George Mason University
College of Education and Human Development
PhD in Education – Exercise, Fitness and Health Promotion Specialization
EFHP 880 (001) – Developing Grants in Health Professions
3 Credits, Spring 2017
Fridays / 10:00AM-12:40PM – Bull Run Hall 212 – Science & Technology Campus

Faculty
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Prerequisites/Corequisites
Graduate Standing or Permission of Instructor

University Catalog Course Description
This course will provide an introduction and overview of federal grants and contracts, emphasizing National Institute of Health (NIH) research grant mechanisms as a 'gold standard', as well as non-federal. Guidelines for proposal development from funding agencies will be examined along with specific models of successful and less successful grant applications.

Course Delivery Method
This course will be delivered using a face-to-face format.

Learner Outcomes or Objectives
This course is designed to enable students to do the following:
- Understand the structure of federal and non-federal grant funding process
- Describe the importance of collaboration, including development of the research team and selecting co-investigators
- Identify Institute funding priorities, available Program Announcements/Requests for Applications, currently funded projects (e.g., NIH RePORTER), and to investigate the composition of specific federal and non-federal review groups
- Explain the process by which grants (federal and non-federal) are solicited, reviewed and awarded.
- Understand the components of a grant application.
- Describe the role of the institution and how to utilize their assistance in the application process.
- Gather, organize and prepare all supportive documentation for a grant proposal.
- Conduct a peer-review and write a critique of a grant proposal using review criteria (e.g., NIH, CDC).
- Understand the process of developing a cohesive, competitive grant application both at the federal and non-federal level.
- Review an NIH grant application to identify the strengths and weaknesses of the

proposal.

- Write a cohesive, well-organized grant proposal according to specific guidelines using appropriate scientific and technical writing strategies

Required Texts

Miner, J. and Miner, T. Proposal Planning and Writing. Third Edition. Westport, Connecticut: Greenwood Press, 2013.

Gerin, W. and Kapelewski, C. Writing the NIH Grant Proposal: A Step by Step Guide. Thousand Oaks, CA: Sage Publications, 2011.

Miner & Miner: Ch 17 from an older version. Posted on BlackBoard

Gerrin: Appendix C from an older version. Posted on BlackBoard

Additional readings:
Supplementary materials will be used in class and posted on BlackBoard/MyMason Portal. Please print these materials and bring them to class so that you have access to them for discussion periods.

Gitlin L.N., Lyons K.J. Successful Grant Writing: Strategies for Health and Human Service Professionals (3rd Ed.). Springer Publishing Company.

Student will be expected to read assigned material in advance of lecture / discussion.

Russell S.W., Morrison D.C. The Grant Application Writer's Workbook. NIH Version.

Day R.A. How to Write and Publish a Scientific Paper (5th Ed.). Oryx Press, Phoenix. 1998

Sides C.H. How to Write and Present Technical Information (3rd Ed). Oryx Press, Phoenix. 1999

Course Performance Evaluation
Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Blackboard, Tk20, hard copy).

Assignments and Examinations
   Grading will be on a letter grade basis. The criteria for evaluation will be:
   1. Participation – 10%: Students will be expected to read assigned materials and complete weekly assignments in advance of topic discussion, and be an active participant in all class discussions and review of assigned work. This class will involve active discussion of grant proposals, and other materials that will be provided.

   2. Identification of Request for Proposals (RFP) / Request for Applications (RFA)/ Program Announcement (PA) – 10%: Students will identify one mechanism and announcement that they believe their idea will be a good match. The identified announcement will be the basis for the grant proposal development. **Due February 17, 2017**

3. Grant Proposal Development - 40%: Students will be expected to develop a federal grant proposal (NIH) in accordance with elements and guidelines presented in class, using SF 424 Instructions and Forms (Note: Research Plan is limited to 6 or 12 pages, depending on mechanism). Each element will be completed individually and presented in class. All elements must be attempted and successfully completed. **Due April 28, 2017**

4. Grant Review – 20%: Students will be assigned three grant applications, one where they will serve as primary reviewer, one as a secondary reviewer, and one as a tertiary reader/discussant. The grant application and review guidelines will be provided in class and posted on blackboard. **Due May 12, 2017**

5. Oral Presentation – 20%: Students will give a 15-minute oral presentation of their grant proposal to students and faculty in attendance. Presentation format should include the following components: 1) Significance, 2) Specific Aims and Hypotheses, 3) Proposed Methods and Preliminary Studies, 4) Budget Proposal and Justification, 5) Timeline, and 6) Key Personnel and Facilities. Student presentations will be critiqued by class peers and faculty members in attendance. **Due May 12, 2017**

<u>Note</u>: Grant Application Submission. Each student should work with their faculty advisor in the writing and submission of a grant proposal to an appropriate funding agency to support their research. While this project should be done concurrently with this class, timeline for completion and submission should be determined in consultation with the faculty advisor.

Drafts. During the semester, the student will have to submit drafts of the following sections:
- Concept Paper, **due March 3**
- Specific Aims, **due March 10**
- Research Plan, **due April 28**
- Budget and Budget Justification, **due May 5**

Course Performance Evaluation Weighting
The course will be graded on a total of 100 points

Assignment	Points
1. Participation	10
2. Identification of RFP/RFA/PA	10
3. Grant Proposal Development	40
4. Grant Review	20
5. Oral Presentation	20
Total	**100**

Grading Policies

The student's final letter grade will be earned based on the following scale:

Grade	Percentage
A	94 – 100%
A-	90 – 93%
B+	88 – 89%
B	84 – 87%
B-	80 – 83%
C	70 – 79%
F	0 – 69%

Note: Although a B- is a satisfactory grade for a course, students must maintain a 3.00 average in their degree program.

Professional Dispositions

Students are expected to exhibit professional behaviors and dispositions at all times.

Core Values Commitment

The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles: http://cehd.gmu.edu/values/.

GMU Policies and Resources for Students
Policies
- Students must adhere to the guidelines of the Mason Honor Code (see http://oai.gmu.edu/the-mason-honor-code/).

- Students must follow the university policy for Responsible Use of Computing (see http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/).

- Students are responsible for the content of university communications sent to their Mason email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students **solely** through their Mason email account.

- Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see http://ods.gmu.edu/).

- Students must follow the university policy stating that all sound emitting devices shall be silenced during class unless otherwise authorized by the instructor.

Campus Resources
- Support for submission of assignments to Tk20 should be directed to tk20help@gmu.edu or https://cehd.gmu.edu/api/tk20. Questions or concerns regarding use of Blackboard should be directed to http://coursessupport.gmu.edu/.

- The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing (see http://writingcenter.gmu.edu/).

- The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students' personal experience and academic performance (see http://caps.gmu.edu/).

- The George Mason University Office of Student Support staff helps students negotiate life situations by connecting them with appropriate campus and off-campus resources. Students in need of these services may contact the office by phone (703-993-5376). Concerned students, faculty and staff may also make a referral to express concern for the safety or well-being of a Mason student or the community by going to http://studentsupport.gmu.edu/, and the OSS staff will follow up with the student.

For additional information on the College of Education and Human Development, please visit our website https://cehd.gmu.edu/.

Class Schedule

WEEK	TOPIC	READINGS/ASSIGNMENT DUE
Jan 27 Week #1	Introduction to EFHP 880 Overview of NIH Grants Process Introduction to PHS 398 Application form Introduction to Grant Writing and Grant Funding Sources Mechanisms of Support (NIH) Strategies for Effective Writing	M&M: Ch 1 G: Ch 1, 7 (pp. 186-212)
Feb 3 Week #2	Dr. Kay Ágoston Director of Graduate Fellowships	
Feb 10 Week #3	Identifying Funding Sources: NIH Guide/RePORT NIH Funding Mechanisms Community of Science Foundation Directories Identifying Appropriate Granting Agencies	M&M: Ch 2-3, M&M BlackBoard Copies: Ch 17 G: Ch. 3 Web Search SF424 Application Guide
Feb 17 Week #4	Formalizing Research Questions: Conceptual/Logic Models Identifying Funding Mechanisms Developing the Idea into a Fundable Research Proposal Identifying Appropriate Granting Agencies Research Plan: Specific Aims	M&M: Ch 7 Read on Blackboard: NIH Phase II "Letter of Intent" **Due: 2. Identification of RFP/RFA/PA**
Feb 24 Week #5	Sketching out Your Idea: Developing a Concept Paper and establishing contact with the Program Officer	Read Blackboard: Concept paper folder, and NIH Phase I "Concept Paper" M&M: Ch 4-5-6 G: Ch. 4
March 3 Week #6	Defining Proposal Objectives Conceptualization and Objectives Research Plan: Specific Aims	M&M: Ch 8 G: pp. 74 – 79 G BlackBoard Copies: App C Read BlackBoard: Grant & Review Examples – Specific Aims of all proposals SF424: Specific Aims **Due: Concept Paper (Draft)**

WEEK	TOPIC	READINGS/ASSIGNMENT DUE
March 10 Week #7	Reviewing the Literature and Marketing the Proposal: Documenting the State-of-the-Art Marketing the Novelty and Innovativeness of the Project Research Plan: Significance, Background & Innovation	G: pp. 79 – 87 G BlackBoard Copies: App C Read BlackBoard: Grant & Review Examples – Significance & Innovation SF 424: Research Strategy: Significance/Innovation SF424 Application Guide **Due: Specific Aims (Draft)**
March 17 Week #8	**Spring Break**	
March 24 Week #9	Establishing your Track Record: More Proposal Marketing - Citing Your Previous Work - Demonstrating a Cohesive Team Documenting Access to Populations and Study Feasibility Research Plan: Approach & Preliminary Studies	G: pp. 87 – 90 G BlackBoard Copies: App C Read BlackBoard: Grant & Review Examples – Approach & Preliminary Studies/Data SF 424: Research Strategy: Preliminary data **Due: Research Plan (Draft)**
March 31 Week #10	Research Design and Methodology: - Study Design Issues - Design as Parallel to Specific Aims - Sample Size and Statistical Power	M&M: Ch 9-10 G: pp. 90 – 110 G BlackBoard Copies: App C Read BlackBoard: Grant & Review Examples – Approach – Study Design SF 424: Research Strategy: Approach
April 7 Week #11	Collaboration and Research Team Development	M&M: Ch 16 G BlackBoard Copies: App C In Class Work
April 14 Week #12	Budgeting and Financial Management: - Direct and Indirect Costs - Use of Spreadsheets Timeline, budget and budget justification Writing the Project Narrative / Abstract & Relevance Statement	M&M: Ch 12 G: Ch 7 – pp. 153-197 Read BlackBoard: Grant & Review Examples – CDC budget, NIH R01 & Resubmission, and Budget folder SF 424: Budget and Budget Instructions Budget files on BlackBoard

WEEK	TOPIC	READINGS/ASSIGNMENT DUE
April 21 Week #13	Human Subjects Protection and Responsible Conduct of Research (RCR)	G: Ch 6 G BlackBoard Copies: App C SF 424: Human Subjects In Class Work **Due: Budget and Budget Justification (Draft)**
April 28 Week #14	Role of the Institution in the Grant Application Process Review Process: What Happens Once the Proposal is Submitted / The Reviewer's Perspective Review Critiques – Summary Statements	G: Ch. 9 Read BlackBoard: Grant & Review Examples – All summary statements **Due: 3. Grant Proposal Development**
May 5 Week #15	In Class Workday	In Class Workday
May 12 Week #16	**Grant Review** **Oral Presentations**	**Due: 4. Grant Review & 5. Oral Presentation**

Note: Faculty reserves the right to alter the schedule as necessary, with notification to students.