

Course Number: CSC 780

Course Title: Application Development for Mobile Devices

Number of Credits: 3

Schedule: Three hours of lecture/discussion per week.

Prerequisite: a grade of B or better in CSC 415 or consent of instructor

Catalog Description

Introduces and compares different popular mobile application frameworks. Provides conceptual and hands-on experience in writing mobile applications using native and cross-platform tools.

Expanded Description

Comparison of desktop and mobile application development paradigms. Overview of different mobile devices. In-depth overview of Android, iOS, and Windows Phone 7 with focus on UI paradigms and application lifecycle. Study of different cross-platform toolchains. The course will be accompanied by an extensive programming project. One application will be developed for Android, iOS, and WP7 using the respective native development environment. Brief introductions to Java, Objective-C, C#.

Course Objectives

- To provide a rigorous and in depth introduction to the fundamental issues of mobile application development
- Introduce students to popular mobile devices based on Android, iOS, and Windows Phone 7
- To offer students hands-on experience in programming for mobile devices

Learning Outcomes

At the end of this course students will:

- have a thorough understanding of UI idioms for mobile devices.
- understand the function of different sensory hardware.
- be able to develop native applications for selected mobile platforms.
- develop best practices for cross-platform deployment.

Method of Evaluation

Student learning will be evaluated on the basis of:

Programming Project	50%
Midterm Examination	20%
Final Examination	30%

Required Textbooks

None – (only publicly available online resources)

Submitted by: Arno Puder

Approved: 8/31/2011