# University of Arkansas – Fort Smith 5210 Grand Avenue P.O. Box 3649 Fort Smith, AR 2913 479-788-7000

#### **General Syllabus**

## **CS 4103 Mobile Application Development**

Credit Hours: 3 Lecture Hours: 3 Laboratory Hours: 0

Prerequisite: CS 2003 Data Structures

Effective Catalog: 2018-2019

#### I. Course Information

#### A. Catalog Description

Examines problem solving and application development in the context of a mobile computing environment. Students will create and deploy applications usable by modern cell phones. The special requirements inherent in mobile environments will be addressed as well as methods for developing commercially viable applications.

# II. Student Learning Outcomes

#### A. Subject Matter

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

- 1. Evaluate and apply software best practices for a mobile application environment.
- 2. Assess common programming pitfalls inherent in mobile environments.
- 3. Interpret typical requirements for making mobile applications commercially viable.
- 4. Design, create and deploy a mobile application.

# **B.** University Learning Outcomes (ULO)

This course enhances student abilities in the following area:

## **Analytical Skills**

**Critical Thinking Skills:** Students will identify a problem, break it down into its component parts, and develop an algorithm for solving the problem. Students will implement their solution as a mobile application.

# **III.** Major Course Topics

- A. Design differences in mobile vs static display design
- B. Event driven programming -mobile design vs an Event Bus and framework
- C. Building GUI interfaces
- D. Mobile application deployment cycle -focuses on stages
- E. Commercial, ethical, and legal issues in the different uses of mobile apps