

Seminar in Science Communication ENY 6931

Spring and Summer Semesters Annually (1 credit)



Science communication is the practice of informing, educating, raising awareness of science-related topics, and increasing the sense of wonder about scientific discoveries and arguments.

This course is a 1-credit graded class that will help you practice various forms of scientific communication while learning to critically evaluate scientific information presented in written form and orally by invited speakers in our department's weekly seminar series. It provides presentation skills required for your Capstone project. To this end, students will create both poster and oral presentations on entomological research.

By the end of this course, students will be able to **critically evaluate** scientific research presented in a variety of formats. Students will also gain hands-on experience in **designing** and producing forms of communication encountered at scientific conferences and responding to peer feedback and questions. This course is designed to be a pre-requisite to ENY 6905 (Capstone).

<u>Course Catalog description</u>: *Presentation and discussion of current research topics*.

Course Information

Time: Asynchronous, online

Pre-requisite: A You should have taken at least a basic entomology class, such as: ENY 3005/5006: Principles of Entomology, and ideally will be a year into your graduate program so that you can understand and appreciate the scientific content of the seminars.

This course is a pre-requisite for ENY 6905 Capstone

Canvas: http://elearning.ufl.edu

Instructor Information

Dr. Georgette Kluiters

Email: g.kluiters@ufl.edu

Phone: (352) 273-3919

Office: 2004 Steinmetz Hall

Office Hours: Due to the asynchronous nature of this course my office hours are flexible for each individual, you can schedule an appointment: calendly.com/

uf_distance_ed_coordinator



Student Learning Outcomes

By the end of the course, students will be able to:

- Evaluate the elements of an effective research presentation and provide constructive criticism.
- Design an engaging poster presentation based on critically evaluated scientific research.
- Produce a lay public-appropriate science blog using engaging, clear and concise writing.
- Plan and deliver an oral 8-minute scientific presentation applying effective presentation techniques.

In working towards these goals, students will foster a sense of curiosity and appreciation for communicating science to both lay audiences and peers or experts in the field.

How This Course Relates To The Online MS in Entomology & Nematology Learning Outcomes:

This course provides training and practice in three of our program's Student Learning Outcomes:

- 1) Proficiency in written communication;
- 2) Proficiency in oral communication; and
- 3) Critical thinking ability.

Instructional Methods: Course materials are organized into modules on the Canvas course website. They will include videos to view and analyze, scientific articles to read, and discussions and assignments to apply what has been learned.



Teaching Assistants

We do not have a teaching assistant assigned to this course. Please direct all enquiries to your course instructor.



Communication & Conduct

Meeting Policy: If you need help with any aspect of the course, we encourage you to communicate via the Canvas Discussion Board – if you have a question, it is likely your peers will appreciate the answer to that question too. Alternatively, you can schedule a 1-to-1 meeting with the instructors TA. You or can request а meeting with Dr. Kluiters clicking by calendly.com/uf distance ed coordinator. The preferred form of contact is via the Canvas course messaging system and we will do our best to respond to messages within 48 hours (not including weekends or holidays). As a courtesy, please check the syllabus and Canvas before reaching out; answers to many of your questions can be found there!

Canvas: Important announcements and updates will be regularly posted to the course Canvas website, so be sure to <u>check Canvas frequently!</u> To ensure that you do not miss anything, please ensure that your Canvas profile is set to receive notifications.

Email Accounts: It is UF policy that you use your GatorLink account or Canvas when emailing your instructors; we will not answer emails sent from other accounts (e.g., personal Gmail, Hotmail, etc).

Professional Conduct: All members of the class are expected to always conduct themselves in a professional and respectful manner. Please use appropriate etiquette when interacting with your peers and instructors, including during class, on Canvas, and via email. Students who behave disrespectfully or disruptively will be reported to the Dean of Students Office.

Attendance & Participation

There is no synchronized class time, but all assignments must be completed by their specified due dates, posted on the Canvas course site and shown in this syllabus. 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/UGRD/academic-regulations/attendance-policies/.



Below is a tentative* schedule of topics & assignments. All assignments are released at the start of the semester, and can be submitted ahead of the due date, except peer reviews which have a fixed date range.

A Weekly Schedule of Topics and Assignments:

Торіс	Assignment	Points
Elements of effective oral science communication	Discussion 1 - Introduce yourself discussion or video	10
Providing constructive feedback on oral presentations	Watch seminar Super Mark It!	10
	Discussion 2 - Critique of SuperMark It! Watch student exit seminar	10
Elements of effective poster presentation	Discussion 3 - Student Exit Seminar PhD View student posters Discussion 4 - Critique of Student Poster presentations. Compare and contrast two models	10
Reflection on departmental seminar	View 1st seminar of choice Written reflection	10
Designing an engaging poster	View 2nd seminar of choice and prepare poster	40
	Poster peer review	10
Informal science communication	View 3rd seminar of choice and write blog post	40
	Blog peer review	10
Designing an effective oral presentation	View 4th seminar of choice and prepare oral presentation	40
	Oral presentation peer feedback	10
Respond to peer feedback	Oral response to questions on presentation from peers & author	10

^{*} Although we will do our best to adhere to this schedule, it may be adjusted during the semester to accommodate opportunities, disruptions, and other circumstances. These changes will be communicated clearly via Canvas. For specific semester dates and timings, please refer to the final version of this syllabus in canvas when you take the course.



Textbooks & Readings: There are no required textbooks for this course. Additional readings and resources may be posted on Canvas throughout the semester.

Materials and Supplies Fees: N/A

Computer Requirement: All students must have regular access to a computer with a reliable internet connection to access assignments and materials on Canvas.



Grading Policies

This course uses a points system for grading. The anticipated maximum that can be earned in the course is **200 points**, distributed as follows:

Discussions (x4): 40 pts (10 pts ea.)

Reflection: **10 pts** Blog Post: **40 pts**

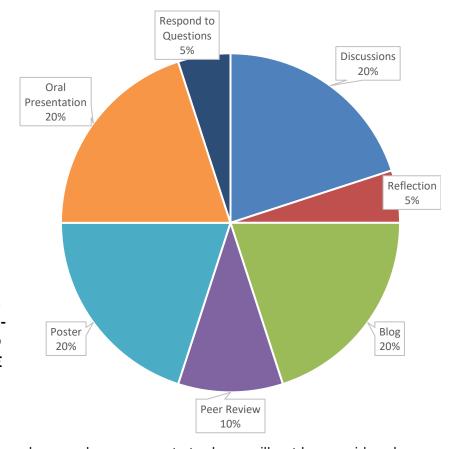
Peer Reviews (x2): **20 pts (10 pts ea.)**Design an Engaging Poster: **40 pts**Design & Deliver an Engaging Oral

Presentation: 40 pts

77 - 79.9% = C+

Response to Questions: 10 pts

At the end of the semester, your total course grade will be converted to a letter grade using the scale below:



Please note that the instructors <u>do not round up grades</u>— requests to do so will not be considered.

For current UF policies on assigning grade points, consult the following policy website: https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

Disputing a grade: If you wish to dispute a grade, you must contact the instructors <u>in writing</u> within two days (48 hours) after the assignment has been returned. In your message, you must include a specific explanation for why you think the grade is incorrect and how you think it should be changed. In required, an instructor will arrange a meeting with you to discuss the issue and determine whether or not to the grade should be changed. The grade assigned following this meeting will be final.

Each semester there will be **at least twelve seminars** available on the Canvas course website that were recorded previously. Two specific seminars will be required viewing for all students. An additional four seminars of the student's choice must be viewed in their entirety.

- For the two required seminars: students will prepare written responses to questions and engage in discussion with other students. Students will view a student poster presentation as an alternative form of science communication and prepare a critique.
- For the four additional seminars of the students' choosing (each assignment must be on a different seminar):
 - 1. Students will submit as an assignment a 350-word reflection.
 - 2. Students will find and read a recent scientific article from the same researcher as the presenter, or someone in their lab, and design a poster presentation, suitable for display at a scientific conference.
 - 3. Students will take information from a peer-reviewed scientific article from the presenter's lab group and translate the science into a blog post with broad interest to the lay public.
 - 4. Students will select one refereed journal article from their current or recent research, and present and record it in the format of an organized 8-minute presentation to explain the research to peers.

Additionally, students will provide constructive peer review of one poster and one blog post of their classmates. They will respond orally to questions from peers in relation to their oral presentation.

Projects, Assignments, & Exams

Discussions (4) – Discussions are designed to allow you to get to know your online peers and learn from each other. They are due on the due date and should follow the guidelines described on the Canvas site for each discussion topic. Once you have posted, you will be able to comment on the posts of others. You must comment on at least two of your peer's posts to receive full marks.

Reflection – Complete a reflection for one seminar. In full sentences, describe what was most interesting to you. How did the seminar's organization and delivery help or hinder your learning? What questions do you have for the presenter? What do you want to know now in addition to what you learned? Can you apply any of this knowledge to your own life, work, or past experience? The reflection should be about 350 words and should use complete sentences that are well written, and spell checked. A rubric will be provided in Canvas.

Poster presentation – Choose another seminar that interests you and find a peer reviewed journal article from that presenter or their research group. To do this, search the presenter's name in Web of Science and choose a peer-reviewed article published by the presenter or their research team on this topic published within the last two years. Make sure to download the Virtual Private Network (VPN) software to access the literature databases and the scientific articles for free using the University of Florida's institutional subscription. Using the guidelines provided in Canvas on what constitutes a good poster presentation, design a poster in PowerPoint that would be suitable for a scientific meeting. Essentially you will need to find the key results in this paper and distill them to their essence, supporting them with graphics and figures from the published paper.

Blog – Choose an aspect of another seminar about which you can develop an entomological "story" that will interest an average non-scientist reader. You will develop this informal science story from a scientific journal article from their research group. Search the presenter's name in Web of Science and choose a recent peer- reviewed article published by them, or their research team, on this topic within the last two years. Your blog should follow the author guidelines for Entomology Today (an online blog for the Entomological Society of America) https://entomologytoday.org/about/author-quidelines/ 1,000 to 1,200 words.

Here are some blogging tips:

Jarreau, Paige. 2014. Blogging tips for science bloggers, from science bloggers. http://www.fromthelabbench.com/from-the-lab-bench-science-bloggers-from-science-bloggers accessed 5/21/2019

Here are some sample entomological and UF/IFAS blogs:

- Entomology Today https://entomologytoday.org/
- UF/IFAS blogs http://blogs.ifas.ufl.edu/global/

Oral presentation – Oral communication skills, including the careful selection of content, and packaging and delivery for maximum engagement and learning are important skills to develop. This exercise will help you get ready to present your capstone project.

Choose a paper from the lab/research group of the presenter of another seminar (search Web of Science and obtain the article using the VPN, as described above). **Develop an 8-minute oral presentation describing this paper**. You may use PowerPoint (or some other presentation software) or record yourself presenting the talk via Zoom, or similar. Full instructions will be provided. Your talk should include title, background information and rationale for the research, research objectives, methods, results, and significance/conclusions/implications, along with elements of critical analysis of the paper.

Peer Reviews (2) – You will be assigned the blog post and poster belonging to one of your classmates. Use the provided rubric to review your classmate's work and provide them with constructive feedback.

Oral Responses to Questions – Following submission of your oral presentation you will be asked to watch to presentations produced by a number of your classmates, and provide questions in response to what you've viewed. You will then be required to orally record your answers to questions submitted to you by your peers – as though you are responding in a question and answer session at a conference.

Exams: There are no exams as part of this course.

Extra Credit: Extra credit assignments may be posted at the **instructors' discretion only**. Any other extra work submitted in order to raise a grade will not be accepted and requests for additional extra credit will not be considered.

Submitting assignments: All assignments for this course will be submitted online via Canvas. It is your responsibility to ensure that you submit these assignments by their due date; work that is submitted after the due date will be subject to late penalties as described in this syllabus. Alternative means of submission (e.g., emailing assignments to an instructor) will not be accepted.

You are responsible for ensuring that all your work is uploaded <u>correctly and completely</u> by the deadline. Corrupted files will be treated as <u>missing work</u> (= 0 grade) until they are reuploaded correctly and late penalties will apply if your resubmission is past the deadline. So, please always double check your files right after you upload them! If you experience technical problems when submitting your work in Canvas, contact the UF Computing Help Desk for assistance: https://helpdesk.ufl.edu.

Late Work & Make-Up Assignments

Assignment Policy: Assignments have specific due dates that are spread out over the course of the semester so as not to overload you at any particular time in the semester. All materials will be available at the beginning of the semester so feel free to work ahead and submit assignments early if you need to accommodate your personal schedule. All assignments have specific due dates that will be posted on the Canvas course site and are shown in this syllabus. Assignments turned in after the due date and time will lose 10% of their value each day.

Make-Up Policy: All assignments must be submitted by the due date and time indicated on Canvas. There are no provisions for make-up assignments. The assignments can be submitted early to work around work or personal obligations. The policy for late submission of assignments is shown above. However, if the student misses the deadline for an assignment due to a medical or family emergency (accompanied by a note from a medical professional), the late assignment penalty will be waived.

Extensions will be considered on a *case-by-case basis* (at the instructors' discretion) only in the event of unforeseen emergencies. In such a case, you must contact the instructors as soon as possible to discuss the situation prior to the deadline; note that the instructors may request documentation. No extensions will be granted for students who miss the due date for any other reason.

A note about deadlines: Remember, the due date doesn't have to be the "do" date! In other words, we encourage you to work on your assignments in advance—don't wait until right before the deadline to submit your work! Last-minute computer problems or other non-emergency situations that arise right before the deadline are not valid reasons for requesting an extension; such requests will not be considered and late penalties will be applied to your work if it is not submitted before the deadline.

Course Technology: Materials, including recorded seminars, will be available on Canvas. Good broadband internet access will be necessary to watch the recorded seminars. Students will need access to a laptop computer with microphone and camera, or a webcam and external microphone that can be connected to a desktop computer to record their oral presentation in Zoom.

- http://helpdesk.ufl.edu
- (352) 392-HELP select option 2

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.



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.

Disability Resource Center

001 Reid Hall (352) 392-8565 | https://disability.ufl.edu/

Instructors' note: We want you to succeed in this course! To ensure your accommodations are in place when you need them, please be sure to have your DRC accommodation letter sent to us <u>as early as possible</u>—ideally at the beginning of the semester.

Course Evaluations

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. 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/.

Technical Help

For issues with technical difficulties for Canvas, please contact the UF Help Desk at:

- http://helpdesk.ufl.edu
- (352) 392-HELP (4357)

Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from the Help Desk 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 a make-up.

University Policy on Academic Honesty

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 the 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 to 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.

Class Demeanor or Nettiquette: All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions, and chats. See the Netiquette Guide for Online Courses

Instructors' note: Any action that subverts the learning goals of the course (or a particular course activity) will be treated as academic misconduct and reported to the Dean of Students Office. This includes—but is not limited to—cheating or assisting others in cheating, plagiarism (i.e., misrepresenting someone else's work as your own, whether it is copied directly or paraphrased), self-plagiarism (i.e., copying/reusing work that you have submitted previously), collaborating with others when it is not permitted, fabricating data, lying to an instructor, and bad faith attempts to undermine the intent of an learning activity. In addition to being reported to the Dean of Students Office, a student will earn a grade of 0 on any assignment that is plagiarized or that otherwise violates these academic honesty policies. This 0 grade is irreversible—it cannot be dropped and the assignment cannot be resubmitted for a different grade. After this, any subsequent incidents of plagiarism or academic honesty will result in an automatic E (= failing grade) in the course.

Students experiencing crises or personal problems that interfere with their general wellbeing 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:

University Counseling & Wellness Center

Counseling Services, Groups and Workshops, Outreach and Consultation, Self-Help Library, Wellness Coaching

3190 Radio Road

(352) 392-1575; https://counseling.ufl.edu

Other campus resources include:

U Matter, We Care: http://umatter.ufl.edu

Career Connections Center: Reitz Student Union- First Floor; (352) 392-1601;

http://career.ufl.edu

Student Success Initiative: http://studentsuccess.ufl.edu

Student Complaints: Complaints regarding on-campus courses may be filed at https://sccr.dso.ufl.edu/policies/student-honor-code-studentconduct-code/. For online courses, please see https://distance.ufl.edu/getting-help/student-complaint-process/

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It is your responsibility to ensure that you fully understand the policies outlined in this syllabus as well as the policies of the university as they relate to this course. By remaining enrolled in this course, you agree that you have read and understood all of these policies and that you will be held accountable to them.

At their discretion, the instructors may change aspects of the course during the semester to accommodate new opportunities, unforeseen disruptions, or other circumstances. These changes will be communicated clearly in class and through Canvas. The current version of the syllabus will always be available on our course's Canvas website. It is your responsibility to ensure that you are following the most recent version of the syllabus.

If you have any questions, please contact the instructors as soon as possible (preferably at the beginning of the course)!

Cover Photo: AdobeStock Image – Science Communication