

CSCI 498B Syllabus

iOS Application Development

Overview

Apple transformed the technology industry with their release of the iPhone in 2007 and the iPad in 2010, revolutionizing the mobile market. In this course, students will be introduced to the iOS platform to develop leading edge mobile digital media applications. The class will feature a combination of lectures, demonstrations, and open lab sessions. Students will complete a number of projects geared towards gaining a solid proficiency in developing iPhone and iPad apps.

Instructor

Associate Professor William Hoff, room BB249 (Brown Hall)

Phone: 303-273-3761

Email: whoff@mines.edu

Office hours: M 1-3, W 1-2. At other times, if I'm not having a meeting, please feel free to stop by.

Meetings

- Class is held Monday and Wednesday in room MZ 126 (Marquez Hall) from 7:30 am - 8:45 am.

Web Sites

- The main course website is http://eecs.mines.edu/Courses/csci498B_fall2016/. Visit this often, as it will contain lecture slides, assignments, labs, grades, etc.
- We will use Blackboard (<https://blackboard.mines.edu>) to submit assignments and projects.
- Please use Piazza to ask questions about the material – this is often the quickest way to get help. Go to <http://piazza.com/> to sign up.

Objectives

Learning objectives:

- Proficiency in using the Xcode development environment.
- Ability to use the iOS Software Developer's Kit to create iPhone and iPad apps.
- Proficiency in the use of the Swift programming language.

Pre-requisites

CSCI 261 (Programming Concepts) and CSCI 262 (Data Structures), or equivalent.

Required Materials

- The required textbook for the course is *Beginning iPhone Development with Swift 2*, by Dave Mark, Kim Topley, Jack Nutting, Frederik Olsson, and Jeff LaMarche, Apress, 2015. It is available online at <http://www.apress.com>.
- A Mac laptop is required, running the latest version of OS X (which is El Capitan, version 10.11.6 at this moment). Also an iPhone or iPad running the latest version of iOS (9.3.4).

- Note - please do not upgrade Xcode, Mac OS or mobile device iOS, after the semester starts! We need to all be using the same version. I recommend disabling automatic installation of updates.

Assessment and Grading

Students will be assessed using the following elements:

- Weekly quizzes (20%). On most Mondays, there will be a short (open book) quiz at the beginning of class, covering the material from last week.
- Lab (15%). We will have frequent hands-on assignments to be done in class. The lab assignment will be checked for completion in class and must be shown to the instructor to receive credit.
- Programming assignments (40%). These are more extensive assignments to be done at home. Late assignments will be reduced in grade unless there is prior approval by the instructor.
- Final project (25%). Details will be announced and posted on the course website.

Using Computers in Class

It's ok to follow along the lecture slides on the computer. However, checking your email, working on other non-class related materials, web-surfing, etc., are not appropriate activities for class time. It's a huge distraction, not only to you but to the people around you. Please be respectful of your colleagues in class, and use the computers only for class activities.

Collaboration Policy for Programming Projects in CS Courses

The following policy exists for all CS courses in the EECS department. This policy is a minimum standard; your instructor may decide to augment this policy.

- If the project is an individual effort project, you are not allowed to give code you have developed to another student or use code provided by another student. If the project is a group project, you are only allowed to share code with your group members.
- You are encouraged to discuss programming projects with other students in the class, as long as the following rules are followed:
 - You view another student's code only for the purpose of offering/receiving debugging assistance.
 - Students can only give advice on what problems to look for; they cannot debug your code for you.
 - All changes to your code must be made by you.
 - Your discussion is subject to the empty hands policy, which means you leave the discussion without any record [electronic, mechanical, or otherwise] of the discussion.
- Any material from any outside source such as books, projects, and in particular, from the Web, should be properly referenced and should only be used if specifically allowed for the assignment.
- To prevent unintended sharing, any code stored in a hosted repository (e.g. on GitHub) must be private. For group projects, your team members may, of course, be collaborators.
- If you are aware of students violating this policy, you are encouraged to inform the professor of the course. Violating this policy will be treated as an academic misconduct for all students involved. See the Student Handbook for details on academic dishonesty.