

Swift MasterClass

The Course

The course is centered around Computer Science and iOS fundamentals from communications and design patterns to machine learning. This course does not teach you how to build apps but to give you a fundamental understanding of Computer Science and iOS fundamentals.

Format

The course will be held live on YouTube every Saturday from 10:30am-11:45am PST. Note that lectures can extend beyond 11:45am if needed. Classes are held live to give students the opportunity to ask questions and to enable in-depth discussions of certain topics.

Communication

The main form of communication will be through Slack. You should have gotten an invite prior to the start of the course.

Prerequisites

The course is designed for late beginner to intermediate students with some experience in programming (ideally in Swift).

Reading Materials

While it is not required, it is recommended to look over some of the online resources provided in the Slack channel (or your own) prior to attending class or using them as reference for your assignments.

Grading

While projects are graded, I don't believe it is an accurate representation of how much you've learned from the assignment but a measure of the effort you've put into them. Grades are intended for your own measure of how well you are doing and will not be used to compare you against other students and does not dictate your success of the class.

Letter grades are assigned as follow

A	90%-100%
B	80%-89%
C	70%-79%
D	60%-69%
F	0-50%

Assignments

Assignments are designed to challenge yourself to apply the concepts being taught in class. While they are not mandatory, it is recommended to at least attempt some of the assignments. Assignments are graded on correctness and structure. Each assignment consist of a number of small projects that target one topic and at least one big project that targets one or more topics.

Final grades for each assignments are assigned with the following weights

Assignment 0	15%
Assignment 1	25%
Assignment 2	45%
Assignment 3	15%
Total	100%

Course Schedule

- iOS Review - Week 0
 - Swift review (if needed)
 - Object Oriented Programming
 - Protocol Oriented Programming
 - Networking
 - Unit Testing
- Communication Patterns - Week 1
 - Protocols and Delegates
 - Notifications and Observers
 - Completion Blocks
- Design Patterns - Week 2
 - MVC
 - Layered Architecture
 - MVVM
- iOS Machine Learning - Week 3
 - Theoretical Introduction
 - CoreML

Help Outside of Lecture

You can reach out to me directly for questions or clarifications

Workload

The workload will depend on the students definition of success in this course. Students who are eager to learn will find themselves spending more than those who are passively taking the course.