Course Code: Title	MAP102: APPLE DEVICE DEVELOPMENT
Program Number: Name	2191: MOBILE APPS DESIGN
Department:	COMPUTER STUDIES
Semesters/Terms:	19F
Course Description:	In this course, students will develop apps for mobile devices on the iOS platform. Apple`s new Swift programming language and the Xcode development environment will be used. The focus of this course in programming is the development of user-interfaces and program logic for the iOS operating system.
Total Credits:	4
Hours/Week:	4
Total Hours:	60
Prerequisites:	There are no pre-requisites for this course.
Corequisites:	There are no co-requisites for this course.
Vocational Learning Outcomes (VLO's) addressed in this course: Please refer to program web page for a complete listing of program outcomes where applicable.	**2191 - MOBILE APPS DESIGN** VLO 3 Develop application and user interfaces for various mobile platforms that leverage evolving mobile device capabilities. VLO 7 Evaluate and implement new features for current IOS, Android and other platforms to meet client needs.
Essential Employability Skills (EES) addressed in this course:	EES 2 Respond to written, spoken, or visual messages in a manner that ensures effective communication. EES 3 Execute mathematical operations accurately. EES 4 Apply a systematic approach to solve problems. EES 5 Use a variety of thinking skills to anticipate and solve problems. EES 7 Analyze, evaluate, and apply relevant information from a variety of sources. EES 10 Manage the use of time and other resources to complete projects. EES 11 Take responsibility for ones own actions, decisions, and consequences.
Course Evaluation:	Passing Grade: 50%, D
Other Course Evaluation & Assessment Requirements:	The student must pass both the lab and test portions of the course. Attendance: Sault College is committed to student success. There is a direct correlation between academic performance and class attendance, therefore, for the benefit of all its constituents, all students are encouraged to attend all of their scheduled learning and evaluation sessions. This implies arriving on time and remaining for the duration of the scheduled session. Absences due to medical or other unavoidable circumstances should be discussed with the

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instructor. Students are required to be in class on time and attendance will be taken within the first five minutes of class.

Absentee reports will be discussed with each student during regular meetings with Faculty Advisors.

Grade
Definition Grade Point Equivalent
A+ 90 - 100% 4.00
A 80 - 89%
B 70 - 79% 3.00
C 60 - 69% 2.00
D 50 - 59% 1.00
F (Fail) 49% and below 0.00
CR (Credit) Credit for diploma requirements has been awarded.
S Satisfactory achievement in field /clinical placement or non-graded subject area.
U Unsatisfactory achievement in field/clinical placement or non-graded subject area.
X A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.
NR Grade not reported to Registrar`s office.
W Student has withdrawn from the course without academic penalty

Books and Required Resources:

iOS Programming (The Big Nerd Ranch Guide) by Christian Keur
Publisher: Pearson Edition: 6
ISBN: 9780134682334

Course Outcomes and Learning Objectives:

Course Outcome 1	Learning Objectives for Course Outcome 1
Introduction to iOS development, Xcode and Interface Builder.	1.1 Understand the history of iOS development and what is required to build iOS apps. 1.2 Use Xcode, the iOS simulator, and physical devices to build and test iOS apps. 1.3 Understand the structure of iOS apps including the Model-View-Controller paradigm. 1.4 Build accessible iOS user interfaces.
Course Outcome 2	**Learning Objectives for Course Outcome 2**
Introduction to Swift, Swift programming and Swift in iOS development.	2.1 Understand Swift syntax. 2.2 Write structures, enumerations, and classes. 2.3 Use data types, conditional statements, loops and string interpolation. 2.4 Work with arrays and dictionaries. 2.5 Discover advanced Swift topics (mutability, immutability, optionals, selectors, subclassing). 2.6 Analyze and improve code quality.
Course Outcome 3	**Learning Objectives for Course Outcome 3**
Views, the view hierarchy, view controllers and layouts	3.1 Understand the view architecture. 3.2 Use view controllers to create and manage views. 3.3 Explain the auto layout system. 3.4 Use constraints to drive visual changes across different device sizes. 3.5 Demonstrate views and view management programmatically.

Course Outcome 4	Learning Objectives for Course Outcome 4
Interacting with the user, the user experience and delegation.	4.1 Understand how to design for user input. 4.2 Use delegation to respond to text changes. 4.3 Explore various input mechanisms to improve the user experience.
Course Outcome 5	**Learning Objectives for Course Outcome 5**
Debugging and testing using the simulator and physical devices.	5.1 Explore debugging tools provided by Xcode. 5.2 Discover the debugger console. 5.3 Apply various methods of debugging. 5.4 Experiment with debugging using the Xcode simulator. 5.5 Experiment with debugging using a physical device.
Course Outcome 6	**Learning Objectives for Course Outcome 6**
Navigation, tab bar controllers and the table view controller.	6.1 Describe how navigation controllers manage a controller hierarchy. 6.2 Discover how to use segues to manage controller relationships. 6.3 Implement a tab bar controller as a primary navigation mechanism. 6.4 Experiment with stack views, table views, and table view controllers.

Evaluation Process and Grading System:

Evaluation Type	Evaluation Weight
Lab 1	3%
Lab 10	3%
Lab 2	3%
Lab 3	3%
Lab 4	3%
Lab 5	3%
Lab 6	3%
Lab 7	3%
Lab 8	3%
Lab 9	3%
Quiz 1	1%
Quiz 10	1%
Quiz 2	1%
Quiz 3	1%
Quiz 4	1%
Quiz 5	1%
Quiz 6	1%
Quiz 7	1%
Quiz 8	1%
Quiz 9	1%

	Test 1	20%
	Test 2	20%
	Test 3	20%

Date:	September 19, 2019
Addendum:	Please refer to the course outline addendum on the Learning Management System for further information.