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

#### **General Syllabus**

### **CSCE 10703 Introduction to Mobile Applications**

Credit Hours: 3 Laboratory Hours: 0

Prerequisite(s): None

Prerequisite(s) or corequisite(s): None

Corequisite(s): None

Effective Catalog: 2019-2020

#### I. Course Information

### A. Catalog Description

Provides an introduction to programming fundamentals using the Swift language from Apple. Students will get practical experience with the tools and concepts needed to build Mobile IOS applications.

#### **II.** Student Learning Outcomes

#### A. Subject Matter

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

- 1. Analyze and solve programming problems using the tools and techniques associated with the Swift Language programming environment.
- 2. Describe and use accepted programming standards for the creation of modular maintainable code.
- 3. Create, code, and debug IOS mobile applications developed using the Swift programming language
- 4. Utilize computational thinking skills to solve problems and design solutions.

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

This course enhances student abilities in the following areas:

#### **Analytical Skills**

## **Critical Thinking Skills**

Students will analyze problems and program requirements and design a mobile application solution using the Swift language.

# **III.** Major Course Topics

- A. Introduction to Xcode and Mobile App Development
- B. Swift Playgrounds
- C. Variables, Data Types, and Naming Standards
- D. Strings
- E. Conditional Statements and Decision Making using If Statements and Loops.
- F. Objects, Instances, Methods, and Properties
- G. Arrays
- H. Structures
- I. Functions
- J. Adaptive User Interfaces
- K. Enumerations
- L. App Design Basics