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| **Instructor** | Dr. Christopher Bennett | **Phone** | 305-284-1275 |
| **Office** | Pick Laboratory | **E-mail** | Bennett@miami.edu |
| **Hours** | T, Th: 9a-11:30a (or by appt.) | **Meet** | WML 130, T/Th 3:30-4:45p |

## **Learning Objectives**:

This course addresses the current technologies, skills, and techniques employed in the field of iOS mobile application audio programming.

## **Goals**:

* Learn Objective-C programming language
* Learn iOS audio programming tools
  + AV Audio Player
  + Core Audio
  + Audio Units
* Learn iOS App development
* Develop 6 iOS Audio Apps

## **Resources**:

* *iOS Programming: The Big Nerd Ranch Guide* (4th Ed.) ISBN-10: 0321942051

## **Evaluation**: Final grades will be assessed as follows:

* Semester Projects: 80% (Weighted equally)
* Final Project: 20%

*More on back* 🡪

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| Week | Topic | Chapter |
| 1 | Source control (Git), Swift, iOS simulator, MVC | 1, Notes |  |
| 2 | Memory management, Objective-C | 2-3 |  |
|  | *1/27 --- Last day to drop without ‘W’ ---* |  |  |
| 3 | Views and Controllers, **APP 1 DUE** | 4-5 |  |
| 4 | Protocols, Delegation | 6-7 |  |
| 5 | Custom Views | 8-9 |  |
| 6 | Audio Frameworks, **APP 2 DUE** | 10 |  |
| 7 | AV Audio Player Objects | Notes |  |
| 8 | AV Audio Engine | Notes |  |
|  | *3/5 to 3/13 --- Spring recess ---* |  |  |
| 9 | vDSP, Audio Sessions, **APP 3 DUE** | Notes |  |
|  | *3/23 --- Last day to drop ---* |  |  |
| 10 | Audio Unit Extensions | Notes |  |
| 11 | AU AppEx Hosting | 12-13 |  |
| 12 | iOS Charts, **APP 4 DUE** | 17 |  |
| 13 | MIDI over Bluetooth | 27 |  |
| 14 | **APP 5 DUE** |  |  |
| Final | **APP 6 DUE** *4/28: 2p to 4:30p* |  |  |