

CREATIVE SCIENTIFIC COMMUNICATION

concepts and methods to engage a diverse audience

ZOO 6927 sect 2F40 • BOT 6935 sect 2F36
Florida Gym, FLG0275 • Wed 10:40-11:30 am,
Fri 3:00-3:50 pm

INSTRUCTORS

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COURSE DESCRIPTION AND OBJECTIVES

Do you want to develop communication skills that highlight your research project and help you engage a broad audience? In **CREATIVE SCIENTIFIC COMMUNICATION**, you will attend small-group workshops led by professional writers, artists, and designers. You will tap your creative potential while building a strong foundation in media technology that illuminates scientific concepts.

The course meets twice per week and is divided into two modules: **Workshops** and **Media Labs**. In the Workshops, professional communicators share advice for creating informative and engaging scientific content. Faculty and visiting lecturers explain the principles of effective storytelling, visual composition, and design fundamentals. During in-class activities, you will begin generating material suitable for papers, posters, and presentations based on your own research projects. In the Media Lab, you will develop science-specific media technology skills that directly complement concepts from the Workshop. The Media Lab introduces the tools available to today's creative scientists. Learn web design, advanced presentation techniques, and other digital multimedia through hands-on tutorials that incorporate graphic design, photography, video, and audio.



Over the course of the semester, you will design and produce an original multimedia project for use in your scientific research program. Examples of projects include:

- A multimedia presentation for a scientific conference
- A short video for a grant proposal (5 minutes max)
- An art installation
- An essay for publication in a mainstream journal or magazine
- A pilot episode for a podcast
- A graphical interface and wireframe for a mobile app
- An electronic field guide for one's study organism
- A website/blog drawing attention to your research questions and future professional goals

COURSE GOALS AND OBJECTIVES

- Describe strategies for creating engaging scientific content for broad audiences
- Demonstrate principles of good content generation across various disciplines including storytelling, visual composition, and graphic design.
- Identify multimedia platforms for effective scientific communication
- Synthesize clear understanding of scientific research principles with meaningful content generation
- Develop technical skills in a variety of multimedia platforms

REQUIRED READING MATERIALS

Barnett, C. (2015). Rain: a Natural and Cultural History. New York, NY: Crown Publishing Group.

REQUIRED MEDIA MATERIALS

Access to a computer with:

- at least 4GB of RAM
- Adobe Creative Cloud [Photoshop, Illustrator, InDesign, Premiere Pro]
- Microsoft Office PowerPoint AND/OR Apple Keynote

ASSIGNMENTS AND EVALUATION OF GRADES

An A will be assigned in the event that the participant is active in the class and completes the assigned work with marked effort. Lack of participation, low effort, or missed assignments will reduce the grade. Consistent and/or unexcused absences will also reduce the grade further.



1. FINAL PROJECT SYNOPSIS: Provide a detailed synopsis of your final project. The synopsis should include the project's description, intended audience, contents, and an example media workflow to achieve content and production. Instructors will review the synopsis to determine rigor and feasibility, and will return creative input to the participant.
2. FINAL PROJECT: The final project is a multimedia project designed for use in your personal research program. It should incorporate multiple forms of media and principles covered during the course. See above for appropriate project examples.
3. FINAL IN-CLASS PRESENTATION: You will present your final project to the class. Presentations should last 5-7 minutes and should incorporate multiple forms of media and include principles covered during the course.
4. PARTICIPATION: The participation grade is on four Canvas Discussions. Each discussion is worth five points. Write a discussion post or series of posts (at least 300 words) that do one of the following...
 - Comment on an lecture or reading from class
 - Ask a question of class members and instructors
 - Workshop a project/presentation. Use Discussion board to upload media/ ask for feedback
 - Comment on a fellow student's project
 - Respond to a fellow student's comments

Assessment (%)	Points/unit	Grade Scale	
Final Project Synopsis (20%)	20	≥ 90.00	A
Final Project (30%)	30	≥ 86.66	A–
Final In-Class Presentation (30%)	30	≥ 83.33	B+
Participation/Discussions (20%)	5	≥ 80.00	B
Total (100%)	85	≥ 76.66	B–

Late Assignment Submission Policy

Major assignments will be accepted no later than six days after the due date. Points will be reduced from late assignments at a rate of 5% per day. This policy does not apply to Discussion Board. Late work will not be accepted on the Discussion Board without communication prior to the due date. Instructors will not accept work submitted later than six days following the deadline except in extenuating circumstances and with prior approval by the instructor.	≥ 73.33	C+
	≥ 70	C
	≥ 66.66	C–
	≥ 63.33	D+
	≥ 60	D
	≥ 56.66	D–
	< 56.66	E

ATTENDANCE

Requirements for class attendance and make-up exams, assignments, and other work in this course is consistent with university policies that can be found at: catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

MATERIALS AND SUPPLIES FEES

An Adobe Creative Cloud subscription is required for the duration of this course. A discounted UF student subscription is available from UF Student Licensing Services (helpdesk.ufl.edu/software-services/adobe).

CLASSROOM CONDUCT

Use encouragement instead of criticism. In Creative Scientific Communication, process is more important than finished products. While you will be required to submit creative work based on your research, we also ask you to experiment widely with new processes and media platforms. Therefore, it is important to maintain a supportive classroom environment where students feel safe to share their creativity. During in-class workshops and media labs please avoid harsh criticism, especially when commenting on a fellow student's creative work. Instead of criticism, say what you like or what you find engaging or memorable about another student's work.

COURSE WEBSITE (E-LEARNING)

Class material including the syllabus, assignment results, some lecture notes, slides, and other information related to the course will be posted on the course e-Learning website (<http://elearning.ufl.edu>). You will also turn in all assignments through the course's Canvas site. You 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 on their website (helpdesk.ufl.edu).

STUDENTS REQUIRING ACCOMMODATIONS

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, 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.



COURSE SCHEDULE

WEEK1

8/24: **Workshop (WS)**

- Introductions/goals
- Descriptions of individual research projects

8/26: **Media Lab (ML)**

- Getting up and running with Adobe Creative Cloud and other course software

WEEK2

8/31: **ML**

Guest: Narayan Ghiotti – *Graphic Design Fundamentals*

- Basic design philosophy and concepts (type, colors, composition)
- Resources for inspiration and content
- Legal/fair-use/free content

9/2: **WS**

Guest: Jorge Perez Gallego, PhD, MFA – *Exhibiting Scientific Research*

WEEK3

9/7: **ML**

- Introduction to Adobe Illustrator

9/9: **WS**

Guest: Mike Gil, PhD – *Mass science communication: My journey into the Vlogosphere*

WEEK4

9/14: **WS**

Guest: Andrea Lucky, PhD – *Crowd Sourcing for Communication and Research*

9/16: **WS**

Guest: Rachel Damiani – *Audience, Message Framing, and Perceived Identity*

WEEK5

9/21: **WS **DISCUSSION 1 DUE****

Guest: Darlena Cunha, Journalist – *Effective Storytelling*

9/23: **ML**

- Introduction to SquareSpace

WEEK6

9/28: **ML**

- Photography mechanics: understanding composition, settings, and parameters

9/30: **WS**

Guest: Margaret Tolbert, Artist

****FINAL PROJECT SYNOPSIS DUE****

WEEK7

10/5: **WS**

Guest: John Moran, Photographer – *Florida's iconic springs and their changes*

10/7: **ML**

- Basic post-production in photography



WEEK8

10/12: **WS**

Mid-semester in-class check-in about projects.

- How are you progressing?
- Do you need feedback about content?
- Do you need help with media?

10/14: **ML**

- Video shooting basics

WEEK9

10/19: **WS **DISCUSSION 2 DUE****

Guest: Cynthia Barnett, author of *Rain*

- Please read Cynthia's book prior to this class.

10/21: **ML**

- Video shooting basics

WEEK10

10/28: **WS**

Guest: Eric Segal, PhD (Harn Museum)

- Meet at the Harn Museum
- This week no Wednesday class or Media Lab
- There will be one two-hour lecture on Friday.

WEEK11

11/2: **WS**

Guest: Deborah Hendrix, UF Samuel Proctor Oral History Program – *Audio Production Basics*

11/5: **ML**

- Video post-production

WEEK12

11/9: **ML**

- Advanced multimedia presentation techniques

11/11: **WS**

Guest: Charlotte Kesl, Photographer – *A Compassionate Eye: Photographing in the Majority World*

WEEK13

11/16: **WS **DISCUSSION 3 DUE****

Guest: Ellie Sommer – *Effective Scientific Writing and Editing*

11/18: **ML**

**** FINAL PROJECT DUE MIDNIGHT****

****FINAL IN-CLASS PRESENTATIONS****

WEEK14

11/23: **WS**

****FINAL IN-CLASS PRESENTATIONS****

11/25: **ML**

NO CLASS

WEEK15

11/30: **** FINAL IN-CLASS PRESENTATIONS****

12/2: **** FINAL IN-CLASS PRESENTATIONS****

WEEK16

12/7: ****DISCUSSION 4 DUE****

**** FINAL IN-CLASS PRESENTATIONS****



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: catalog.ufl.edu/ugrad/current/advising/info/student-honor-code.aspx#honesty

UNIVERSITY SUPPORT SERVICES

Resources are available on campus to help students meet academic goals and solve personal problems, which interfere with their academic performance. Resources include:

- University Counseling Center, 301 Peabody Hall, 392-1575, www.counseling.ufl.edu/cwc/
- Student Mental Health, Student Health Care Center, 392-1171, shcc.ufl.edu/
- Career Resource Center, Reitz Union, 392-1601, www.crc.ufl.edu/

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 semester, 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/>.

