

SAMPLE COURSE OUTLINE

Course Code, Number, and Title:

WMDD 4945: Native IOS App Development

Course Format:

[Course format may vary by instructor. The typical course format would be:]

Lecture 3 h + Seminar 0 h + Lab 2 h

Credits: 3

Transfer credit: For information, visit bctransferguide.ca

Course Description, Prerequisites, Corequisites:

Currently, iOS and Android are the two most popular operating systems on mobile devices. Coursework focusses on the Swift programming language and creation of apps for the iOS platform. Topics include building storyboards, implementing actions, using audio/visual assets, testing and deployment.

Commented [MO1]: Information from Edco4

Prerequisites: A minimum grade of "C" in WMDD 4845 and 4930

Registration in this course is restricted to students admitted to the Post-Degree Diploma in Web and Mobile App Design and Development Program.

Commented [MO2]: Information from web

Learning Outcomes:

Upon successful completion of this course, students will be able to:

- Decompose a design into a series of connected storyboards
- Implement each storyboard using the Swift language and iOS Cocoa Touch framework
- Incorporate audio/visual assets into the application
- Test the application to ensure it works correctly
- Deploy the native iOS application to the device
- Find, decipher and use appropriate documentation for a necessary widget, feature, or language construct

Instructor(s): TBA

Office: TBA **Phone:** 604 323 XXXX **Email:** TBA

Office Hours: TBA

snəwəyət̓ leləm̓ Langara College acknowledges that we are located on the unceded territory of the Musqueam people.

Textbook and Course Materials:

[Textbook selection may vary by instructor. An example of texts and course materials for this course might be:]

Abbey Deitel and Paul Deitel. "iOS 8 for Programmers: An App-Driven approach with Swift."

Matt Neuberg. "iOS 9 programming fundamentals with Swift: Swift, Xcode, and Cocoa basics".

Paul Deitel, Harvey Deitel. "Swift for Programmers".

Vandad Nahavandipoor. "iOS 9 Swift Programming cookbook: solutions and examples for iOS Apps".

Note: *This course may use an electronic (online) instructional resource that is located outside of Canada for mandatory graded class work. You may be required to enter personal information, such as your name and email address, to log in to this resource. This means that your personal information could be stored on servers located outside of Canada and may be accessed by U.S. authorities, subject to federal laws. Where possible, you may log in with an email pseudonym as long as you provide the pseudonym to me so I can identify you when reviewing your class work.*

Assessments and Weighting:

Final Exam 20%

Other Assessments %

(An example of other assessments might be:) %

Midterm Exam: 20%

Assignments: 40%

Project: 20%

Proportion of individual and group work:

Individual: 70%

Group: 30%

Grading System: Letter grade

Specific grading schemes will be detailed in each course section outline.

Passing grade: C

Topics Covered:

[Topics covered may vary by instructor. An example of topics covered might be:]

Swift programming language

- Types, including arrays, tuples, and dictionaries
- Variables

This generic outline is for planning purposes only.

snəwəyət leləm.

THE COLLEGE OF HIGHER LEARNING.

- Operators
- Control structures
- Functions
- Exceptions and guards
- Optionals
- Objects and Classes
- Protocols

Nib Editor Interface

- Nibs, storyboards, outlets, actions, connections
- Attributes, constraints

Cocoa Touch UIKit Framework

- UIViewController
- User Interface Widgets – buttons, labels, text fields, pickers, etc.
- Bridging between Objective-C code and Swift

UI Testing and Deployment

Design patterns (and their implementation within Cocoa)

- Model-View-Controller
- Factory
- Command
- Delegation
- Key-Value Observing
- Notifications

Other Cocoa Touch iOS frameworks

- location
- GPS
- accelerometer
- maps
- mail
- contacts
- CoreMedia
- OpenGL

As a student at Langara, you are responsible for familiarizing yourself and complying with the following policies:

College Policies:

[E1003 - Student Code of Conduct](#)

[F1004 - Code of Academic Conduct](#)

This generic outline is for planning purposes only.

Langara.

THE COLLEGE OF HIGHER LEARNING.

snəwəyət̚ lələm̚.

THE COLLEGE OF HIGHER LEARNING.

[E2008 - Academic Standing - Academic Probation and Academic Suspension](#)

[E2006 - Appeal of Final Grade](#)

[F1002 - Concerns about Instruction](#)

[E2011 - Withdrawal from Courses](#)

Departmental/Course Policies:

Langara.

THE COLLEGE OF HIGHER LEARNING.

This generic outline is for planning purposes only.