



CSC 280 Introduction to Mobile Application Programming

(3 contact hours – 0 lab hours - 3 credits)

Syllabus¹

· General Information

Instructor	
Office	
Phone	
Class Time	
Class Location	
Office Hours	
Teaching Assistant	

· Required Textbook

- Building iPhone Apps with HTML, CSS, and JavaScript: Making App Store Apps Without Objective-C or Cocoa**, Jonathan Stark, O'reilly, 2010.

· Supplementary Textbook

- Beginning PhoneGap: Mobile Web Framework for JavaScript and HTML5**, Rohit Ghatol and Yogesh Patel, 2012.
- jQuery Mobile**, Jon Reid, O'reilly, 2012.

· Course Description

Survey of mobile application issues. Introduction to latest web technologies (HTML5) for building mobile web applications. Mobile OS including Android and iOS (iPhone/iPad).

· Course Prerequisites

CSC125

· Course Category

Elective.

¹ This syllabus may change as needed. In such a case, students will be informed accordingly

• **Course Outcomes:**

At the completion of this course, students will be able to:

1. Describe the components of Mobile Application [ABET a]
2. Describe the functionalities of mobile devices [ABET a]
3. Describe and analyze HTML5 web technology. [ABET a, i]
4. Describe and analyze requirements of mobile applications. [ABET a, b]
5. Describe and analyze structure of Javascript programming language [ABET i]
6. Describe and analyze deployment of mobile application [ABET c]
7. Communicate effectively on issues, orally and in writing. [ABET f]
8. Write a report on mobile computing related subjects. [ABET h]
9. Work effectively within a team [ABET d]
10. Instal and use Javascript development environment. [ABET i]

• **Tentative Schedule**

Topic	Week
Syllabus	1
Introduction to Mobile Application	1-2
Introduction to Mobile Devices	3
HTML5: 2D/D Graphics APIs	4
HTML5: Web Storage & Database APIs	5
HTML5: Device-oriented APIs (GPS and Sensors)	6
Programming in Javascript	7-10
Introduction to Android	10-11
Introduction to iOS (iPhone, iPad)	11-12
Deploying Web Apps into Android	13-14
Deploying Web Apps into iOS (iPhone, iPad)	15

• **Grading Scheme**

Quiz	10%
Report	15%
Project	40%
Final Exam	35%