are not unusual and should be expected.

Date	Class Content	Assigned Tasks	Peer Review Tasks	Tasks Due
Week 1 (8/21)	Lecture: Academic Integrity Lecture: 'How to' on literature review and citation methods -Syllabus Review -Discuss potential objectives for individual projects -Review academic conduct codes	-conduct a literature review on an individual research topic		
Week 2 (8/28)	Lecture: Structuring a research paper & How to write a Methods section -Solidify objectives based on literature review results -Discuss the comparisons and tests needed to address objectives	-write a Methods section for your topic -critique the Methods section of a paper in your literature review -add papers to your literature review		-Literature review (5%)
Week 3 (9/4)	-Discuss critiques on Methods sections from selected papers - Discuss analyses and results for each selected study	-add papers to your literature review		-Methods critique (1%)

Week 4 (9/11)	Lecture: How to write a Results section -Address any issues with understanding analysis or reporting results	- write a Results section for your paper - critique a results section of a paper in your literature review -add papers to your literature review	-Method section review (2%)	-Methods section (5%)
Week 5 (9/18)	-Discuss critiques on Results section -Address any issues with understanding analysis or reporting results	-add papers to your literature review		-Results critique (1%)
Week 6 (9/25)	Lecture: How to write a Discussion -Address any issues with understanding analysis or reporting results	-write the Discussion section for your paper -critique a Discussion section of a paper in your literature review -add papers to your literature review	-Results section review (2%)	-Results section (5%)
Week 7 (10/2)	-Discuss critiques on Discussion section -Discuss any issues associated with writing a Discussion section	-add papers to your literature review		-Discussion critique (1%)
Week 8 (10/9)	-Lecture: How to write an Introduction	-write the Introduction section of your paper -critique an introduction section of a paper in your literature review	-Discussion section review (2%)	-Discussion with edited results and methods sections (5%)
Week 9 (10/16)	-Discuss critiques on the Introduction section - Discuss any issues with writing an Introduction or Discussion section	-make edits to your discussion section -add papers to your literature review -add papers to your literature review		-Introduction critique (1%)
Week 10 (10/23)	Lecture: How to write an abstract Lecture: How to submit an article to a scientific journal -Discuss general questions	-write the abstract for your paper -critique an abstract of a paper in your literature review section	-Introduction section review (2%)	-Discussion section edits (5%) -Introduction section (5%)

Week 11 (10/30)	-Select a journal to format papers to for submission -Review submission guidelines for selected journals -Discuss abstract critiques	-make edits on full paper draft -format papers for journal submission		-Abstract critique (1%)
Week 12 (11/6)	Lecture: Making a Conference Presentation or Poster -Question and answer period	-Select a poster or presentation -Select a conference you are interested in attending		-Finalized literature review (5%)
Week 13 (11/13)	Optional Practice: Posters and Presentations -Question and answer period		-Full paper draft review (3.5%)	-Full paper draft (15%)
Week 14 (11/20)	- Present your poster or presentation - Review and discuss final papers - Review steps for paper submission for each selected journal			-Conference Poster or Presentation (10%)
Week 15 (11/27)	THANKSGIVING BREAK			
Week 16 (12/4)	READING DAY		-Final paper review (3.5%)	-Final paper due (20%)

Late Submissions & Make-up Requests

It is the responsibility of the student to access on-line lectures, readings, quizzes, and exams and to maintain satisfactory progress in the course. Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies (see below). Late submissions will be docked 10% per day late (weekend days count too!)

Computer or other hardware failures, except failure of the UF e-Learning system, will not excuse students for missing assignments. Any late submissions due to technical issues **MUST** be accompanied by the ticket number received from the Helpdesk when the problem was reported to them. The ticket number will document the time and date of the problem. You **MUST** e-mail your instructor within 24 hours of the technical difficulty if you wish to request consideration.

For computer, software compatibility, or access problems call the HELP DESK phone number—352-392- HELP = 352- 392-4357 (option 2).

Policy and Requirements

This course plan and syllabus are subject to change in response to student and instructor needs. Any changes will be clearly communicated in advance through Canvas. CALS and UF Policies can be reviewed at <https://syllabus.ufl.edu/syllabus-policy/uf-syllabus-policy-links/>

Communication Courtesy and Professionalism

Just as in any professional environment, meaningful and constructive dialogue is expected in this class and requires a degree of mutual respect, willingness to listen, and tolerance of opposing points of view. Respect for individual differences and alternative viewpoints will be maintained in this class at all times. All members of the class are expected to follow rules of common courtesy, decency, and civility in all interactions. Failure to do so will not be tolerated and may result in loss of participation points and/or referral to the Dean of Students' Office.

Privacy Statement

Our class sessions may be audio-visually recorded for students in the class to reference and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image agree to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

Software Use

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.