

# SEMINAR IN SCIENCE COMMUNICATION

ENY 6931, 1 CREDIT, SPRING 2020

**INSTRUCTOR:**

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**OFFICE HOURS:** Available by phone from 8:30 a.m. till 4:30 p.m. (Eastern Standard Time) or email during the workweek. I will respond to your call or email within 24 hours. Zoom meetings can be arranged for more detailed questions.

**COURSE WEBSITE:** This course is available entirely online. All required materials can be found in eLearning in Canvas <http://elearning.ufl.edu>

**COURSE COMMUNICATIONS:** Please communicate with the instructor about private issues through the Canvas course management email system (Inbox). Questions about course content that may benefit from peer input can be posted on the general Course Questions discussion board. The class instructor moderates the discussion board. Please follow the guidelines for communication in the Netiquette document linked on p. 4 of this syllabus.

**REQUIRED OR RECOMMENDED TEXTBOOKS:** None

**MATERIALS AND SUPPLIES FEES:** None

**COURSE DESCRIPTION:** This course is a 1-credit graded class that will help you practice various forms of scientific communication while learning to evaluate critically scientific information presented in written form and orally by invited speakers in our department's weekly seminar series.

**PREREQUISITE KNOWLEDGE AND SKILLS:** You should have taken at least a basic entomology class and, ideally, will be a year into your graduate program so that you can understand and appreciate the scientific content of the seminars.

**COURSE GOALS AND/OR OBJECTIVES:** At the end of this course, students will be able to:

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

**HOW THIS COURSE RELATES TO THE STUDENT LEARNING OUTCOMES IN THE ONLINE M.S. IN ENTOMOLOGY & NEMATOLOGY:** 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.

#### **COURSE POLICIES:**

**ATTENDANCE POLICY:** 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 in this course are consistent with university policies that can be found at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

**QUIZ/EXAM DATES/POLICIES:** There are no quizzes or exams.

**MAKE-UP POLICY:** 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 below. 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.

**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.

**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

**ONLINE COURSE EVALUATION:** Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semesters, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results>.

## UF POLICIES:

**UNIVERSITY POLICY ON ACCOMMODATING STUDENTS WITH DISABILITIES:** Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, [www.dso.ufl.edu/drc](http://www.dso.ufl.edu/drc)) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

**UNIVERSITY POLICY ON ACADEMIC CONDUCT:** UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity by abiding by the Honor Code. On all work submitted for credit by students 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." The Honor Code (<http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions.

Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

**CLASS DEMEANOR OR NETIQUETTE:** 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 <http://teach.ufl.edu/wp-content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf>

## GETTING 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.

Other resources are available at <http://www.distance.ufl.edu/getting-help> for:

- Counseling and Wellness resources
- Disability resources
- Resources for handling student concerns and complaints
- Library Help Desk support

Should you have any complaints with your experience in this course please visit <http://www.distance.ufl.edu/student-complaints> to submit a complaint.

## GRADING POLICIES:

### **METHODS BY WHICH STUDENTS WILL BE EVALUATED AND THEIR GRADE DETERMINED**

Each semester there will be at least eight seminars available on the Canvas course website that were recorded previously. Two specific seminars will be required viewing for all students. An additional five 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 two seminars of the students choosing, they will submit as an assignment a 350-word reflection. For three additional seminars, students will complete an additional three assignments (each assignment must be on a different seminar). For one seminar, you will find and read a recent scientific article from the same researcher or someone in their lab and design a poster presentation, suitable for display at a scientific conference. For a second seminar, you will take information from a peer-reviewed scientific journal article from the presenter's lab group and translate the science into a blog post with broad interest to the lay public. For the third seminar you choose, you 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. Students will provide constructive peer review of one poster and one blog post of their classmates.

**INFORMATION ON CURRENT UF GRADING POLICIES FOR ASSIGNING GRADE POINTS:**

For information on current UF policies for assigning grade points, see <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

**A WEEKLY SCHEDULE OF TOPICS AND ASSIGNMENTS:**

Topic	Assignment	Points	Due date (can start earlier)
Elements of effective oral science communication	Discussion 1 - Introduce yourself discussion or video	10	Monday, January 13
Providing constructive feedback on oral presentations	Watch seminar x Discussion 2 - Critique of <i>Seminar x</i>	10	Monday, January 20
	Watch student exit seminar Discussion 3 - Student <i>Exit Seminar Masters</i>	10	Monday, January 27

Elements of effective poster presentation	View student poster Discussion 4 - Critique of Student Poster presentation two models compare and contrast	10	Monday, February 3
	View 1 <sup>st</sup> seminar of choice Written reflection 1	10	Monday, February 10
	View 2 <sup>nd</sup> seminar of choice Written reflection 2	10	Monday, February 17
Designing an engaging poster	View 3 <sup>rd</sup> seminar of choice and prepare poster	40	Monday, March 9
	Peer review	10	Monday, March 16
Informal science communication	View 4 <sup>th</sup> seminar of choice and write blog post	40	Monday, March 30
	Peer review	10	Monday, April 6
Designing an effective oral presentation	View 5 <sup>th</sup> seminar of choice and prepare oral presentation	40	Monday, April 20

Disclaimer: This syllabus represents my current plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.

### **ASSIGNMENT DESCRIPTIONS**

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 posts to receive full marks.

Reflections (2) – Complete a reflection for two additional seminars. 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 him/her 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-guidelines/> 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-blog/blogging-tips-for-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) and record yourself presenting the talk via a Zoom meeting that you initiate within the Canvas course. I will provide instructions on how to do this. Your talk should include title, background information and rationale for the research, research objectives, methods, results, and significance/conclusions/implications. You might like to add elements of critical analysis of the paper in your presentation by commenting on the following:

1. How convincing were their results and do they support the conclusions? (i.e., did they set up the experiments and analyze the data correctly?)
2. What you would have done differently, if anything?
3. What is the next direction this research group should take based on these results?

**GRADING SCALE:** Grades will be based on the following scale:

A, 93-100; A-, 90-92.99; B+, 87-89.99; B, 83-86.99; B-, 80-82.99; C+, 77-79.99; C, 73-76.99; C-, 70-72.99; D, 60-69.99; E, <60.

## **OTHER RESOURCES**

### Readings

Berenbaum, May R. 2017. Communicating about science communication: a brief entomological history. *Ann. Entomol. Soc. Am.* 110 (5): 435–438, <https://doi.org/10.1093/aesa/sax060>