Instructor: Jill McNitt-Gray, Ph.D.
                Office Hours: by appointment; Email: mcnitt@usc.edu

MEETINGS

Wednesdays, 9 - 10:50am, PED B9 TBD

TEXTBOOK

Recommended reading: Thomas Ogden & Israel Goldberg. Research Proposals – A guide to success. 3rd Ed., 2002

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).

COURSE 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.

GRADING

Writing Assignments: weekly writing submitted via email & finished modules (due weeks 4, 8, 12) 20% each
Final Draft: due one week prior to screening exams 25%
Attend and Evaluate Seminars: provide "I liked, I wish" evaluations 15%

Week 1	Introduction: Proposal development in the context of Integrative and Evolutionary Biology
Week 2	Experimental Design and Determination of Variables used to test hypotheses
Week 3	Evaluation of methodologies
Week 4	Evaluation of methodologies
Week 5	Test-Retest Reliability and Effect size required
Week 6	Data collection: resources and expertise required
Week 7	Data collection: logistics
Week 8	Expected Hurdles
Week 9	*Proposed Solutions*
Week 10	Integrate Methods with Specific aims, rationale/background, and significance
Week 11	Acquire Pilot Data
Week 12	Analyze Pilot Data

Week 13   Interpret Pilot Results in light of existing literature

Week 14   Representation of results (Slides: communicating evidence used to test hypothesis)

Week 15   Final Draft and Revisions (using format required by respective granting agencies)

**course plan may be modified as needed throughout the semester

In addition to in-class contact hours, all courses must also meet a minimum standard for out-of-class time, which accounts for time students spend on homework, readings, writing, and other academic activities. **For each unit of in-class contact time, the university expects two hours of out of class student work per week over a semester.**

(Please refer to the *Contact Hours Reference,* located at usc.edu/curriculum/resources.)

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 Section 11, *Behavior Violating University Standards*https://scampus.usc.edu/1100-behavior-violating-university-standards-and-appropriate-sanctions/. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, http://policy.usc.edu/scientific-misconduct/.

Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the *Office of Equity and Diversity* http://equity.usc.edu/ or to the *Department of Public Safety* http://capsnet.usc.edu/department/department-public-safety/online-forms/contact-us. This is important for the safety whole USC community. Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report, or can initiate the report on behalf of another person. *The Center for Women and Men* http://www.usc.edu/student-affairs/cwm/ provides 24/7 confidential support, and the sexual assault resource center webpage sarc@usc.edu describes reporting options and other resources.

Support Systems
A number of USC's schools provide support for students who need help with scholarly writing. Check with your advisor or program staff to find out more. Students whose primary language is not English should check with the *American Language Institute* http://dornsife.usc.edu/ali, which sponsors courses and workshops specifically for international graduate students. *The Office of Disability Services and Programs* http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.htmlprovides certification for students with disabilities and helps arrange the relevant accommodations. If an officially declared emergency makes travel to campus infeasible, *USC Emergency Information http://emergency.usc.edu/*will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.