Time & Place:
September 28 - December 4, Fall Term 2015
08:00 - 08:50 PM, Monday/Wednesday/Friday
Straub Hall, Room 251
Office Hours by appointment in Deschutes 100
Questions accepted after lecture as time allows.

Text Book:
We will be working from the documentation available in Apple’s Developer Library:

Additional Resources:
Additional resources can be found listed on the course website.

Instructor:
Charles Augustine
hyllus@cs.uoregon.edu

Course Description:
An introduction to developing apps for iOS using Apple’s iOS 9.x SDK. An exploration of the Xcode tool suite and related tools, the Swift (and Objective-C) language(s), and the iOS conceptual model.
Course Objectives:
Design and implement an iOS application
Gain familiarity with iOS SDK:
- Swift 2.0 and related language concepts
- Cocoa Touch (UIKit) and Foundation/Swift Standard Library, Core Data, etc.
Learn to use Xcode and related tools:
- Code editor
- Interface Builder
- Developer documentation
- Version control (git)
- Debugger
- Instruments

Evaluation:
The grade received for the class will be based on project work, a midterm exam, and some homework assignments. Homework will be assigned to reinforce core concepts and prepare for the midterm and final project. A midterm exam will test that students have understood core concepts necessary for iOS development. After the midterm, each student will be expected to write a functional iOS application meeting a minimum set of criteria. In addition, to ensure that continuous progress is being made, progress will also be evaluated at various assigned project milestones as the class progresses towards the final project deliverable.

Students will pick their own project, with guidance to ensure it is of reasonable scope and allows for the exploration of the various topics covered by the course.

<table>
<thead>
<tr>
<th>Homework Assignments</th>
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<tbody>
<tr>
<td>Midterm Exam</td>
<td>20%</td>
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<tr>
<td>Project Milestones</td>
<td>10%</td>
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<tr>
<td>Final Project</td>
<td>50%</td>
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Late Work:
Late work will not be considered for a grade unless an agreement for turning in the work in question is made with the instructor prior to the assigned due date. The maximum grade of the late work will be reduced at the instructors discretion based on the situation.
## Tentative Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
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| 1    | 9/28 - 10/2  
Introductions & Syllabus Overview, Xcode, Swift  
**Setup Assignment Due Wednesday 9/30 by 8:00 AM** |
| 2    | 10/5 - 10/9  
Interface Builder, Auto Layout, Adaptive Layout (Multi-tasking)  
**Swift Assignment Due Monday 10/5 by 8:00 AM** |
| 3    | 10/12 - 10/16  
SDK Overview, Design Patterns, View Controllers / Views  
**AutoLayout Assignment Due Monday 10/12 by 8:00 AM** |
| 4    | 10/19 - 10/23  
Storyboards / NIB Files, Standard View Components, Scroll Views and Subclasses, Stack Views  
**Basic App Assignment Due Monday 10/19 by 8:00 AM** |
| 5    | 10/26 - 10/30  
Data Modeling, Concurrency, Core Data, Custom Model Classes  
**Core Data Assignment Due Friday 10/30 by 8:00 AM** |
| 6    | 11/2 - 11/6  
Unit Testing, UI Testing, Debugging  
**Project Proposal (Milestone 1) Due Thursday 11/5 by 8:00 AM**  
**Midterm Exam Friday 11/6** |
| 7    | 11/9 - 11/13  
Notifications, Keyboard Handling, Gesture Recognition, Custom View Drawing  
**Unit/UI Testing Assignment Due Wednesday 11/11 by 8:00 AM**  
**Withdraw / Change Grading Option by Sunday 11/15** |
| 8    | 11/16 - 11/20  
Property Lists / User Defaults, Securing Data, Map Integration  
**Final Project Milestone 2 Due Wednesday 11/18 by 8:00 AM** |
| 9    | 11/23 - 11/27  
Camera and Photos, Contacts  
**Final Project Milestone 3 Due Wednesday 11/25 by 8:00 AM**  
**No Class Friday 11/27 - Thanksgiving Holiday**  
**Course Evaluations Open Wednesday 11/25** |
| 10   | 11/30 - 12/4  
Notifications, Messaging, Class Summary  
**Project Milestone 4 Due Friday 12/4 by 8:00 AM** |
| **Finals Week** | **Final Projects Due by 11:59 PM on Friday 12/11**  
**Course Evaluations Close Monday 12/7** |