

USC Dornsife  
College of Letters,  
Arts and Sciences

**BISC 549 – Seminar in Integrative and Evolutionary Biology (2 units)**

**Spring 2024**

**Lectures: Monday; Time: 4:00 – 5:15 PM**

**Location: AHF 251**

**•Instructor: Lorraine P. Turcotte, PhD, Professor (she/her/hers)**

**Office: AHF 247**

**Office Hours: by appointment**

**Contact Info: [turcotte@usc.edu](mailto:turcotte@usc.edu)**

I will respond to all emails within 48 hours either individually via email or as a group in class (if the topic is relevant for all students attending the class). For answers to complex questions, the student may be encouraged to schedule a visit during office hours.

**•Instructor: Michael Campbell, PhD, Assistant Professor**

**Office Location: AHF B10e**

**Office Hours: TBA**

**Contact Info: [mc44860@usc.edu](mailto:mc44860@usc.edu)**

**COURSE DESCRIPTION**

This seminar in Integrative and Evolutionary Biology is part of a curriculum on professional development and designed as a workshop on proposal/grant-writing and written communication in science.

Specifically, over the semester, each student will develop a proposal modeled after a grant application as per the guidelines of a major funding agency (e.g. NIH, NSF, or private foundations).

**Learning Objectives**

To develop critical thinking and those skills essential to successful grant proposal writing, i.e. selecting significant research questions, hypothesis and aims development, targeted and critical literature review, research/experimental design, selection of test variables and appropriate methodologies, data collection and analysis, interpretation of results, understanding and defining limitations, preliminary data and anticipated results.

**Technological proficiency and Hardware/Software required**

Because the possibility always exists that we will have to go back to virtual classes, you should have an **internet-enabled device** with browser capabilities, such as a tablet or laptop/desktop computer. This course requires the use of **Blackboard** whether the class will be in person or virtual. Blackboard will be your gateway to access Zoom (if we have to give lectures virtually) and to view your grades. Blackboard will also be the repository of lecture slides and lectures on Zoom if we go virtual. If classes go online, students will need to download **Respondus Lockdown Browser** to take all scheduled exams. Information for these resources can be found at the ITS Customer Support Center: <https://itservices.usc.edu/contact/> and <https://blackboardhelp.usc.edu/>. This course also requires the use of Microsoft Word, Excel and Powerpoint.

**USC Technology Rental Program** (<https://itservices.usc.edu/spaces/laptoploaner/>): Students who are in need of resources to participate in this class can apply to the university's equipment rental program. The **Student Basic Needs team** will work with you to distribute equipment (if you are eligible). Please visit <https://studentbasicneeds.usc.edu/resources/technology-assistance/> to apply and for more information.

### Description and Assessment of Assignments

For this course, you will ask to finalize the research proposal for your screening exams. To facilitate this process, you will be asked to complete three written assignments and three presentations. Ultimately, you will be asked to submit your final proposal.

**Writing Assignments:** Written assignments will be due weeks 3, 5, 8, and 13. Assignments will be submitted via email to both instructors.

**Presentations:** Presentations will be due in weeks 9, and 11. Powerpoint slides will be submitted via email to both instructors.

**Final Draft:** Final draft of your proposal for your screening exam will be due one week prior to screening exam.

### Grading Breakdown

| Assignment  | % of Grade |
|---|------------|
|   |            |
| <b>4 Modules due weeks 3, 5, 8, and 13 (10% each)</b> | <b>40</b>  |
| <b>Presentations due week 9 and 10 (10 % each)</b>    | <b>20</b>  |
| <b>Final draft of proposal for the screening exam</b> | <b>40</b>  |
|   |            |
| <b>Total</b>  | <b>100</b> |

### Grading Timeline

All graded work will be returned no later than one week after the submission deadline.

### Late work

If the submission deadline for an assignment is missed, the assignment may be submitted up to one week late. A **20% grade deduction** will be applied to all late assignments. If you miss submitting work for an unavoidable, documented, and serious reason, discuss the situation with me during office hours.

### Grading Scale

•Assignments and summaries will be given a number grade (example: 88%). **Only the final grade will be given a letter grade.** Course final grades will be determined using the following scale:

|           |                 |
|-----------|-----------------|
| <b>A</b>  | <b>94-100</b>   |
| <b>A-</b> | <b>90-93.99</b> |
| <b>B+</b> | <b>87-89.99</b> |
| <b>B</b>  | <b>83-86.99</b> |
| <b>B-</b> | <b>80-82.99</b> |
| <b>C+</b> | <b>77-79.99</b> |

|    |          |
|----|----------|
| C  | 73-76.99 |
| C- | 70-72.99 |
| D+ | 67-69.99 |
| D  | 63-66.99 |
| D- | 60-62.99 |
| F  | ≤59.9%   |

### Classroom Norms

To promote a respectful, professional, and productive classroom environment, the following expectations will be maintained during all class sessions.

- Do not interrupt when someone else is speaking
- You can criticize ideas, but not people
- Avoid inflammatory language
- Either support assertions with evidence, or speak from personal experience
- Do not dominate the discussion
- Make a single point each time you speak, rather than making a series of statements at once

### Attendance and Participation

You will be expected to participate in all aspects of this academic course. This means that we expect all students to ask questions and to participate in discussions related to the topics of the day.

**Masking:** The ongoing Covid-19 pandemic combined with the flu season may necessitate the return of masking at some point during the semester. With this in mind and with the latest LA County recommendations, **we will support instructors, students, TA's and lecturers who choose to wear a mask in the classroom or the lab as needed based on personal preferences and/or requirements.** There is no need to explain or justify your choice (but you can do so if you wish).

### Course Schedule: A Weekly Breakdown

| Week | Date     | Lecture Topic  | Instructor | Due  |
|------|----------|--|------------|--|
| 1    | 01/08/24 | Specific aims and hypotheses   | Campbell   |  |
| 2    | 01/15/24 | <b>Dr. MLK Jr.'s Birthday—NO CLASS</b>   | Campbell   |  |
| 3    | 01/22/24 | Background and preliminary data  | Campbell   | Written section on specific aims/hypotheses        |
| 4    | 01/29/04 | Significance and innovation  | Campbell   |  |
| 5    | 02/05/24 | Approach/Research Design   | Campbell   | Written section on background and preliminary data |
| 6    | 02/12/24 | Budget, budget justification, and other proposal sections                                | Campbell   |  |
| 7    | 02/19/24 | <b>President's Day—NO CLASS</b>  | Campbell   |  |
| 8    | 02/26/24 | Proposal development / continuation of specific aims and rationale developed in the fall | Turcotte   | Written section on significance and innovation     |

|    |          |  |                       |                                  |
|----|----------|--|-----------------------|----------------------------------|
| 9  | 03/04/24 | Experimental Design and determination of variables to be measured to test the hypothesis | Turcotte              | Present specific aims/hypotheses |
| 10 | 03/11/24 | <b>SPRING RECESS—NO CLASS</b>  |                       |                                  |
| 11 | 03/18/24 | Evaluation of methodologies  | Turcotte              | Present method comparison        |
| 12 | 03/25/24 | Evaluation of methodologies  | Turcotte              |                                  |
| 13 | 04/01/24 | Statistics; Test-retest reliability and effect size                                      | Turcotte              | Written methods section          |
| 14 | 04/08/24 | Data collection; resources and expertise required  | Turcotte              |                                  |
| 15 | 04/15/24 | Data collection; logistics   | Turcotte              |                                  |
| 16 | 04/22/24 | Final draft using appropriate format   | Turcotte/<br>Campbell | <b>Final draft due</b>           |

### Statement on Academic Conduct and Support Systems

#### Academic Conduct:

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in SCampus in Part B, Section 11, “Behavior Violating University Standards” [policy.usc.edu/scampus-part-b](http://policy.usc.edu/scampus-part-b). Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on [Research and Scholarship Misconduct](#).

#### Students and Disability Accommodations:

USC welcomes students with disabilities into all of the University’s educational programs. The Office of Student Accessibility Services (OSAS) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at [osas.usc.edu](http://osas.usc.edu). You may contact OSAS at (213) 740-0776 or via email at [osasfrontdesk@usc.edu](mailto:osasfrontdesk@usc.edu).

#### Support Systems:

*Counseling and Mental Health* - (213) 740-9355 – 24/7 on call  
[studenthealth.usc.edu/counseling](http://studenthealth.usc.edu/counseling)

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

*National Suicide Prevention Lifeline* - 1 (800) 273-8255 – 24/7 on call  
[suicidepreventionlifeline.org](http://suicidepreventionlifeline.org)

Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

*Relationship and Sexual Violence Prevention Services (RSVP)* - (213) 740-9355(WELL), press “0” after hours – 24/7 on call  
[studenthealth.usc.edu/sexual-assault](http://studenthealth.usc.edu/sexual-assault)

Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

*Office for Equity, Equal Opportunity, and Title IX (EEO-TIX)* - (213) 740-5086  
[eeotix.usc.edu](http://eeotix.usc.edu)

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

*Reporting Incidents of Bias or Harassment - (213) 740-5086 or (213) 821-8298*

[usc-advocate.symplicity.com/care\\_report](https://usc-advocate.symplicity.com/care_report)

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

*The Office of Student Accessibility Services (OSAS) - (213) 740-0776*

[osas.usc.edu](https://osas.usc.edu)

OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

*USC Campus Support and Intervention - (213) 821-4710*

[campussupport.usc.edu](https://campussupport.usc.edu)

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

*Diversity, Equity and Inclusion - (213) 740-2101*

[diversity.usc.edu](https://diversity.usc.edu)

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.

*USC Emergency - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call*

[dps.usc.edu](https://dps.usc.edu), [emergency.usc.edu](https://emergency.usc.edu)

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

*USC Department of Public Safety - UPC: (213) 740-6000, HSC: (323) 442-120 – 24/7 on call*

[dps.usc.edu](https://dps.usc.edu)

Non-emergency assistance or information.

*Office of the Ombuds - (213) 821-9556 (UPC) / (323-442-0382 (HSC)*

[ombuds.usc.edu](https://ombuds.usc.edu)

A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

*Occupational Therapy Faculty Practice - (323) 442-3340 or [otfp@med.usc.edu](mailto:otfp@med.usc.edu)*

[chan.usc.edu/otfp](https://chan.usc.edu/otfp)

Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.