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

General Syllabus

CS 1073 Introduction to Mobile Applications

Credit Hours: 3

Lecture 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 S

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