

University of Arkansas – Fort Smith
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General Syllabus

CS 3023 Research Methods in Information Technology

Credit Hours: 3

Lecture Hours: 3

Laboratory Hours: 0

Prerequisite: CS 2003 Data Structures, ENGL 1213 Composition II, and STAT 2503 Probability and Statistics I

Effective Catalog: 2018-2019

I. Course Information

A. Catalog Description

Review of current IT research, and in instruction on determining the veracity of published assessments of technology. Students will also learn how to design a research project for accurate results.

II. Student Learning Outcomes

A. Subject Matter

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

1. Evaluate and review sources of IT research.
2. Evaluate and assess the veracity of published assessments.
3. Design a replication of a published study.
4. Execute a pilot study to test research design.
5. Apply statistical analysis in research.

B. University Learning Outcomes

This course enhances student abilities in the following areas:

Analytical Skills

Critical Thinking Skills: Students will analyze research problems, assess a current research topic, evaluate and analyze information, and improve upon it.

Communication Skills (written and oral)

Students will prepare a written document evaluating current research in an IT area. Students will present to IT department faculty and students.

III. Major Course Topics

- A. Identifying sources of IT research
- B. Uncovering fallacies in research
- C. Designing and implementing a replication
- D. Applying appropriate statistical techniques
- E. Evaluating results of a pilot study