Syllabus

GLY6932 – Special Topics – Demystifying the Proposal Writing Process (3-credits)

Mondays Periods 6-8 (12.50 – 3.50 pm), WM 210

Professor: Dr. Robert Hatfield
Contact: Office WM 220; rhatfield1@ufl.edu
Office Hours: Wednesdays 2-4 pm or by arrangement. Please feel free to contact me to arrange office hours outside of class periods.
Materials and Supplies Fee: None

Course Premise: All graduate students, whether they stay in academia or not, will likely need to write strong proposals and/or make compelling arguments throughout their careers. This course will largely use NSF-style proposal organization as a model for rigorous and well thought out proposal development and submission. In this course, students will learn how to develop a full federal agency proposal, complete with all required and auxiliary documents for submission targeted to a specific solicitation. We will introduce and use the NSF Research.gov demo site (which is a mirror of the Research.gov site) to develop and compile full NSF proposals as would be done through the real NSF Research.gov proposal management system.

Students will begin by reviewing *real* proposals written by UF faculty members and participate in a simulated funding panel. Using this experience as a springboard, each student shall develop their own proposal, with the help of his or her faculty advisor, that in some way addresses his or her thesis research. These proposals will also be reviewed and evaluated by a simulated NSF panel made up of the students and instructor. The culminating assignment will be an oral presentation of the proposal (AGU-style) and will be open to faculty and all other students as a showcase of the research breadth of our graduate student cohort.

The goal of this course is that by the end of the semester students will have written an NSF-style (or other style as appropriate to the student) proposal which can be (but doesn't have to be) the basis of a real submission to target graduate student funding and/or open up avenues for post-doc conversations, post-graduation. Whether or not your proposal is "funded" by your peers, or ends up being submitted to a real call, it will serve as a useful road map as you proceed with your research.

This course is intended for advanced (second year or beyond) graduate students and is best suited for students who have already written their prospectus. This course will help develop those ideas, frame their questions and hypotheses, and discuss how best to test them with data and data collection methods. This course may also be audited by postdoctoral researchers, with the agreement of the instructor.

This course averages out to a three-credit course but in-class activities during the 2 Mock NSF Panels may extend beyond the designated class time depending on class size. The week-by-week class schedule will deal with important aspects of the proposal writing process each week, but time will also be put aside during class to address specific questions and concerns from the group as we move through the process.

Prerequisites: Commitment from your faculty advisor to provide a "real" past proposal (including and ad-hoc and panel reviews) for review by the students. Commitment from your faculty advisor to support you in developing a suitable proposal.

A note for faculty advisors on the nature of these commitments. It will be stressed that all proposals shared with the class are considered confidential and we will have class discussions about the sensitive nature of proposals and intellectual merit. The commitment to assist in developing proposals is not intended to be a specific time burden, but if students have specific and/or technical ideas for their research proposals, you are in the best position to be able to answer those questions as the students work through this process.

Class Schedule:

Week 1: 08/25/25: Orientation to the class. Introduction to NSF structure and how to find and identify a program/solicitation to submit a proposal to. Discussion of the different types of proposals (EAGER, RAPID, Full, Post-doctoral etc) you can submit. How to manage time when writing a proposal. Assignment 0 due by the end of the week (08/29/205). Assignment 1 handed out.

Week 2: 09/01/25: No Class. Labor Day. Assignment of roles for Mock NSF Panel 1 distributed by email.

Week 3: 09/08/25: Class presentations of funding opportunities (Assignment 1). Overview of the entire submission process from drafting, internal review, submission, ad-hoc reviews, panel review, and decisions. Overview of the key NSF Review Criteria: Intellectual Merit & Broader Impacts.

Week 4: 09/15/25: Assignment 2 in class: Mock NSF Panel 1 (could go longer than the posted class time – please contact me privately if you foresee any issues with extending the class period).

Week 5: 09/22/25: Constructing your project description. Using the experience of the panel review we will brainstorm as a group on what the successful elements of real proposals are with the aim of developing a skeleton that your project description can be scaffolded around. Ordering of proposals, what goes in to your 15-pages and in what order?

Week 6: 09/29/25: The importance of hypotheses testing in proposal development. How to formulate hypotheses and how to go about testing them with experimental design. We will spend some time discussing the importance of a strong introduction. How do you grab your audience and convince them to fund you and your science?

Week 7: 10/06/25: Assignment 3a in class: 5–10-minute presentation. Present a 4-5 slide overview of your proposed project. It should begin with a cover page detailing the proposal title, the specific program solicitation, the proposal duration, and basic info like what personnel will be supported. Slides 2-5 will each deal with the project overview, the intellectual merit, and the broader impacts. This is the basis for your project summary. Each presentation will be followed by 5-10 mins of questions/feedback from the class. The project summary (Assignment 3b) is to be submitted by the end of the week (10/10/25).

Week 8: 10/13/25: Overview of the different required and optional proposal elements. Introduction to the PAAPG, SciENV, and the Research.gov demo site as tools to build your full proposal.

Week 9: 10/20/25: Budgets and Budget Justifications. How to plan a proposal budget. What can be charged to a federal Grant? What can't? In class activity creating a proposal budget and budget justification.

Week 10: 10/27/25: Questions for faculty members (hopefully we can get 2-3 other faculty members together for a 1hr discussion on their experience of writing a successful grant proposal). Elevating your writing. A discussion on how to polish your first draft to make for a compelling proposal.

Week 11: 11/03/25: All those other things. What makes a complete proposal? Facilities, Equipment and Other Resources, Data Management Plan, Post-Doctoral Mentoring Plan, Current and Pending Support, Collaborators and other Affiliations, Biosketch.

Week 12: 11/10/25: CRUNCH TIME! Q & A as needed during class time to offer support advice during the proposal writing process. Use any additional time to work on proposal development.

Week 13: 11/17/25: ***Full, complete proposal due by the end of the day (11-17-23).***
Debrief/Discussion. How was the proposal writing process? What was hard/challenging? What was easy? What would you different next time? Assignment of roles for Mock NSF Panel 2.

Week 14: 11/24/25: No Class. Thanksgiving Week.

Week 15: 12/01/25: Mock NSF Panel 2 (could go longer than the posted class time – please contact me privately if you foresee any issues with extending the class period). Assignment 5a due 12/01/25, assignment 5c due 12/05/25.

Week 16: 12/08/25: Exam 1/Student Presentations. 15-min AGU style oral presentation. Given the number of students this could take several hours, but each student would provide a 12 min talk on their proposed research project with time for questions and change over.

Assignments:

Assignment 0: Due 8/29/25: Submit a pdf of a complete proposal (including all auxiliary documents) written by your advisor or other academic mentor via Canvas. Please contact me if you are having difficulty with obtaining a proposal.

Assignment 1: Due 9/5/25: Identify a program at NSF (or other federal agency) to which you would like to submit to. Search the recent awards that have been funded through the program using the simple award search. Identify submission deadlines. Identify the program budget, and typical number of awards made each cycle and the amount of each award. Put together a PowerPoint slide or two and we will use these mini presentations as the start point for a class discussion on 9/8/25.

Assignment 2: Mock Panel 9/15/25. Serve as a proposal lead, reader, or scribe on a selection of faculty written proposals. Roles and responsibilities to be defined and distributed in class prior to the panel.

Assignment 3: Brief Presentation/overview of your proposal due on 10/06/25, project summary by the end of the same week 10/10/25.

Assignment 4: Submit complete proposal with all required elements.

Assignment 5a: Submit ad-hoc reviews for Mock Panel 2. Due before class on 12/01/25.

Assignment 5b: Mock Panel 2: 12/01/25. Serve as a proposal lead, reader, or scribe on a selection of student written proposals. Roles and responsibilities to be defined in class prior to the panel.

Assignment 5c: Submit written evaluations for each of your scribe roles. Due 12/05/25.

Assignment 6: 15-min AGU style presentation of your research proposal.

Deadlines, Key Dates, and Grade Weighting:

August 29th: Assignment 0: Submit mentors' proposal via Canvas. *No grade but it is a prerequisite.*
September 5th: Assignment 1 and participation in class discussion on 9/8/25. *Worth 10 % of the grade.*
September 15th: Assignment 2: Mock Panel 1. *Preparation and participation worth 15 % of the grade*.
October 6th: Assignment 3a: 5-minute, 4-slide presentation. *Worth 5% of the grade.*
October 10th: Assignment 3b: Project Summary due. *Worth 10% of the grade.*
November 17th: Assignment 4: Final proposal due with all required elements. *Worth 20% of the grade.*
December 1st: Assignment 5a: Mock Panel 2. *Submission of ad-hoc reviews worth 5 % of the grade.*
December 1st: Assignment 5b: Mock Panel 2. *Participation worth 10 % of the grade.*
December 5th: Assignment 5c: Mock Panel 2. *Submission of discussion summaries worth 5 % of grade.*
December 8th: Exam 1: Presentations. *Worth 20 % of the grade.*

Assignments 0, 1, 3b, and 4 to be submitted via Canvas.

Attendance Policy:

Students are expected to attend class and participate in class discussions. Attendance and participation in class is formally evaluated via assignments 1, 2, 3a, 5, and 6 which are wholly or partly completed in class and together are worth 60 % of the final grade.

Grading Scale:

Grade	**Range:**	
A	100 %	to 94.0 %
A-	< 94.0 %	to 90.0 %
B+	< 90.0 %	to 87.0 %
B	< 87.0 %	to 84.0 %
B-	< 84.0 %	to 80.0 %
C+	< 80.0 %	to 77.0 %
C	< 77.0 %	to 74.0 %
C-	< 74.0 %	to 70.0 %
D+	< 70.0 %	to 67.0 %
D	< 67.0 %	to 64.0 %
D-	< 64.0 %	to 61.0 %

F	< 61.0 %	to 0.0 %

Required Course Materials and Canvas Site:

There is no required textbook for this course. All required reading materials will be distributed by the instructor and hosted on Canvas (https://elearning.ufl.edu/). Assignments 0, 3b, and 4 will be submitted via Canvas; all other assignments do not have to be formally submitted, but will be used in class for discussion/presentation. Post-Docs auditing the course should contact the instructor with their UFID so they can be added to the Canvas Site.

Online Course Evaluation:

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at http://gatorevals.aa.ufl.edu/students. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via http://ufl.bluera.com/ufl. Summaries of course evaluation results are available to at http://gatorevals.aa.ufl.edu/public-results.

This course complies with all UF policies. For information on those policies and for a list of campus resources, please see this page: https://go.ufl.edu/syllabuspolicies.