Grant Writing

PET 5936 | Class # 16425 | 3 Credits | Spring 2023

UF | Department of Applied Physiology and Kinesiology
College of Health and Human Performance
UNIVERSITY of FLORIDA

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Course Information

INSTRUCTOR	**Ashley J. Smuder, PhD** Office: FLG 112 Office Phone: 352-294-1765 Email: asmuder@ufl.edu Preferred Method of Contact: email
OFFICE HOURS	By appointment
MEETING TIME/LOCATION	FLG 225 Thursday | Period 8 – 10 (3:00pm – 6:00pm)

COURSE DESCRIPTION

This is an introductory course in grant writing that is targeted for graduate students and clinician-scientists preparing for research careers. This course will focus on the fundamental components of a research grant using both lecture and reading materials. During this course, each student will write an "experimental" grant using an NIH R21 or F31 format. The course will conclude with the formation of "peer-review study sections" to review the grant proposals written by class members.

PREREQUISITE KNOWLEDGE AND SKILLS

None.

REQUIRED AND RECOMMENDED MATERIALS

No textbook is required. The course instructor will post lecture slides, videos and reading materials as appropriate on Canvas. Students may not circulate or share sample grant proposals from this class without the author's permission.

COURSE FORMAT

This course will meet once per week with classes consisting of a mix of informal lectures, individual grant section consultations, mock study sections and discussions with guest panelists.

COURSE LEARNING OBJECTIVES:

This course will cover issues that are critical for success when seeking out and applying for grant awards. Upon successful completion of the course students will be able to:

1. Identify and describe key elements of good scientific writing
2. Identify key components and generate an NIH biosketch
3. Evaluate and critically review a research grant
4. Identify and discuss the organization of the NIH and the NIH grant submission process
5. Describe and generate components of an NIH grant and recognize the process of crafting a successful grant application
6. Analyze, identify and discuss the NIH grant review process and scoring system

Course & University Policies

ATTENDANCE POLICY

Make every effort to attend all class meetings. Attendance at the assigned study section is mandatory. Missing classes will likely have a negative impact on learning and therefore could negatively influence your final grade in the course. Requirements for class attendance, make-up assignments and other work in this course are consistent with university policies and can be found at:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

PERSONAL CONDUCT POLICY

Students are expected to exhibit behaviors that reflect highly upon themselves and our University. Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obliged to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult the instructor in this class.

ACCOMMODATING STUDENTS WITH DISABILITIES

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center by visiting their Get Started page at https://disability.ufl.edu/students/get-started/. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations. Several activities in the course are performed in group. The instructor will work closely with the DRC and the students registered therein to make suitable arrangements for group assignments.

COURSE EVALUATIONS

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 https://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 https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

Getting Help

HEALTH & WELLNESS

- U Matter, We Care: If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575
- Counseling and Wellness Center: https://counseling.ufl.edu/, 352-392-1575
- Sexual Assault Recovery Services (SARS) - Student Health Care Center, 392-1161
- University Police Department, 392-1111 (or 9-1-1 for emergencies) http://www.police.ufl.edu/

ACADEMIC RESOURCES

- E-learning technical support, 352-392-4357 (select opti on 2) or e-mail to Learning-support@ufl.edu. https://lss.at.ufl.edu/help.shtml
- Career Connections Center, Reitz Union, 392-1601. Career assistance and counseling. https://career.ufl.edu/
- Library Support, http://cms.uflib.ufl.edu/ask. Various ways to receive assistance with respect to using the libraries or finding resources.
- Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. http://teachingcenter.ufl.edu/
- Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. http://writing.ufl.edu/writing-studio/

- Student Complaints On-Campus: https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/ On-Line Students Complaints: http://distance.ufl.edu/student-complaint-process/

INCLUSION, DIVERSITY, EQUITY, AND ACCESSIBILITY RESOURCES

For suggestions or concerns related to IDEA, please reach out to any of the following:
- Dr. Linda Nguyen, APK IDEA Liaison, linda.nguyen@hhp.ufl.edu
- Dr. Rachael Seidler, APK Graduate Coordinator, rachaelseidler@ufl.edu
- Dr. Joslyn Ahlgren, APK Undergraduate Coordinator, jahlgren@ufl.edu

Grading

The following list provides the point-accruing components of the course. The total points earned from each grading component will be summed and will comprise the total points earned in the course. The course grading scale is also provided for reference.

Evaluation Components	Points Per Component	Approximate % of Total Grade
Assignments (3)	10 pts/assignment = 30 pts	30/200 = 15%
NIH biosketch	20 pts	20/200 = 10%
Grant application	75 pts	75/200 = 37.5%
Grant reviews (3)	10 pts/review = 30 pts	30/200 = 15%
Study section participation	25 points	25/200 = 12.5%
Grant revision	20 points	20/200 = 10%

Assignments – Three homework assignments will be provided. Grades will be based on assignment completion.

NIH Biosketch – For this assignment, students will need to find the NIH instructions and requirements for biographic sketches and complete one for themselves.

Grant Application – The objective of this assignment is to improve your ability to identify an important research problem, devise an experimental solution to the problem, and compose a peer-reviewed competitive grant. Students should use the instructions provided by the NIH SF424 forms (Posted on NIH website). Your grant R21 or F31 application requires the completion of all of the NIH required forms which includes yours and your co-investigators NIH biosketches. The body of the research plan of the grant **will be limited to 6 pages (note: this page count does not include the abstract and specific aims)**. This 6 page limit is identical to the current NIH R21 and F31 guidelines.

Grant Reviews – Students will be assigned three proposals written by other classmates. They will read and critique the proposals following the NIH guidelines for reviewers. Students will be expected to discuss their reviews in a mock NIH study section.

Study Section Participation – Each student is required to attend and participate in a peer review study section of grants written by class members. Attendance and oral participation in this process is mandatory.

Grant Revision – Based on the critique from the study section, each student will submit an introduction page addressing the changes made to the grant application for resubmission.

LATE POLICY

Assignments may be submitted late with a valid and university approved excuse. Without a university approved reason 10% of possible points will be deducted per day. University policy regarding attendance and approved reasons for missing class and associated assignments can be viewed here:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

GRADING SCALE

Students should contact the instructor as soon as possible if they feel there is an error in grading or submission of final grades.   Final course grades will be assigned based on the table below. The grade achieved by the student and showing on Canvas is final. There is no rounding of grades in any circumstance. Any requests for additional extra credit or special exceptions to these grading policies will be interpreted as an honor code violation (i.e., asking for preferential treatment) and will be handled accordingly.

More detailed information regarding current UF grading policies can be found here:
https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/

Letter Grade	A	B+	B	C+	C	D+	D	E
Percent of Total Points	90.00-100%	87.00-89.99%	80.00-86.99%	77.00-79.99%	70.00-76.99%	67.00-69.99%	60.00-66.99%	0-59.99%
GPA of Each Letter Grade	4	3.33	3	2.33	2	1.33	1	0

Weekly Course Schedule

TENTATIVE COURSE SCHEDULE

This is an approximation of course content during the semester and is subject to change per discretion of the instructor. Course content and/or order of presentation may change depending on class needs. Students will be apprised of any changes as soon as they occur.

Date	Topics	Assignments
Jan-10	Introduction to Grant Writing	
Jan-17	NIH resources and grants	NIH website assignment
Jan-24	Components of an NIH grant – Part 1	
Jan-31	Biosketch consultation	NIH Biosketch
Feb-7	Components of an NIH grant – Part 2	Panelist questions assignment
Feb-14	Guest panelists	
Feb-21	Specific Aims consultation	Specific Aims and Abstract
Feb-28	Grant review process and scoring NIH study sections and institutes	
Mar-7	Research Strategy consultation	
Mar-14	No class – Spring Break	Research Strategy Mock study section assignment
Mar-21	Reviewing a grant and writing a critique Review of study section operations	Full Grant Application
Mar-28	Pick up grant review assignments	Reviewer critiques
Apr-4	Study Section 1	
Apr-11	Study Section 2	
Apr-18	Responding to reviewer comments and grant revision	Response to reviewer comments
Apr-25	No class	