**UNIVERSITY OF ARKANSAS OF MEDICAL SCIENCES**

**COLLEGE OF NURSING**

#### SYLLABUS

**DOCTOR OF PHILOSOPHY IN NURSING PROGRAM**

NPHD 6113: PRELIMINARY STUDIES AND GRANT DEVELOPMENT

SECTION: 001

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**UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES**

**COLLEGE OF NURSING**

**COURSE NUMBER AND TITLE:**

NPHD 6113: Preliminary Studies and Grant Development

**SECTION: 001**

**CATALOG DESCRIPTION:**

Develop skills needed to conduct preliminary pilot studies and prepare a grant proposal.

**COURSE CREDIT:**

Three (3) semester hours

**PRE-REQUISITES OR CONSENT:**

NPHD 6118: Philosophies and Theory in science and Research

NPHD 6102: Qualitative Methodology in Nursing Research

NPHD 6103: Quantitative Methodology in Nursing Research

BIOM 5013: Biostats I

BIOM 5212: Biostats II

NPHD 6112: Synthesizing the Literature

**CO-REQUISITES:**

N/A

**CLASS SCHEDULE:**

Be prepared to devote a minimum of 12 hours/week to reading and activities for this 3-hour course. See Weekly Course Schedule.

**Class meets on Thursdays 9:00 am – 12:00 pm. In person classes will be located in RAHN Building 3204 classroom. Zoom classes can be accessed at this link:**

[**https://uams.zoom.us/j/93771404116?pwd=K1FuM25oUk5oR2VCSDBORjBnVkxiQT09**](https://uams.zoom.us/j/93771404116?pwd=K1FuM25oUk5oR2VCSDBORjBnVkxiQT09)

**Meeting ID: 937 7140 4116, Passcode: 546433**

**SUBMITTING AND ACCESSING DOCUMENTS:**

Access to course documents (i.e. syllabus, instructions relating to assignments, folders for student products, etc.) will be managed via Box. An individual folder has been set up for each student. The Box link can be accessed here**:**

[**https://app.box.com/s/ziifatja6btoew9i0lyr0tu4xslhngoz**](https://app.box.com/s/ziifatja6btoew9i0lyr0tu4xslhngoz)

**COURSE OVERVIEW:**

Preliminary Studies and Grant Development builds upon the doctoral level knowledge of nursing theory, qualitative and quantitative methodology, data management and analysis as well as the expanded ability to read, synthesize and evaluate the research literature. During this course students will use their previously identified researchable problem/question to develop a scholarly grant proposal***.***

This course reflects the mission and philosophy of the College of Nursing as it assists in role development of professional nurses who can conduct health-related scientific research. The course addresses the outcome of critical thinking throughout the semester as students complete their synthesis of the literature and develop a research proposal. Students expand their communication skills through both verbal and written critiques of other students' research proposals and their own development of a scholarly grant proposal. Ethical and cultural issues relevant to grant proposal development are also discussed.

**COURSE OBJECTIVES:**

Upon completion, the student will be able to:

1. Conduct a pilot test of research procedure(s) and evaluate the feasibility of the procedure(s) for the proposed research.
2. Develop a proposal/grant around the area of interest.
3. Identify potential funding sources for specific problems.
4. Discuss the ethical and cultural issues that relate to development of a grant proposal.

**TEACHING METHODS:**

The course will be presented in a seminar/discussion format. Teaching methods include directed readings, in person and virtual lectures and discussion, and group learning activities.

Students will work with their dissertation advisors in tandem with course instructors in the development of their research proposal. Sessions will focus on the process of research grant writing. It is understood that the research grant application developed to meet the learning objectives of this course may not be fully feasible to execute as the dissertation project. In these instances, the student, the course instructors, and the dissertation advisor will work together to adjust the final course deliverable to meet dissertation requirements and limitations. Students should understand that that process of making these adjustments is also part of the grant development learning process!

## Course requirements:

|  |  |  |
| --- | --- | --- |
| **Course Component** | **% of Grade** | **Points** |
| Attendance, Participation, Discussion | 20% | 115\* |
| Weekly Assignments | 20% | 110\*\* |
| Specific Aims | 10% | 50 |
| Research Proposal | 40% | 200 |
| Oral Presentation | 10% | 50 |
| **Total** | **100%** | **525** |

# \*Attendance/Participation/Discussion for in-person classes have a maximum score of 10 points each (5 x 10 = 50); for Zoom classes the maximum score is 5 points each (11 x 5 = 55). Total points possible for Attendance/Participation/Discussion is 115.

\*\*Weekly Assignments have a maximum of score of 10 points each (10 x 11 = 110) for a total maximum score of 110.

**GRADING FOR SPECIFIC AIMS ASSIGNMENT:**

|  |  |
| --- | --- |
| Opening sentence | 5 points |
| Current knowledge | 5 points |
| Gap in knowledge | 5 points |
| Statement of need | 5 points |
| Long-term goal | 5 points |
| Overall objective | 5 points |
| Central hypothesis or “why” | 5 points |
| List of specific aims | 5 points |
| Expected outcomes | 5 points |
| Positive impact statement | 5 points |
| **Total points:** | **50 points** |

**GRADING FOR RESEARCH PLAN:**

|  |  |
| --- | --- |
| **Specific Aims** | 30 points |
| **Research Strategy** | 150 points |
| Significance (30 points) |  |
| Importance of the Problem (10) |  |
| Rigor of Prior Research (10) |  |
| Expected Research Contribution (10) |  |
| Innovation (20 points) |  |
| Approach (100 points) |  |
| Each Aim (or combined; 20 points) |  |
| Introduction (20 points) |  |
| Research Design (20) |  |
| Expected Outcomes (20) |  |
| Potential Problems/Solutions (20) |  |
| **Timeline** | 10 points |
| **Future Directions** | 10 points |
| **Total points:** | **200 points** |

**GRADING FOR ORAL PRESENTATION:**

|  |  |
| --- | --- |
| Provides organized and complete delivery | 20 points |
| Develops effective slides | 10 points |
| Stays within specific time limit | 10 points |
| Provides adequate Q&A | 10 points |
| **Total Points** | **50 points** |

**Grading Scale:**

Letter grades are derived from course requirements using the following grading scale:

A = 90 – 100%

B = 80 – 89.99%

C = 75 – 79.99%

D = 70 – 74.99%

F = < 70%

**SCHOLARLY WRITING FOR PHD PROGRAM COURSES:**

Scholarly writing is a core competency of the College of Nursing Graduate Programs**.** For all scholarly works and papers, students will be expected to adhere to the following guidelines:

1. Students must use plagiarism software such as “Safe Assign” for all papers prior to submission and are expected to revise the paper accordingly before submitting on or prior to the due date.
2. Resubmission of student scholarly writing assignments will not be permitted after the final due date without prior approval from the faculty.
3. Remediation may be required for any student identified as having difficulties with scholarly writing (content, logic, flow, grammar, formatting references, etc.). Failure to participate in faculty recommended remediation may result in failure of the course.

The Writing Center in the UAMS Library is available free for students: <https://library.uams.edu/>

<https://studentsuccess.uams.edu/our-services/writing-presentation-center/>

**Attendance/Participation:**

Students are expected to demonstrate regular class/meeting attendance and behaviors that facilitate learning, including the virtual learning environment. ***Careful consideration was made by the course instructor regarding when in-person classes will better facilitate learning while also being mindful of students’ schedules and physical locations. Therefore, only 5 class periods will be held in person on the UAMS campus. It is expected that all students will attend class in person on the in-person dates indicated in the Weekly Schedule.1*** Students are accountable for all materials presented and are responsible for making arrangements to secure any materials presented in their absence. Vacation is not an excused absence. Students are expected to be attentive in class/meetings and are not to use laptop computers except for class related activities. Cell phones and pagers should be turned off or set to silent vibration.

See UAMS Graduate School Student Handbook for policy on class attendance. Students are expected to participate in all web-based and classroom-based activities.

**Course/Faculty Evaluation Statement:**

Web-based evaluations are conducted to assist the faculty in improving their courses and their teaching strategies. As members of the student body enrolled in a professional program of study, all students are required to complete the course/faculty evaluations as a part of their preparation for their professional role. The College of Nursing Scholastic Non-Cognitive Performance Standards guides the student in an understanding of these expectations.

**REQUIRED READINGS:**

Robertson, J., Russell, S., Morrison, D. (2021). *The Grant Application Writer’s Workbook.* Version 20.21, National Institutes of Health (NIH). Grant Writers’ Seminars and Workshops, LLC.

Supplemental readings may be assigned on a weekly basis as needed.

**RECOMMENDED TEXTS:**

N/A

APA FORMAT:

Students will be expected to follow the guidelines as listed below for all scholarly works and papers: At the discretion of the course faculty, other formats may be requested.

American Psychological Association (2020). *Publication manual of the American Psychological Association* (7th ed.). Washington, DC: Author.

**ASSIGNMENTS:**

Instructions:

1. For all assignments, please use Arial font size 11, single spaced and 0.5 margins. This is typically the requirement for all NIH grant applications. ***Your assignment will receive a zero if you fail to do so.*** The rationale for this is that the NIH, as well as most, if not all, other extramural funding agencies require that formatting instructions be followed explicitly or the application will be *returned without review*. Per an excerpt from a currently active National Institute of Nursing Research (NINR) Request for Applications (RFA):

*“It is critical that applicants follow the instructions in the Research (R) Instructions in the*[*SF424 (R&R) Application Guide*](https://grants.nih.gov/grants/guide/url_redirect.htm?id=12000)*except where instructed in this funding opportunity announcement to do otherwise. Conformance to the requirements in the Application Guide is* ***required and strictly enforced****. Applications that are out of compliance with these instructions may be delayed or not accepted for review.”*

1. Please upload all assignments to your individual student folder in Box on or before the due date using this link: <https://app.box.com/s/ziifatja6btoew9i0lyr0tu4xslhngoz>

**Weekly assignments are due by 11:59pm on the Tuesday immediately prior to the Thursday class period each week.**

1. You are expected to complete all assignments on time. **Tardiness will result in points being taken off for each assignment unless you have permission given by the instructor or appropriate documentation showing reason for being late.**

**WEEKLY COURSE SCHEDULE**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Week** | **In Person or Zoom** | **Topic** | Readings | Assignment Due Dates |
| 1 | Aug 18  **In Person** | Orientation to class; overview of NIH; How to develop an idea (research question); Identifying a funding mechanism (anatomy of a funding mechanism) | Chapters 1, 2, 3;  Lipowski 2008 | NA |
| 2 | Aug 25  Zoom | Developing the idea, continued (research question); Finalizing the funding mechanism; How to develop the Specific Aims (SAs) | Chapters 7, 8  (Instructions and scoring for SAs provided.) | **August 23** (by 11:59pm): Submit to Box: Your proposed research question (could submit a couple of versions you are considering), and a link to your chosen funding mechanism (can submit more than one option) |
| 3 | Sept 1  **In Person** | Round Robin review of first draft Specific Aims; How to conduct the literature review for identifying a knowledge gap and providing evidence for why the proposed study needs to be done | Chapter 9 | **August 30** (by 11:59pm): Submit to Box: First draft Specific Aims |
| 4 | Sept 8  Zoom | Continue review of Specific Aims; Discussion of Significance and Innovation sections of a research grant | Chapter 10 | **Sept 6** (by 11:59pm): Submit to Box: Revised SAs with references cited and numbered |
| 5 | Sept 15  Zoom | NIH scoring criteria (video); Guest Lecturer (Dr. Matt Hayat): Designing the hypothesis and how to test it | NA | **Sept 13** (by 11:59pm): Submit to Box: Revised Specific Aims if applicable; SAs will be sent to external reviewers for feedback; Reviewer feedback due by Sept 19 |
| 6 | Sept 22  Zoom | Conceptual framework for the study; Integration of literature throughout the research plan; Role of preliminary studies; Outline of the research plan | Chapter 9 | **Sept 20** (by 11:59pm): Submit to Box: Continue revising Specific Aims page |
| 7 | Sept 29  **In person** | Approach, Part 1: Research design (and alignment with SAs and hypotheses); Overview of methods (how data will be collected or accessed); Data management; Review first draft outline with each student | Chapter 11  (Instructions and scoring for Research Plan provided.) | **Sept 27** (by 11:59pm): Submit to Box: Final and complete Specific Aims page |
| 8 | Oct 6  Zoom | Approach, Part 2: Participants and setting; Participant recruitment; Randomization (if clinical trial); Statistical analyses (and alignment with SAs and hypotheses) | Chapter 11 | **Oct 4** (by 11:59pm): Submit to Box: First draft outline with some content for Approach section of research  plan |
| 9 | Oct 13  **In person** | Approach, Part 3: Review concepts from last 2 weeks and discuss questions or challenges in students’ research plans; Expected outcomes, Limitations or potential problems and alternative strategies; timeline; future directions | Chapter 11 | **Oct 11** (by 11:59pm): Submit to Box: Second draft outline with some content for Approach section of research plan |
| 10 | Oct 20  Zoom | Supporting documents, Part 1: Biographical sketch (Guest lecturer: Dr. Kerry Evans); Budget and budget justification (Guest lecturer: Renea Brazil) | Chapters 12, 13, 14 | **Oct 18** (by 11:59pm): Submit to Box: Third draft research plan with most sections completed |
| 11 | Oct 27  Zoom | NIH scoring rubric; Review Summary Statement; How study sections are conducted; | Chapter 4 | NA (continue working on research plan) |
| 12 | Nov 3  **Zoom** | Other Supporting Documents; Group discussion of 4th drafts; Please be prepared with what questions and/or concerns you wish to get group feedback/input on for your research plan | NA | **Nov 1** (by 11:59pm): Submit to Box: Fourth draft full research plan |
| 13 | Nov 10  **In person** | Work on biosketches (as a group); Building a grant budget (as a group); Example of complete NIH R01 grant application | Chapters 15 and 16 | **Nov 8** (by 11:59pm): Submit to Box: Final SAs and full research plan due; Send back to previous reviewers for critique |
| 14 | Nov 17  **Either in person or Zoom** | Individual appointments; these can be in person or Zoom, whichever the student prefers; a schedule will be provided for sign-ups |  | **Nov 15** (by 11:59pm): Submit to Box: Biosketch; Critiques due back from reviewers |
|  | Nov 24  No class | **Thanksgiving Holiday** | NA | NA |
| 15 | Dec 1  Zoom | Ethical, cultural, and diversity considerations (Guest lecturer: Dr. John Imig); Discuss template for student presentations; review any course content as requested by students and/or additional tips from instructors |  | **Nov 30** (by 11:59pm; Note that this is a Wednesday): Submit to Box: Final complete research plan (including SAs and biosketch) |
| 16 | Dec 8  Zoom | Student presentations |  | **Dec 6** (by 11:50pm): Submit to Box: Oral presentation slides |