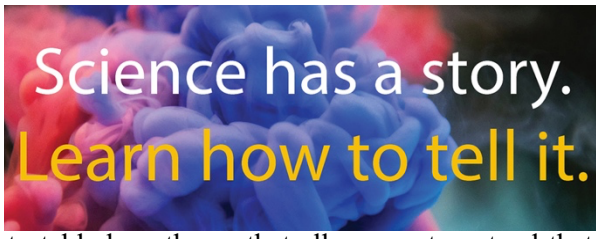
Syllabus: BISC549 – Seminar in Integrative and Evolutionary Biology

Instructor: Dr. Michael C. Campbell
Office: AHF 205
Email: mc44680@usc.edu (best method for contact)
Course Meeting: Friday 11 am – 12:50 pm (Credits: 2)
Office Hours: By appointment.



GOALS: A major goal of all science classes is to expose students to critical thinking about the world they live in and the information they are presented with in their daily lives. This learner-centered course is designed for graduate students at all levels with diverse scientific backgrounds who have cross-disciplinary interests. Through this class, you will gain the ability to synthesize new information from the scientific literature and develop testable hypotheses that allow you to extend that knowledge even further. Armed with the ability to think rationally and critically and a broad understanding of your area of research interest you will finish the course with an appreciation for thinking like a scientist.

RECOMMENDED TEXTBOOK: Hofmann, Angelika H. 2020. Scientific Writing and Communication, Fourth Edition. Oxford University Press. New York, NY, USA. This can be purchased online and is available as a hardcover, softcover or e-book.

LEARNING OBJECTIVES: Within the framework outlined in the goals for this course, there are several objectives that will be achieved through a combination of lectures, readings, and class activities (group and individual). By the end of the course, you should be able to:

1) Foster critical thinking and problem-solving skills to advance our current understanding of biological systems.
2) Understand and practice interpretation and syntheses of ideas from the peer-reviewed primary literature.
3) Communicate, orally and in writing, about your area of research interest
4) Learn to conduct science using an inquiry and collaborative research-based approach.

EXPECTATIONS:

All students are expected to…

1) Be **on time** and prepared for all classes. Occasionally things happen beyond your control. However, you are expected to be punctual so as to fully utilize the time we have available.
2) Be responsible for your own mastery of the material. If you do not understand concepts or ideas presented in assignments, activities or lectures, it is up to you to find the answers and to seek help.
3) Provide sufficient notice to the instructor if you are going to be absent for a legitimate reason.
4) Be responsible for the material missed due to absences (do not email the instructor asking if you missed anything important – check with your fellow classmates, and yes it is all important!).
5) Actively participate in class activities, discussions, and projects.

All students can expect …

1) The instructor to arrange to meet with students by appointment in lieu of established office hours.
2) To improve written and oral communication skills.
3) A classroom environment that is conducive to learning, challenging and engaging.
4) To improve critical thinking skills and the use of scientific principles for learning.
5) To be engaged with the material presented in class through multiple pedagogical styles that include mini lectures, group work, literature discussion, student presentations, and more.

TEACHING APPROACH: My teaching approach is designed to facilitate a collaborative, learner-centered environment where you, the student, engage in learning the material through active participation in activities, discussions, and presentations. This approach is designed to allow you to take a self-directed approach to developing an understanding of the material, rather than relying on the instructor as the primary source of knowledge. You will engage in a variety of classroom activities (*e.g.*, lectures, group problem solving, writing) that allow each student to make use of their diverse backgrounds and distinctive learning styles. Activities and the concepts learned through them are emphasized and reviewed in lectures to encourage students to think about the material.

ASSESSMENT OF PERFORMANCE

GRADING: Grades will be based on **participation**, **assignments (in class and homework)**, **presentations**, **and a research proposal**. Your final grade will be based on a straight percentage. (90-100% = A, 80- 89% = B, 70-79% = C, 60-69% = D and < 60% = F).

Grades will be based on the following breakdown:

Grade breakdown

15%	Class Participation (answering and asking questions, as well as group work)
25%	Short Written Assignments
20%	Homework Assignments and Presentations
40%	Research Proposal

READINGS: Primary readings for the class will be from the recommended textbook.

ATTENDANCE AND PARTICIPATION: Both are integral to your success in this class. Asking and answering questions is expected and required. While you will not be penalized directly for not coming to class, if you are not here you cannot participate, and this will likely be reflected in your class performance. Beyond the obvious benefits that being in class and participating have on a student's understanding of the material, regular attendance in this class can earn you additional points on your final grade. No matter the reason (excused or not), **you are responsible for all work missed** in your absence, and you should immediately **contact a classmate** to get what you have missed.

SHORT WRITTEN ASSIGNMENTS: There will be given writing assignments during the semester based on topics covered in class. Specifically, you will be required to submit different elements of a research proposal on which you will receive feedback from the instructor. In addition, you will receive short written assignment (*e.g.*, an essay of about 800-1,000 words or 2-3 pages) based on different lecture topics.

HOMEWORK ASSIGNMENTS AND PRESENTATIONS: During the course, review questions will be given as homework assignments, and you will be required to provide a short written response. In certain weeks students will be asked to present one or more of the assigned readings. Presentations should summarize the experimental questions, approach, and findings, as well as identify potential weaknesses and areas to stimulate class discussion.

RESEARCH PROPOSAL: You will submit a proposal in NSF format on a topic of interest that will contribute to the proposal that you are expected to submit for your screening exam. Prior to writing the research proposal, you will discuss the topic with the instructor.

NOTE ON ACADEMIC CONDUCT: ACADEMIC DISHONESTY WILL NOT BE TOLERATED. Attempts to discredit the system of evaluation (*e.g.*, plagiarism on an assignment, or fabricating an excuse for missing class) are serious. Academic dishonesty will be reported in writing to the Department Chair and to the Dean of the College. Students are encouraged to read the SCampus in Part B, Section 11, "Behavior Violating University Standards" policy.usc.edu/scampus-part-b.

Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on scientific misconduct, policy.usc.edu/scientific-misconduct.

ACADEMIC SUPPORTS: Students who require additional academic support can access it through the services listed below. Please note that this is not an exhaustive list, and I am happy to assist with finding other needed support.

a) ***Student Health Counseling Services***. Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention. Contact: *(213) 740-7711 – 24/7 on call*; engemannshc.usc.edu/counseling

b) ***National Suicide Prevention Lifeline***. Free and confidential emotional support to people in suicidal crisis or emotional distress (24 hours a day, 7 days a week). Contact: *1 (800) 273-8255 – 24/7 on call;*suicidepreventionlifeline.org

c) ***Relationship and Sexual Violence Prevention Services (RSVP)***. Free and confidential therapy services, workshops, and training for situations related to gender-based harm. Contact: (213) 740-4900 – 24/7 on call; engemannshc.usc.edu/rsvp

d) ***Office of Equity and Diversity (OED) | Title IX.*** The university prohibits discrimination or harassment based on the following protected characteristics: race, color, national origin, ancestry, religion, sex, gender, gender identity, gender expression, sexual orientation, age, physical disability, medical condition, mental disability, marital status, pregnancy, veteran status, genetic information, and any other characteristic which may be specified in applicable laws and governmental regulations. Contact: *(213) 740-5086;* equity.usc.edu, titleix.usc.edu

e) ***Bias Assessment Response and Support***. Avenue to report incidents of bias, hate crimes, and microaggressions for appropriate investigation and response. Contact: *(213) 740-2421;*studentaffairs.usc.edu/bias-assessment-response-support

f) ***The Office of Disability Services and Programs***. Support and accommodations for students with disabilities. Services include assistance in providing readers/notetakers/interpreters, special accommodations for test taking needs, assistance with architectural barriers, assistive technology, and support for individual needs. Contact: *(213) 740-0776;* dsp.usc.edu

g) ***USC Support and Advocacy***. Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student. Contact: *(213) 821-4710*; studentaffairs.usc.edu/ssa

h) ***Diversity at USC***. Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students. Contact: *(213) 740-2101*; diversity.usc.edu

CONTACTING THE INSTRUCTOR: The best means of contacting the instructor is via email. If you email me, I will generally respond within 24 hours. However, I generally do not respond to emails over the weekend or after 5:00 pm. I want to be available to help students get the most out of the class, and I maintain an open-door policy so that students feel free to seek out help as needed. Outside of office hours, **if my door is open, I may be available** for a **brief** visit and to help with simple questions. However, if my office door is closed, please make an appointment

BLACKBOARD: I will place the syllabus, schedule, assignments and other relevant material on **Blackboard**.

BISC549 LECTURE SCHEDULE

[subject to revision – revised August 22, 2022]

Friday 11:00 am – 12:50 pm (via Zoom or in room AHF 205)

Date	Topic	Readings
08/26/2022	Introduction to BISC549; Science and Communication	Hofmann Part I
09/02/2022	Scientific Writing Basics: Style and composition	Hofmann Part I
09/09/2022	Scientific Writing Basics: Style and composition	Hofmann Part I
09/16/2022	Scientific Writing Basics: Style and composition	Hofmann Part I
09/23/2022	Scientific Writing Basics: Style and composition	Hofmann Part I
09/30/2022	Planning and laying the foundation	Hofmann Part II
10/07/2022	Planning and laying the foundation	Hofmann Part II
10/14/2022	Planning and laying the foundation	Hofmann Part II
10/21/2022	Research proposals	Hofmann Part III
10/28/2022	Research proposals	Hofmann Part III
11/04/2022	Research proposals	Hofmann Part III
11/11/2022	**NO CLASS**–VETERANS DAY	
11/18/2022	Research proposals	Hofmann Part III
11/25/2022	**NO CLASS**– THANKSGIVING HOLIDAY	
12/02/2022	Ethics in research	TBD
12/09/2022	**RESEARCH PROPOSAL DUE 5pm ****	