

**University of Arkansas - Fort Smith**  
**5210 Grand Avenue**  
**P. O. Box 3649**  
**Fort Smith, AR 72913-3649**  
**479-788-7000**

## **General Syllabus**

### **HLTH 4103 Research in the Health Sciences**

Credit Hours: 3

Lecture Hours: 3

Laboratory Hours: 0

Prerequisites: admission into a health sciences program or consent of Executive Director of the School of Nursing or Dean of the College of Health Sciences, and STAT 2503 Probability and Statistics I

Effective Catalog: 2018 – 2019

#### **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 Information**

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 successful completion of this course, the student will be able to:

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 established protocol.

## **B. University Learning Outcomes**

This course enhances student abilities in the following areas:

### **Analytical Skills**

**Critical Thinking Skills:** Students will think critically in analyzing to reach viable solutions to a problem and assess and justifying their solutions. Students will apply appropriate mathematical models to solve problems.

### **Communication Skills (written and oral):**

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

### **Ethical Decision Making**

Students will identify ethical dilemmas and affected parties.

### **Global & Cultural Perspectives**

Students will demonstrate the understanding or application of their discipline in a global environment.

## **III. Major Course Topics**

- A. Module 1: Beginning the Research Process
  - Beginning the Research Process
  - The Research Process
  - Selecting a Problem and Reviewing the Research
- B. Module 2: Ethics and Sample
  - The Importance of Ethics in Research
  - Sampling and Generalizability
- C. Module 3: Design and Measurement
  - Research Design and Methods
  - Measurement
- D. Module 4: Data Collection and Analysis
  - Data Collection
  - Statistics
  - The Research Proposal
  - The Research Manuscript