Scientific Writing and Presenting FOR 6934 - 3 credits

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Office hours: Mondays 8:30-9:30 am or by appointment

Course location/time Room: 4903, Building 4900

Date/Time: Thursdays, 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%)

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.

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%

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 the week before your section is due to the instructor.

For each peer review, students will exchange written paper sections at the end of each class. 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 instructors 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.

Week	Class Content	Assigned Tasks	Peer Review Tasks	Tasks Due
1	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		
2	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%)
3	Lecture: How to write a Results section -Discuss critiques on methods sections from selected papers - Discuss analyses and results for each selected study	- write a Results section for your paper - critique a results section of a paper in your literature review	-Method section review (2%)	-Methods critique (1%)

		-Add papers to your literature review		
4	-Discuss critiques on Results section -Address any issues with understanding analysis or reporting results	-add papers to your literature review	-Results section review (2%)	-Results critique (1%) -Methods section (5%)
5	Lecture: How to write a Discussion	-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 (5%)
6	-Discuss critiques on Discussion section -Discuss any issues associated with writing a Discussion section	-add papers to your literature review	-Discussion section review (2%)	-Discussion critique (1%)
7	-Lecture: How to write an Introduction	-write the Introduction section of your paper -critique an introduction section of a paper in your literature review -add papers to your literature review		-Discussion with edited results and methods sections (5%)
8	-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	-Introduction section review (2%)	-Introduction critique (1%)
9	Lecture: How to write an abstract	-write the abstract for your paper -critique an abstract of a paper in your literature review section -add papers to your literature review		-Introduction section (5%) -Discussion section edits (5%)
10	Lecture: How to submit an article to a scientific journal -Discuss abstract critiques -Discuss general questions about Abstract, Introduction, and Discussion	-make edits to your Introduction -add papers to your literature review -make a list of 5 journals that you think may be suited for your paper and be prepared to explain why	-Full paper draft review (3.5%)	-Abstract critique (1%)

11	Lecture: Making a Conference Presentation or Poster -Select a journal to format papers to for submission -Review submission guidelines for selected journals	-make edits on full paper -format papers for journal submission -Select a poster or presentation -Select a conference you are interested in attending		-Full paper draft (15%)
12	-Discussion on conference selection -Question and answer period			-Finalized literature review (5%)
13	Optional Practice: Posters and Presentations -Question and answer period		-Final paper review (3.5%)	
14	-Question and answer period			-Final paper due (20%)
15	Present your poster or presentationReview and discuss final papersReview steps for paper submission for each selected journal			-Conference Poster or Presentation (10%)

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 that can be found at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

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).

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.

Semester Evaluation Process

Student assessment of instruction is an important part of efforts to improve teaching and learning.

At approximately the mid-point of the semester, the School of Forest, Fisheries, & Geomatics Sciences will request anonymous feedback on student satisfaction on various aspects of this course. These surveys will be sent out through Canvas and are not required but encouraged. This is <u>not</u> the UF Faculty Evaluation!

At the end of the semester, students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

Academic Honesty Policy

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."

You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

It is assumed that you will complete all work independently in each course unless them instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct or appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated.

Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code.

Inclusive Learning Environment

This course embraces the University of Florida's Non-Discrimination Policy, which reads,

The University shall actively promote equal opportunity policies and practices conforming to laws against discrimination. The University is committed to non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, gender identity and expression, marital status, national origin, political opinions or affiliations, genetic information and veteran status as protected under the Vietnam Era Veterans' Readjustment Assistance Act.

If you have questions or concerns about your rights and responsibilities for inclusive learning environment, please see the instructor or refer to the Office of Multicultural & Diversity Affairs website: http://multicultural.ufl.edu.

Services for Students with Disabilities:

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation. 0001 Reid Hall, 352-392-8565, http://www.disability.ufl.edu

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.

Campus Helping Resources

For issues with technical difficulties for e-learning in Canvas, please post your question to the Technical Help Discussion in your course, or contact the UF Help Desk at:

- <u>Learning-support@ufl.edu</u> | (352) 392-HELP select option 2 | <u>http://elearning.ufl.edu</u>
- Library Help Desk support http://cms.uflib.ufl.edu/ask
- SFFGS Academic Hub https://ufl.instructure.com/courses/303721

Student Life, Wellness, and Counseling Help

Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- UF CALS offers direct mental health counseling FREE OF CHARGE for students at distance locations (REC's) through an embedded counselor Dr. Philip Daniels. He has a welcome video which can be viewed here: Dr. Daniels Welcome Video. If you are a student at a UF/IFAS Research and Education Center, you will be directed to Dr. Daniels for consultation and referral services. *Email communication has limited confidentiality and is reserved for scheduling, pdaniels@ufl.edu* If you are in need of an appointment, please email or call Dr. Daniels directly (352) 392-1575.
- Counseling and Wellness resources http://www.counseling.ufl.edu/cwc/
- U Matter, We Care http://www.umatter.ufl.edu/
- Career Connections Center http://career.ufl.edu/
- Student Success Initiative http://studentsuccess.ufl.edu
- Other resources are available at http://www.distance.ufl.edu/getting-help for online students.

Student Complaint Process

The School of Forest, Fisheries, & Geomatics Sciences cares about your experience and we will make every effort to address course concerns. We request that our online students complete a course satisfaction survey each semester, which is a time for you to voice your thoughts on how your course is being delivered. You can also <u>submit feedback anytime</u>.

If you have a more urgent concern, your first point of contact should be the Academic Coordinator or the Graduate/Undergraduate Coordinator for the program offering the course. You may also submit a complaint directly to UF administration:

- https://distance.ufl.edu/getting-help/
- https://registrar.ufl.edu/complaint.html