

**University of Arkansas – Fort Smith  
5210 Grand Avenue  
PO Box 3649  
Fort Smith, AR 72913  
479-788-7000**

## **General Syllabus**

### **HEAL 41003 Research in the Health Sciences**

Credit Hours: 3                      Lecture Hours: 3                      Laboratory or other types of Hours: 0

Prerequisite(s): Admission into a health sciences program or consent of Executive Director of the School of Nursing or Dean of the College of Health, Education and Human Sciences, MATH 21003 Probability and Statistics I

Effective Catalog: 2023-2024

## **I. Course Information**

### **A. Catalog Description:**

Introduction into methods and techniques of research in health sciences. Focuses on basic research terminology, research designs, qualitative and quantitative methods, and data analysis. Critical-thinking skills used to evaluate clinical research for applicability to the health sciences.

### **B. Additional Course Description:**

This full online course is available via Blackboard Learning (BLS). The course content is divided into four learning modules that include learning outcomes, teaching materials, assessment, and learning activities.

## **II. Student Learning Outcomes**

### **A. Subject Matter:**

Upon completion of this course, the student will:

1. Compare the philosophical foundations of quantitative research and qualitative research.
2. Formulate research questions/hypotheses based on the research topic.
3. Conduct a literature review using various search engines on a selected clinical problem.
4. Explain the purpose of protection of human subjects in health sciences research.
5. Compare the considerations of sampling, design, measurement, data collection, and data analysis in quantitative and qualitative researches.
6. Evaluate research article used by the logical consistency between the theoretical perspective, research purpose, question, design, statistical analysis, and conclusions in evidence-based research.
7. Explain the impact of research in the health sciences on practice, education, and

- health promotion.
8. Develop a mini research proposal on a selected topic from your discipline using an established protocol.

**B. University Learning Outcomes:**

This course enhances student abilities in the following areas:

**Analytical Skills**

**Critical Thinking**

Students will analyze information to reach viable solutions to a problem and assess and justifying their solutions.

**Communication Skills (written and oral)**

Students will communicate effectively using interpersonal, written, and technological strategies.

**Ethical Decision Making**

Students will model ethical decision-making processes in health care related settings. Students will identify ethical dilemmas and affected parties.

**III. Major Course Topics**

- A. Beginning the Research Process
- B. PICOT Question
- C. Library Resource Discussion and APA Format
- D. Hierarchy of Evidence
- E. Quantitative Research
- F. Qualitative Research
- G. Critical Appraisal
- H. Protecting Human Participants
- I. Topic and PICOT
- J. Articles and Evaluation Template
- K. Synthesize the Evidence
- L. Methodology
- M. Implementation
- N. Evidence-based Practice Paper or Presentation