

CS275 - Mobile App Development - Fall 2021

Syllabus

Meeting Times

Tuesday/Thursday, 10:05 - 11:20 am, Votey 205
also Thursday, Sept 23rd 6:00 - 9:00 pm, Votey 209

Instructor

Jason Hibbeler - Innovation E315

Office hours: Tuesday/Thursday 2:15 - 4:00 pm or by appointment, either in person, or on Microsoft Teams.

Prerequisites

CS120 Advanced Programming in C++
CS124 Data Structures and Algorithms
Senior or Graduate standing

Course Description

CS275 will give students the opportunity to learn Swift and iOS development with both individual assignments and also team projects. The team project will take place over 75% of the semester and will be for a stakeholder who might be affiliated with the University community or might be from outside the University. Students will learn the structure of an iOS application, the frameworks for developing iOS applications, and the concepts of event-driven programming and GUI development.

As part of the process of working with a client stakeholder, students will learn the phases of software engineering: requirements gathering, design, implementation, verification, and evolution.

Course Learning Objectives

Students will learn to write and debug Swift programs for iOS. Students will make use of the text for the course and find and use the many other resources freely available for Swift and iOS development. Students will learn to work constructively with other peers as part of their team projects.

Course Format

Material will be presented through in-class lectures. All teaching material will be available on Blackboard. Students will also be required to share learning that they on different technical aspects of Swift and iOS development with the rest of the class.

I will be using Microsoft Teams for CS275. Our class sessions will be audiovisually recorded for students to use, and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. Please read this checklist to be sure that you are ready for classes: <https://www.uvm.edu/it/kb/student-technology-resources>

Required Course Materials

The text for the class is iOS Programming: the Big Nerd Ranch Guide, 7th Edition, by Keur, and Hillegass (available in the UVM bookstore). Students will do their programming assignments using Xcode and must have access to a macOS computer to do so.

Blackboard

I will post all lecture material and assignments on Blackboard. We will use Blackboard for submitting all class work, and I will maintain all grades on Blackboard.

Attendance Policy and Classroom Environment Expectations

Attendance for class meetings is mandatory and will count for 5% of the final grade.

Grading

The final grade for CS205 will consist of these components:

Programming Assignments	20%
Individual Projects	30%
Team Project	45%
Class Attendance	5%

Students taking CS275 for graduate credit will have additional projects and assignments.

At the end of the semester, I will total up all of the work and the attendance for the course and assign letter grades as follows: 96.67% to 100%: A+; 93.34% to 96.66%: A; 90.0% to 93.33%: A-; and analogously for B-/B/B+ and C-/C/C+.

Assessments

Assignments include:

- several Swift and iOS assignments
- a BYOD (bring your own data) individual project.
- a large team project spanning several months.

There will not be a midterm or final exam.

Course Evaluation

All students will be expected to complete a CEMS course evaluation towards the end of the semester. These evaluations are anonymous and confidential and will give students the opportunity to provide feedback and constructive criticism, with the goal of helping to improve the course.

Course Schedule

Aug. 31st - Sept. 2nd :Introduction, course goals, course structure

* Friday, Sept. 3rd: last day to add class without instructor permission

Sept. 7th - Sept. 9th: Introduction to the Swift programming language

* Monday, Sept. 6th: Labor Day Recess

Sept. 14th - Sept. 16th: Swift, continued

* Monday, Sept. 13th: Add/Drop Pass/No Pass, Audit deadline

Sept. 21st - Sept. 23rd: Swift, continued

* Thursday, Sept. 23rd: no class

* Thursday, Sept. 23rd: Team Project Proposals (6:00 - 9:00 pm)

Sept. 28th - Sept. 30th: Introduction to iOS

Oct. 5th - Oct. 9th: iOS concepts

* Friday, Oct. 8th: no class (Fall Recess)

Oct. 12th - Oct. 14th: iOS concepts

Oct. 19th - Oct. 21st: iOS concepts

Oct. 26th - Oct. 28th: iOS concepts

* Monday, Nov. 1st: Last day to withdraw

Nov. 2nd - Nov. 4th: iOS concepts

Nov. 9th - Nov. 11th: iOS concepts

Nov. 16th - Nov. 18th: iOS concepts

Nov. 23rd - Nov. 25th: iOS concepts

* Thursday, Nov. 25th: Thanksgiving Recess

Nov. 30th - Dec. 2nd: iOS concepts

Dec. 7th - Dec. 9th: iOS concepts

Student Learning Accommodations:

In keeping with University policy, any student with a documented disability interested in utilizing accommodations should contact SAS, the office of Disability Services on campus. SAS works with students and faculty in an interactive process to explore reasonable and appropriate accommodations, which are communicated to faculty in an accommodation letter. All students are strongly encouraged to meet with their faculty to discuss the accommodations they plan to use in each course. A student's accommodation letter lists those accommodations that will not be implemented until the student meets with their faculty to create a plan.

Contact SAS:

A170 Living/Learning Center;

802-656-7753;

access@uvm.edu

www.uvm.edu/access

Student Conduct with regard to COVID-19

The [Green and Gold Promise](#) clearly articulates the expectations that UVM has for students, faculty, and staff to remain compliant with all COVID-19 recommendations from the federal CDC, the State of Vermont, and the City of Burlington. This include following all rules regarding facial coverings when attending class. If you do not follow these guidelines, I will ask you to leave the class. If you forget your mask, you cannot enter the class and should go back and retrieve your mask. The [Code of Student Conduct](#) outlines policies related to violations of the Green and Gold Promise. Sanctions for violations include fines, educational sanctions, parent notification, probation, and suspension. If you are feeling ill, do not come to class.

Other

Religious Holidays: Students have the right to practice the religion of their choice. If you need to miss class to observe a religious holiday, please submit the dates of your absence to me in writing by the end of the second full week of classes. You will be permitted to make up work within a mutually agreed-upon time. <https://www.uvm.edu/registrar/religious-holidays>

Academic Integrity: The policy addresses plagiarism, fabrication, collusion, and cheating. <https://www.uvm.edu/policies/student/acadintegrity.pdf>

Course Changes: The University of Vermont reserves the right to make changes in the course offerings, mode of delivery, degree requirements, charges, regulations, and procedures contained herein as educational, financial, and health, safety, and welfare considerations require, or as necessary to be compliant with governmental, accreditation, or public health directives.

Intellectual Property: Students are prohibited from publicly sharing or selling academic materials that they did not author (for example: class syllabus, outlines or class presentations authored by the professor, practice questions, text from the textbook or other copyrighted class materials, etc.); and students are prohibited from sharing assessments (for example homework or a take-home examination). Violations will be handled under UVM's

Intellectual Property policy and Code of Academic Integrity.

Grade Appeals: If you would like to contest a grade, please follow the procedures outlined in this policy: <https://www.uvm.edu/policies/student/acadintegrity.pdf>

Grading: For information on grading and GPA calculation, go to <https://www.uvm.edu/registrar/grades>

Code of Student Rights and Responsibilities: <https://www.uvm.edu/~uvmppg/ppg/student/studentcode.pdf>

FERPA Rights Disclosure: The purpose of this policy is to communicate the rights of students regarding access to, and privacy of their student educational records as provided for in the Family Educational Rights and Privacy Act (FERPA) of 1974. <https://www.uvm.edu/~uvmppg/ppg/student/ferpa.pdf>

Promoting Health & Safety:

The University of Vermont's number one priority is to support a healthy and safe community:

Center for Health and Wellbeing <https://www.uvm.edu/health>

Counseling & Psychiatry Services (CAPS) Phone: (802) 656-3340

C.A.R.E. If you are concerned about a UVM community member or are concerned about a specific event, we encourage you to contact the Dean of Students Office (802-656-3380). If you would like to remain anonymous, you can report your concerns online by visiting the Dean of Students website at <https://www.uvm.edu/studentaffairs>

Final exam policy: The University final exam policy outlines expectations during final exams and explains timing and process of examination period. <https://www.uvm.edu/registrar/final-exams>