

**College of Public Health & Health Professions and College of Medicine  
PHC 7727**

**Grant Writing Skills for Clinical and Health Research**

**Summer C, 2020 2 credits**

**ZOOM Fridays 9:30 am (until up to 12 pm)**

**Instructor Information**

Section 13447

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## **Course Overview or Purpose**

This course provides practical instruction in the grant writing process, with a specific focus on National Institutes of Health (NIH) procedures. It provides the student with experience in writing a full grant application and in reviewing others' grant applications. It also contains a Mock Grant Review session to assist students in understanding the process and content of grant review.

**Prerequisites** Epidemiology Methods II or permission of instructors.

## **Course Objectives and/or Goals**

Upon successful completion of the course, students should be able to:

1. Discuss the National Institutes of Health funding structure, grant types, and application criteria.
2. Understand and correctly prepare a NIH grant application
3. Seek and respond to a Request for Proposal (F31 or K award). An application to other granting mechanisms must be approved from course instructor prior to submission.

## **Course Materials**

**Most required resources will be available via download; links will be provided.**

## **Course Requirements/Evaluation/Grading of Letter Grade**

<b>Grading Components</b>	<b>100 Points Total</b>
Prior to class preparation	5
Research Topic	5
Specific Aims	5
Research Strategy Flow chart-5pts Significance-5pts Approach-5pts	15
Biosketch	5
Training Plan	5
Letters of Support	5
Presentation	10
Completed F31 or K Grant Package	25
Peer Feedback Forms	10
Participation	10

**All materials will be graded on the revised submission. Please include your name and date and draft number on every submission. Participation grade will include discussion of the draft materials (first submissions).**

<b>Percentage or points earned in class</b>	<b>93%-100%</b>	<b>90%-92%</b>	<b>87%-89%</b>	<b>83%-86%</b>	<b>80%-82%</b>	<b>77%-79%</b>	<b>73%-76%</b>	<b>70%-72%</b>	<b>67%-69%</b>	<b>63%-66%</b>	<b>60%-62%</b>	<b>Below 60%</b>
<b>Letter Grade equivalent</b>	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E

<b>Letter Grade</b>	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E	WF	I	NG	S-U
<b>Grade Points</b>	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.67	1.33	1.0	0.67	0.0	0.0	0.0	0.0	0.0

For greater detail on the meaning of letter grades and university policies related to them, see the Registrar's Grade Policy regulations at <http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html>

### **Class Sessions**

The class will utilize interactive, blended, and didactic teaching styles using ZOOM as the main communication platform. Some class assignments will have a “mock” aspect. The “mock” aspect will provide students an opportunity to participate both as an applicant and a reviewer. This will involve both critiquing and having work critiqued. The work to be critiqued will be examined by both the instructor(s) and the student reviewer. Please submit your assignments BEFORE the class period through e-learning. The feedback will be graded, as will your revised version of each assignment.

This interactive style of learning demands that each participant actively prepares for class participation, and commits to the peer review process, an essential element of academic and scholarly life. Students are expected to take the review process seriously as it an important learning objective of this class

Assignment Outline				
#	Date	Topic and (Assignments)	Description	Points
1	05/15	Class will NOT meet!  COMPLETE prior to 2 <sup>nd</sup> class!	<p>1. Watch and be ready to discuss these:  <a href="https://www.youtube.com/user/NIHgrants">https://www.youtube.com/user/NIHgrants</a>  <a href="http://youtu.be/9cNRMSCGfHo">http://youtu.be/9cNRMSCGfHo</a></p> <p>2. Navigate various resources—that is, be familiar with them:  <a href="http://grants.nih.gov/grants/oer.htm">http://grants.nih.gov/grants/oer.htm</a>  <a href="http://grants.nih.gov/training/extramural.htm">http://grants.nih.gov/training/extramural.htm</a>  <a href="https://grants.nih.gov/grants/guide/pa-files/PA-18-671.html">https://grants.nih.gov/grants/guide/pa-files/PA-18-671.html</a>  <a href="http://grants.nih.gov/grants/how-to-apply-application-guide.htm">http://grants.nih.gov/grants/how-to-apply-application-guide.htm</a>  <a href="http://public.csr.nih.gov/aboutcsr/Pages/default.aspx">http://public.csr.nih.gov/aboutcsr/Pages/default.aspx</a></p> <p>3. Interview TWO faculty members from different departments (not your mentor, not anybody already questioned by another student taking the course this year): 1) How many grants have they “read” in their career? 2) How many have they carefully reviewed as a primary or secondary reviewer? 3) What is their <b>one sentence advice</b> to you for writing your first grant? 4. Identify examples for appropriate projects (topic, aims) from abstracts for relevant F31 grants listed on <a href="#">NIH reporter</a></p>	5
2	5/22	Research Topic (#1 one paragraph on topic; submit online before class and bring hard copy to class and #2 interview info; submit online be ready to discuss in class)	<p>1<sup>st</sup> hour: discuss your impressions of the YouTube videos. Discuss if you see yourself as one of the grantee types. Discuss the information from faculty above. What are the most important tips from the videos? How can you avoid common mistakes?</p> <p>2<sup>nd</sup> and 3<sup>rd</sup> hour: We will introduce <a href="#">NIH reporter!</a> You will share with the class your research interest—a question that you plan to address—or your dissertation question and an outline of what you would like to do. (You will write a NIH F31 or another instructor approved grant application this semester.) We will discuss specific aims – important elements, how-tos, and good examples from NIH RePORTER.</p>	5
3	5/29	Specific Aims (#1 submit SA draft online before class)	<p>1<sup>st</sup> hour: review with classmates your aims (written after reviewing the guidelines on the NIH website). State concisely the goals of the proposed research and summarize the expected outcome(s), including the impact that the results of the proposed research will exert on the research field(s) involved.</p> <p>2<sup>nd</sup> hour: Instructor will reinforce the material on best practices for writing aims.</p> <p>3<sup>rd</sup> hour: Students present aims (randomly selected). For next week, revise them to turn them in for grading.</p>	5
4	6/05	Flow chart (#1 submit revised SA and #2 FC draft)	Review the flow charts on the course site. Bring to class a graphic representation of your study design including sample size, eligibility, all participation, all measures, intervention if applicable. Criteria for grading: clear, complete, and visually	5

			attractive. 1 <sup>st</sup> hour: review revised SA and get feedback. 2 <sup>nd</sup> hour: Instructors review best practices for flow charts. 3 <sup>rd</sup> hour: Students present flow charts (randomly selected). Turn in corrected flow chart next week for grading.	
5	6/12	Significance (#1 submit revised FC and #2 Significance draft)	Explain how the research question challenges or seeks to shift current research or clinical practice paradigms. Review the NIH guidelines for Significance. Bring to class an example from your area of interest and identify its strengths and weaknesses. 1 <sup>st</sup> hour: Instructors will present hints for developing a strong Significance section. 2 <sup>nd</sup> 3 <sup>rd</sup> hour: Students will review each others' section.	5
6	6/19	Approach (#1 revised Significance and #2 Approach draft)	1 <sup>st</sup> hour: discussion of principles for drafting an overall strategy, methodology, and planned analyses that are well reasoned and appropriate to accomplish the specific aims of the project. We will present you examples from successful grants. 2 <sup>nd</sup> and 3 <sup>rd</sup> hour: Review and discussion of students' work (chosen at random).	5
7	07/10 Class will not meet!	Biosketch (Final POLISHED version due 07/05)	Personal statement, position and honors, peer reviewed manuscripts, and research support NIH Biosketch template and sample can be accessed from: <a href="https://www.ncbi.nlm.nih.gov/sciencv/">https://www.ncbi.nlm.nih.gov/sciencv/</a> (generates bio) <a href="http://grants.nih.gov/grants/funding/424/index.htm">http://grants.nih.gov/grants/funding/424/index.htm</a> <b>Arrange small group meeting</b> (ANY TIME during the week) to discuss and edit biosketch draft to generate final version	5
8	7/17	Training Plan aka "Background and Goals for Fellowship Training" (#1 Revised Approach and #2 TP draft)	1 <sup>st</sup> hour: Discussion/edits of TP 2 <sup>nd</sup> hour: Biosketch discussion 3 <sup>rd</sup> hour: Revised Approach discussion	5
9	7/24	Reference Letters, Cover Letter, Academic record (#1 Revised TP and #2 draft letters)	1 <sup>st</sup> hour: Principles of each 2 <sup>nd</sup> hour: Discussion/edits each 3 <sup>rd</sup> hour: Open discussion	5
10	07/31	Grant presentation (mock review)	Students will present 4-6 slides (max 10 min) to summarize their grant, followed by brief discussion and scoring.	10
	08/03	Peer Feedback (due to students and instructors)	Critique of assigned presentations (reviewer's 1-3)	10
	08/05	Final grant deadline		25
		Participation		10

## **Statement of University's Honesty Policy (cheating and use of copyrighted materials)**

*Academic Integrity* – Students are expected to act in accordance with the University of Florida policy on academic integrity (see Student Conduct Code, the Graduate Student Handbook or this web site for more details: [www.dso.ufl.edu/judicial/procedures/academicguide.php](http://www.dso.ufl.edu/judicial/procedures/academicguide.php)).

Cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior. We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.

## **Policy Related to Class Attendance and Make-up Work**

This is an interactive class and students are expected to be present and to participate in all class sessions. Students who know they will need to miss a class session should discuss this with the instructor prior to the date of the class.

## **Statement Related to Accommodations for Students with Disabilities**

### **Accommodations for Students with Disabilities**

If you require classroom accommodation because of a disability, you must first register with the Dean of Students Office (<http://www.dso.ufl.edu/>). The Dean of Students Office will provide documentation to you, which you then give to the instructor when requesting accommodation. The College is committed to providing reasonable accommodations to assist students in their coursework.

## **Counseling and Student Health**

Students may occasionally have personal issues that arise in the course of pursuing higher education or that may interfere with their academic performance. If you find yourself facing problems affecting your coursework, you are encouraged to talk with an instructor and to seek confidential assistance at the UF Counseling & Wellness Center, 352-392-1575. Visit their web site for more information: <http://www.counseling.ufl.edu/>.

The Student Health Care Center at Shands is a satellite clinic of the main Student Health Care Center located on Fletcher Drive on campus. Student Health at Shands offers a variety of clinical services, including primary care, women's health care, immunizations, mental health care, and pharmacy services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the web site at: [www.health.ufl.edu/shcc](http://www.health.ufl.edu/shcc)

Crisis intervention is always available 24/7 from: Alachua County Crisis Center: (352) 264-6789. From the Crisis Center: **“Do not wait until you reach a crisis to come in and talk with**

**us. We have helped many students through stressful situations impacting their academic performance. You are not alone so do not be afraid to ask for assistance.”**

**Class Demeanor Expected by the Professors**

As a classroom of scholars, the instructors will treat students with respect and expects respect in return. The classroom climate will be supportive, encouraging and open. To this end, no one should be taking calls or texts or using their laptops for other purposes than taking notes while the class is in session, except in the case of emergency. Electronic items must be turned off if they appear to detract from classroom discussion and attention. Please listen attentively; participation is required. When opinions differ, please listen first, and then prepare to comment. If you feel you have been treated disrespectfully by any member of the scholastic community involved in this course, please bring this to the instructor’s attention privately for remediation.