UNIVERSITY OF

FLORIDA COLLEGE OF NURSING COURSE FALL 2021

COURSE NUMBER NGR 7816

COURSE TITLE Quantitative Research Design and Measurement in Nursing

CREDITS 3

PLACEMENT Variable Required Core Course

PREREQUISITE None

FACULTY Gail M. Keenan, PhD, RN, FAAN

Department Chair (FCH)

Professor (R. Murray & Anabel Davis Jenks Professorship

in Nursing Excellence)

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COURSE DESCRIPTION This course provides the foundation for evaluating quantitative research methods and designs and developing significant and innovative programs of nursing and health research. Emphasis is on principles and techniques for analyzing and developing rigorous research methods, including sampling plans, measurement, procedures and study designs.

COURSE OBJECTIVES Upon completion of this course, the student will be able to:

1. Identify research priorities in nursing and health.
2. Analyze the relationship between clinical practice and research.
3. Examine ethical principles in quantitative research.
4. Employ standardized criteria for evaluating and developing research.
5. Analyze key components of quantitative research designs and methods, including sampling plans, measurement, procedures and study designs.
6. Evaluate various experimental and non-experimental designs.
7. Critique published research articles for design and measurement

COURSE SCHEDULE:

Faculty Section Day/Time Room

Keenan 6182 Tuesday/12:50-3:50pm G112

Video recordings are on E-Learning in Canvas and will supplement in-class time. E-Learning in Canvas is accessed by using your Gatorlink account name and password at <http://elearning.ufl.edu/>.

There are several tutorials and student help links on the E-Learning login site. If you have technical questions call the UF Computer Help Desk at 352-392-HELP or send email to [helpdesk@ufl.edu.](mailto:helpdesk@ufl.edu)

It is important that you regularly check your Gatorlink account email for College and

University wide information and the course E-Learning site for announcements and notifications.

Course websites are generally made available on the Friday before the first day of classes.

TOPICAL OUTLINE

* 1. Anatomy of a dissertation
  2. Searching the literature & systematic literature reviews
  3. Current priorities in nursing research
  4. Evidence-based practice and outcomes research
  5. Development of substantive research questions, hypotheses, purpose statements and specific aims
  6. Protection of human subjects
  7. Components of well-designed research plans
  8. Experimental and non-experimental research designs
  9. Reliability, validity and bias in research
  10. Measurement approaches
  11. Sampling methods
  12. Critiquing published research

TEACHING METHODS

Class participation in discussions, viewing of pre-recorded lectures, student demonstration of knowledge through writing, presentations, and tests.

LEARNING ACTIVITIES

Readings, viewing video-recorded lectures, participation in class discussions, research article critiques, development of an initial research proposal in which the student experiences how all the parts of the research process fit together.

EVALUATION METHODS/COURSE GRADE CALCULATION

Written assignments (6) (10 points each)\* 60%

Examination (20 points) 20% Research proposal presentation (20 points) 20%

Total= 100%

\* Feedback will be provided to the student during the next class period discussion as noted on the class schedule.

MAKE UP POLICY

Students are expected to submit assignments by the established due dates. If extenuating circumstances occur, a student must notify Dr. Keenan of the circumstance at least 1 week ahead of due date and establish an acceptable make-up plan. Students are to inform Dr. Keenan of any sudden unforeseen circumstances that develop 1 week or less ahead of a due date that prevent the student from meeting an assignment deadline. Dr. Keenan may require documentation to validate the claim.

GRADING SCALE/QUALITY POINTS

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| A | 95-100 | (4.0) | C | 74-79\* | (2.0) |
| A- | 93-94 | (3.67) | C- | 72-73 | (1.67) |
| B+ | 91- 92 | (3.33) | D+ | 70-71 | (1.33) |
| B | 84-90 | (3.0) | D | 64-69 | (1.0) |

|  |  |  |  |
| --- | --- | --- | --- |
| B- | 82-83 (2.67) | D- | 62-63 (0.67) |
| C+ | 80-81 (2.33) | E | 61 or below (0.0) |

\* 74 is the minimal passing grade

For more information on grades and grading policies, please refer to University’s grading policies: <https://catalog.ufl.edu/graduate/regulations/>

COURSE EVALUATION

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/>.

ACCOMMODATIONS DUE TO DISABILITY

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, <https://disability.ufl.edu/>) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

PROFESSIONAL BEHAVIOR

The College of Nursing expects all Nursing students to be professional in their interactions with patients, colleagues, faculty, and staff and to exhibit caring and compassionate attitudes. These and other qualities will be evaluated during patient contacts and in other relevant settings by both faculty and peers. Behavior of a Nursing student reflects on the student's individual’s ability to become a competent professional Nurse. Attitudes or behaviors inconsistent with compassionate care; refusal by, or inability of, the student to participate constructively in learning or patient care; derogatory attitudes or inappropriate behaviors directed at patients, peers, faculty or staff; misuse of written or electronic patient records (e.g., accession of patient information without valid reason); substance abuse; failure to disclose pertinent information on a criminal background check; or other unprofessional conduct can be grounds for disciplinary measures including dismissal.

UNIVERSITY POLICY ON ACADEMIC MISCONDUCT

Academic honesty and integrity are fundamental values of the University community.

Students should be sure that they understand the UF Student Honor Code at <http://www.dso.ufl.edu/students.php>. Students are required to provide their own privacy screen for all examination’s administered to student laptops. No wireless keyboards or wireless mouse/tracking device will be permitted during examinations.

UNIVERSITY AND COLLEGE OF NURSING POLICIES:

Please see the College of Nursing website for student policies (<http://students.nursing.ufl.edu/currently-enrolled/student-policies-and-handbooks/>) and a full explanation of each of the university policies – (<http://students.nursing.ufl.edu/currently-enrolled/course-syllabi/course-policies>)

Attendance

UF Grading Policy Religious Holidays

Counseling and Mental Health Services Student Handbook

Faculty Evaluations

Student Use of Social Media

REQUIRED TEXTBOOKS

Portney, L. G., & Watkins, M. P. (2020) *Foundations of clinical research: Applications to*

*evidence-based practice (4th ed).* Philadelphia, PA: F.A Davis Company

Harford, T. (2021) *The data detective*. United Kingdom/USA: Riverhead Books, Penguin

Random House.

Selected readings from current nursing research literature.

RECOMMENDED TEXT

Cook, T. D., & Campbell, D. T. (1979). *Quasi-experimentation design and analysis issues for*

*field settings.* Boston: Houghton Mifflin.

Strunk, W. & White, E.B. (1999) The elements of style (ed 4). Harlow United Kingdom:

Longman and Pearson.

WEEKLY CLASS SCHEDULE

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| --- | --- | --- |
| **Class & Meeting Date**  **Tuesdays-12:50 to 3:50PM** | **Topic** | **Activities to be completed AHEAD of class:**  **\*Written assignments due for week MUST be posted by 5PM Monday the day before class.** |
| Week 1  August 24, 2021 | Welcome Course Overview – Please skim/read ahead -The Data Detective | Be prepared to discuss:   1. Why am I seeking a research career? 2. What research questions am I interested in pursuing for my dissertation? Why? 3. After skimming/reading the book The Data Detective before class) – why do I think this is a required reading? |
| Week 2  August 31st ,2021 | Foundations of Nursing Research I | Check Canvas Week 2 readings, videos, lectures, and assignments |
| Week 3  September 7th, 2021 | Foundations of Nursing Research II | Check Canvas Week 3 readings, videos, lectures, and assignments |
| Week 4  September 14, 2021 | Defining the Research Question I | Check Canvas Week 4 readings, videos, lectures, and assignments |
| Week 5  September 21, 2021 | Defining the Research Question II | Check Canvas Week 5 readings, videos, lectures, and assignments |
| Week 6  September 28, 2021 | The Research Plan | Check Canvas Week 6 readings, videos, lectures, and assignments |
| Week 7  October 5, 2021 | Individual Meetings with Dr. Keenan | Check Canvas Week 7 readings, videos, lectures, and assignments |
| Week 8  October 12, 2021 | Research Design | Check Canvas Week 8 readings, videos, lectures, and assignments |
| Week 9  October 19th 2021 | Sampling Methods | Check Canvas Week 9 readings, videos, lectures, and assignments |
| Week 10  October 26th 2021 | Measurement Approaches | Check Canvas Week 10 readings, videos, lectures, and assignments |
| Week 11  November 2, 2021 | Critiquing the Literature | Check Canvas Week 11 readings, videos, lectures, and assignments |
| Week 12  November 9th, 2021 | Critiquing the Literature | Check Canvas Week 12 readings, videos, lectures, and assignments |
| Week 13  November 16th, 2021 | Comprehensive Exam | Check Canvas Week 13 readings, videos, lectures, and assignments |
| Week 14  November 23, 2021 | Student Presentation | Check Canvas Week 14 readings, videos, lectures, and assignments |
| Week 15  November 30th, 2021 | Individual Meetings with Dr. Keenan | Check Canvas Week 15 readings, videos, lectures, and assignments |

Approved: Academic Affairs Committee: 10/97;01/05 Faculty: 12/97:01/05

UF Curriculum: 06/98