

University of Florida
College of Public Health & Health Professions Syllabus
PHC 7727 Grant Writing Skills for Clinical and Health Research (2 credit hours)

Summer C: 2023

Delivery Format: Online Synchronous, Fridays 9:30AM – 12:00PM

Course Website or E-Learning available on [Canvas](#)

Instructor Name: Volker Mai, PhD, MPH, Associate Professor of Epidemiology

Room Number: Emerging Pathogens Institute 373

Phone Number: 352-273-9398

Email Address: vmai@epi.ufl.edu

Office Hours: By Appointment

Preferred Course Communications: Email via E-learning,

Instructor Name: Drew A. Westmoreland, Assistant Professor of Epidemiology

Room Number: CTRB Rm. 4246

Phone Number: 352-294-5945

Email Address: westmorelanddrew@ufl.edu

Office Hours: By Appointment

Preferred Course Communications: Email

Prerequisites

To enroll in this course, students must:

- 1) Have taken Epidemiology Methods II or
- 2) Have permission of instructors and permission from your mentor to write an F31 (or equivalent grant) with due dates within one year or

Please note, your mentor is the person who will be your main help for directing the science, not the instructors.

It is not too early to get an era commons account ID. For class you will need one, so begin now to ask your grants office how to get one. Remember, this account ID will follow you throughout your career so choose a user ID wisely! The affiliation can always change, but not your user ID.

PURPOSE AND OUTCOME(S)

Course Overview

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.

Relation to Program Outcomes

The purpose of this course is to provide students with guidance for and practical experience in writing a NIH-style grant application. Students will write major components of an F31 or K-series career development award that will be submitted within the year. As such, this course provides students with key skills to successfully navigate the grant writing process—an essential part of seeking and receiving research funding for many career paths.

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.

Instructional Methods

The class will utilize interactive and didactic teaching styles using Zoom as the main communication platform (online, synchronous). 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 the e-learning course website. 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.

DESCRIPTION OF COURSE CONTENT

Topical Outline/Course Schedule

Week	Date(s)	Topic(s) and Readings	Assignments Due*
1	05/19 (Class will not meet)	<p>1. Watch and be ready to discuss these: https://www.youtube.com/watch?v=2cEZk1R-dJc http://youtu.be/9cNRMsCGfHo</p> <p>2. Navigate various resources—that is, be familiar with them: http://grants.nih.gov/grants/oer.htm http://grants.nih.gov/training/extramural.htm https://grants.nih.gov/grants/guide/pa-files/PA-21-051.html http://grants.nih.gov/grants/how-to-apply-application-guide.htm http://public.csr.nih.gov/aboutcsr/Pages/default.aspx</p> <p>3. Interview one faculty member from a <u>different department</u> and interview one faculty member from your <u>own department</u>. Ask them: a) What is the challenge involved in writing grants? b) How many have they written in their career? c) What is their one sentence advice to you for writing this grant? (The faculty member cannot be your mentor, nor anybody already questioned by another student taking the course this year- so you need to ask the faculty member m if they have been interviewed already and if so, you must choose someone else);</p> <p>4. Identify examples for similar, active, projects (topic, aims) from abstracts for relevant F31 grants listed in NIH reporter. Note the University, the Mentor etc.</p>	None

Week	Date(s)	Topic(s) and Readings	Assignments Due*
2	5/26	<p>Research Topic:</p> <p>1st hour: Discuss the information from faculty above. Discuss your impressions of the YouTube videos. What are the most important tips from the videos? How can you avoid common mistakes?</p> <p>2nd and 3rd hour: We will introduce NIH reporter! 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 an 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>	<ol style="list-style-type: none"> 1. Interview information 2. Research question and a brief paragraph on the topic
3	06/02	<p>Specific Aims:</p> <p>1st and 2nd hours: Review with classmates your aims (written after reviewing the guidelines on the NIH website above). 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. To get ideas on aims, read some material from NIH Reporter.</p> <p>Students present aims (randomly selected). <u>For next week, revise them to turn them in for grading.</u> This section is the hardest section to write and requires multiple iterations.</p> <p>3rd hour: Instructors will reinforce the material on best practices for writing aims.</p>	<ol style="list-style-type: none"> 1. Specific Aims 1st Draft

Week	Date(s)	Topic(s) and Readings	Assignments Due*
4	06/09	<p>Flow chart:</p> <p>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 attractive.</p> <p>1st and 2nd hours: Review flow charts with classmates paying attention to graphic presentation.</p> <p>Students present flow charts (randomly selected). <u>Turn in corrected flow chart next week for grading.</u></p> <p>3rd hour: Instructors review best practices for flow charts.</p>	<p>1. Flow Chart 1st Draft</p> <p>2. Specific Aims Revised Draft</p>
5	06/16	<p>Significance:</p> <p>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.</p> <p>1st and 2nd hours: Students will review each others' section keeping in mind the NIH's definition and expectations for the Significance section.</p> <p>Students present Significance sections (randomly selected). <u>Turn in corrected Significance Section next week for grading.</u></p> <p>3rd hour: Instructors will present hints for developing a strong Significance section.</p>	<p>1. Significance 1st Draft</p> <p>2. Flow Chart Revised Draft</p>

Week	Date(s)	Topic(s) and Readings	Assignments Due*
6	06/23	<p>Approach:</p> <p>1st and 2nd hours: Review and discussion of students' Approach sections (chosen at random).</p> <p><u>Turn in corrected Approach Section 7/14 for grading.</u></p> <p>3rd 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.</p>	<p>1. Approach 1st Draft</p> <p>2. Significance Revised Draft</p>
Summer Break			
7	07/07 (No class meeting)	<p>Biosketch:</p> <p>In lieu of a class meeting, arrange small group meeting (<u>anytime</u> during the week) to discuss and edit Biosketch draft to generate final version.</p> <p><u>Final corrected Biosketch due 7/28.</u></p> <p>Personal statement, position and honors, peer reviewed manuscripts, and research support NIH Biosketch template and sample can be accessed from: https://www.ncbi.nlm.nih.gov/sciencv/ (generates bio) http://grants.nih.gov/grants/funding/424/index.htm</p>	1. Biosketch 1 st Draft
8	07/14	<p>Training Plan:</p> <p>1st and 2nd hours: Review Training Plans and Biosketches with classmates. Students present (randomly selected) to class for discussion.</p> <p><u>Turn in corrected Training Plan section next week for grading.</u></p> <p>3rd hour: Discussion of best practices for drafting training plans.</p>	<p>1. Training Plan 1st Draft</p> <p>2. Approach Revised Draft</p>

Week	Date(s)	Topic(s) and Readings	Assignments Due*
9	07/21	Other sections: Reference Letters, Cover Letter, Academic record, Human Subjects, Response to Grant Summary 1 st hour: Review of letters with classmates and discussion (randomly selected). <u>Final corrected letters due with final grant package 8/04.</u> 2 nd and 3 rd hours: Best practices for other sections, letters, responding to summary statements, and open discussion.	1. Letters 1 st Draft 2. Training Plan Revised Draft
10	07/28	Students will present 4-6 slides (max 10 min) to summarize their grant, followed by brief discussion and scoring.	1. Grant Presentation 2. Biosketch Revised Draft
	08/01	Critique of assigned presentations (reviewer's 1-3)	1. Peer Feedback (due to students and instructors)
	08/04		1. Final grant package
*All assignments are to be submitted online prior to class the week they are due. Students should be prepared to discuss all assignments in class. Examples of the assignments will be provided to aid students in completing the assignments by the due date.			

Course Materials and Technology

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

For technical support for this class, please contact the UF Help Desk at:

- helpdesk@ufl.edu
- (352) 392-HELP - select option 2
- <https://helpdesk.ufl.edu/>

Additional Academic Resources

[Career Connections Center](#): Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

[Library Support](#): Various ways to receive assistance with respect to using the libraries or finding resources.

[Teaching Center](#): Broward Hall, 352-392-2010 or to make an appointment 352-392-6420. General study skills and tutoring.

[Writing Studio](#): 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints On-Campus: [Visit the Student Honor Code and Student Conduct Code webpage for more information](#).

On-Line Students Complaints: [View the Distance Learning Student Complaint Process](#).

ACADEMIC REQUIREMENTS AND GRADING

Assignments

Requirement	Due Date*	Points (100 pts total)
Preparation (prior to class)	Each class meeting	5
Research Topic	05/26/2023	5
Specific Aims	06/02/2023	10
Research Strategy (total pts)		15
<i>Flow Chart (2 pts)</i>	06/09/2023	
<i>Significance (5 pts)</i>	06/16/2023	
<i>Approach (8 pts)</i>	06/23/2023	
Biosketch	07/07/2023	5
Training Plan	07/14/2023	5
Letters of Support	07/21/2023	5
Presentation	07/28/2023	10
Peer Feedback Forms	08/01/2023	5
Completed F31 or K Grant Package	08/04/2023	25
Participation	Each class meeting	10

**** All materials (except the presentation, peer feedback forms, and complete grant package) will be graded on the revised submission (please see the detailed course outline for revised submission due dates).***

To provide a highly interactive learning environment, all assignments might be shared with the class for open discussion and critique. All assignments should be submitted via the course website portal. Include your name and date and draft number on every submission. During the final class we will hold a Mock Grant Review session to assist students in understanding the process and content of grant reviews. Participation grade will include your contributions to the discussion of the draft materials (first submissions). Instructors assume all announcements are read by students.

Grading

Point system used (i.e., how do course points translate into letter grades).

Example:

Percentage Earned	Letter Grade
93-100	A
90-92	A-
87-89	B+
83-86	B
80-82	B-
77-79	C+
73-76	C
70-72	C-
67-69	D+
63-66	D
60-62	D-
Below 60	E

Please be aware that a C- is not an acceptable grade for graduate students. The GPA for graduate students must be 3.0 based on 5000 level courses and above to graduate. A grade of C counts toward a graduate degree only if based on credits in courses numbered 5000 or higher that have been earned with a B+ or higher.

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

More information on UF grading policy may be found at:

<http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#grades>

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 or need an assignment extension should discuss this with an instructor prior to the date of the missed class. Approval will be determined on a case-by-case basis.

Please note: Any requests for make-ups due to technical issues must be accompanied by the UF Computing help desk (<http://helpdesk.ufl.edu/>) correspondence. You must e-mail an instructor within 24 hours of the technical difficulty if you wish to request an extension.

STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

Expectations Regarding Course Behavior

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.

Communication Guidelines

Instructors expect students be professional in all communications including online forums and email (e.g., using full sentences, correct spelling, descriptive subject lines). Please use clear and concise language when writing or posting. Be respectful in what you share and how you share it (e.g., avoid using all CAPS when communicating as this can look like you are yelling). When giving feedback to others, consider how you would like to hear similar constructive feedback. While in a Zoom class meeting, please make sure to use mute if you are in a noisy area or when you are not speaking.

Academic Integrity

Students are expected to act in accordance with the University of Florida policy on academic integrity. As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge:

“We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.”

You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit 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.”

It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students

Office for consideration of disciplinary action. For additional information regarding Academic Integrity, please see Student Conduct and Honor Code or the Graduate Student Website for additional details:

<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>

<http://gradschool.ufl.edu/students/introduction.html>

Please remember cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

Recording Within the Course:

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.

Policy Related to Guests Attending Class:

Only registered students are permitted to attend class. However, we recognize that students who are caretakers may face occasional unexpected challenges creating attendance barriers. Therefore, by exception, a department chair or his or her designee (e.g., instructors) may grant a student permission to bring a guest(s) for a total of two class sessions per semester. This is two sessions total across all courses. No further extensions will be granted. Please note that guests are **not** permitted to attend either cadaver or wet labs. Students are responsible for course material regardless of attendance. For additional information, please review the Classroom Guests of Students policy in its entirety. Link to full policy: <https://phhp.ufl.edu/policy-classroom-guests-of-students/>

Online Faculty Course Evaluation Process

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/>.

SUPPORT SERVICES

Accommodations for Students with Disabilities

If you require classroom accommodation because of a disability, it is strongly recommended you register with the Dean of Students Office <http://www.dso.ufl.edu> within the first week of class or as soon as you believe you might be eligible for accommodations. The Dean of Students Office will provide documentation of accommodations to you, which you must then give to me as the instructor of the course to receive accommodations. Please do this as soon as possible after you receive the letter. Students with disabilities should follow this procedure as early as possible in the semester. The College is committed to providing reasonable accommodations to assist students in their coursework.

Counseling and Student Health

Students sometimes experience stress from academic expectations and/or personal and interpersonal issues that may interfere with their academic performance. If you find yourself facing issues that have the potential to or are already negatively affecting your coursework, you are encouraged to talk with an instructor and/or seek help through University resources available to you.

- The **Counseling and Wellness Center** 352-392-1575 offers a variety of support services such as psychological assessment and intervention and assistance for math and test anxiety. Visit their web site for more information: <http://www.counseling.ufl.edu>. On line and in person assistance is available.
- **U Matter We Care** website: <http://www.umatter.ufl.edu/>. If you are feeling overwhelmed or stressed, you can reach out for help through the You Matter We Care website, which is staffed by Dean of Students and Counseling Center personnel.
- 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. 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: <https://shcc.ufl.edu/>
- Crisis intervention is always available 24/7 from: Alachua County Crisis Center: (352) 264-6789
<http://www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx>
- **University Police Department:** [Visit UF Police Department website](#) or call 352-392-1111 (or 9-1-1 for emergencies).
- **UF Health Shands Emergency Room / Trauma Center:** For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; [Visit the UF Health Emergency Room and Trauma Center website](#).

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.

Inclusive Learning Environment

Public health and health professions are based on the belief in human dignity and on respect for the individual. As we share our personal beliefs inside or outside of the classroom, it is always with the understanding that we value and respect diversity of background, experience, and opinion, where every individual feels valued. We believe in, and promote, openness and tolerance of differences in ethnicity and culture, and we respect differing personal, spiritual, religious and political values. We further believe that celebrating such diversity enriches the quality of the educational experiences we provide our students and enhances our own personal and professional relationships. We embrace The University of Florida's Non-Discrimination Policy, which reads, "The University shall actively promote equal opportunity policies and practices conforming to laws against discrimination. The University is committed to non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, gender identity and expression, marital status, national origin, political opinions or affiliations, genetic information and veteran status as protected under the Vietnam Era Veterans' Readjustment Assistance Act." If you have questions or concerns about your rights and responsibilities for inclusive learning environment, please see your instructor or refer to the Office of Multicultural & Diversity Affairs website: www.multicultural.ufl.edu