



## COURSE OUTLINE: CSD203 - MOBILE APPS I

Prepared: Fred Carella

Approved: Corey Meunier, Chair, Technology and Skilled Trades

<b>Course Code: Title</b>	CSD203: MOBILE APPLICATIONS I
<b>Program Number: Name</b>	2090: COMPUTER PROGRAMMER
<b>Department:</b>	COMPUTER STUDIES
<b>Semesters/Terms:</b>	20F
<b>Course Description:</b>	This course provides an introduction to mobile application development using Appinventor 2. Appinventor is a visual design tool that uses blocks to specify application behavior and provides a new way to program applications. The student will apply design concepts and use the Appinventor visual design environment to write applications for Android mobile devices.
<b>Total Credits:</b>	4
<b>Hours/Week:</b>	4
<b>Total Hours:</b>	60
<b>Prerequisites:</b>	CSD105
<b>Corequisites:</b>	There are no co-requisites for this course.
<b>This course is a pre-requisite for:</b>	CSD309
<b>Vocational Learning Outcomes (VLO's) addressed in this course:</b>	<b>2090 - COMPUTER PROGRAMMER</b>
<b>Please refer to program web page for a complete listing of program outcomes where applicable.</b>	VLO 1 Identify, analyze, develop, implement, verify and document the requirements for a computing environment.
	VLO 10 Contribute to the development, documentation, implementation, maintenance and testing of software systems by using industry standard software development methodologies based on defined specifications and existing technologies/frameworks.
	VLO 11 Apply one or more programming paradigms such as, object-oriented, structured or functional programming, and design principles, as well as documented requirements, to the software development process.
	VLO 13 Contribute to the integration of network communications into software solutions by adhering to protocol standards.
<b>Essential Employability Skills (EES) addressed in this course:</b>	EES 1 Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience.
	EES 2 Respond to written, spoken, or visual messages in a manner that ensures effective communication.
	EES 4 Apply a systematic approach to solve problems.
	EES 5 Use a variety of thinking skills to anticipate and solve problems.
	EES 6 Locate, select, organize, and document information using appropriate technology and information systems.

In response to public health requirements pertaining to the COVID19 pandemic, course delivery and assessment traditionally delivered in-class, may occur remotely either in whole or in part in the 2020-2021 academic year.



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	EES 7 Analyze, evaluate, and apply relevant information from a variety of sources.
<b>Course Evaluation:</b>	<p>Passing Grade: 50%, D</p> <p>A minimum program GPA of 2.0 or higher where program specific standards exist is required for graduation.</p>
<b>Other Course Evaluation &amp; Assessment Requirements:</b>	<p>The student must pass both the lab and test portions of the course.</p> <p>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.</p> <p>Absences due to medical or other unavoidable circumstances should be discussed with the instructor. Students are required to be in class on time and attendance will be taken within the first five minutes of class. A missed class will result in a penalty in your marks unless you have discussed your absence with the professor as described above. The penalty depends on course hours and will be applied as follows:</p> <p>Course Hours Deduction  5 hrs/week (75 hrs) 1% / hr  4 hrs/week (60 hrs) 1.5% /hr  3 hrs/week (45 hrs) 2% /hr  2 hrs/week (30 hrs) 3%/hr</p> <p>Absentee reports will be discussed with each student during regular meetings with Faculty Advisors. Final penalties will be reviewed by the professor and will be at the discretion of the professor.</p> <p>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</p> <p>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.</p>
<b>Books and Required Resources:</b>	<p>App Inventor 2 by Wolber  <a href="http://www.appinventor.org/book2">http://www.appinventor.org/book2</a></p>

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App Inventor 2 Course in A Box by Wolber  
<http://www.appinventor.org/content/CourseInABox/Intro>

**Course Outcomes and Learning Objectives:**

<b>Course Outcome 1</b>	<b>Learning Objectives for Course Outcome 1</b>
1. Preparing the development environment	1.1 Prepare and install software 1.2 Create projects in AppInventor 1.3 Become familiar with the design area, the palette, viewer, components and properties panels 1.4 Develop application functionality with the blocks editor
<b>Course Outcome 2</b>	<b>Learning Objectives for Course Outcome 2</b>
2. Develop Introductory Level Applications	2.1 Define terms and concepts 2.2 Develop graphical user interfaces using buttons, text labels, notifiers, alerts and other components. 2.3 Develop applications that incorporate multimedia: sound, static images, video
<b>Course Outcome 3</b>	<b>Learning Objectives for Course Outcome 3</b>
3. Advanced Programming Concepts	3.1 Incorporate the following concepts and constructs in AppInventor in the development of more advanced application functionality 3.1.1 Data types, data structures, control structures 3.1.2 Colors 3.1.3 Processing numbers 3.1.4 Checking program states with logic blocks 3.1.5 Manipulate text 3.1.6 Lists 3.1.7 Control
<b>Course Outcome 4</b>	<b>Learning Objectives for Course Outcome 4</b>
4. Storage and Databases	4.1 Save data locally 4.2 Save data remotely
<b>Course Outcome 5</b>	<b>Learning Objectives for Course Outcome 5</b>
5. Develop Attractive Applications	5.1 Use graphics and animations 5.2 Control processes with a clock 5.3 Measure orientation with orientation sensor 5.4 Determine position with location sensor 5.5 Measure g-force with accelerometer 5.6 Communicate using telephone and sms

**Evaluation Process and Grading System:**

Evaluation Type	Evaluation Weight
Labs	40%
Tests	60%

**Date:** July 22, 2020

**Addendum:** Please refer to the course outline addendum on the Learning Management System for further information.

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