



## COURSE OUTLINE: CSD203 - MOBILE APPS I

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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 2095: COMPUTER PROGRAMMING
<b>Department:</b>	COMPUTER STUDIES
<b>Semesters/Terms:</b>	21F
<b>Course Description:</b>	This course provides an introduction to mobile application development concepts and tools. Topics include current industry development environments, user interfaces, mobile programming, data storage, debugging and deployment. The student will apply concepts and write applications for mobile devices using a mobile app development environment.
<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>	<p><b>2090 - COMPUTER PROGRAMMER</b></p> <p>VLO 1 Identify, analyze, develop, implement, verify and document the requirements for a computing environment.</p> <p>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.</p> <p>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.</p> <p>VLO 13 Contribute to the integration of network communications into software solutions by adhering to protocol standards.</p> <p><b>2095 - COMPUTER PROGRAMMING</b></p> <p>VLO 1 Identify, analyze, develop, implement, verify and document the requirements for a computing environment.</p> <p>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.</p>

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 2021-2022 academic year.



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	<p>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.</p> <p>VLO 13 Contribute to the integration of network communications into software solutions by adhering to protocol standards.</p>
<b>Essential Employability Skills (EES) addressed in this course:</b>	<p>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.</p> <p>EES 2 Respond to written, spoken, or visual messages in a manner that ensures effective communication.</p> <p>EES 4 Apply a systematic approach to solve problems.</p> <p>EES 5 Use a variety of thinking skills to anticipate and solve problems.</p> <p>EES 6 Locate, select, organize, and document information using appropriate technology and information systems.</p> <p>EES 7 Analyze, evaluate, and apply relevant information from a variety of sources.</p>
<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</p>

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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.

**Course Outcomes and Learning Objectives:**

<b>Course Outcome 1</b>	<b>Learning Objectives for Course Outcome 1</b>
1. History of mobile application development and current industry development environments.	1.1 Review the history of app development. 1.2 Define various current industry development environments. 1.3 Use an app development IDE to build, test and debug mobile apps.
<b>Course Outcome 2</b>	<b>Learning Objectives for Course Outcome 2</b>
2. App projects, user interfaces and running apps.	2.1 Understand how to create and run a simple app. 2.2 Describe layouts and the screen/view hierarchy. 2.3 Develop graphical user interfaces. 2.4 Use the device emulator/simulator.
<b>Course Outcome 3</b>	<b>Learning Objectives for Course Outcome 3</b>
3. Working with screens, UI widgets and UI events.	3.1 Understand the screen lifecycle. 3.2 Respond to rotation and application states. 3.3 Implement listeners for UI events. 3.4 Explore common UI widgets.
<b>Course Outcome 4</b>	<b>Learning Objectives for Course Outcome 4</b>
4. Data persistence and storage.	4.1 Understand how to persist data temporarily. 4.2 Use SQLite to implement data storage. 4.3 Explore the application sandbox and how application files are stored. 4.4 Save files to the device.

**Evaluation Process and Grading System:**

<b>Evaluation Type</b>	<b>Evaluation Weight</b>
Lab 1	6%
Lab 2	6%
Lab 3	6%
Lab 4	6%
Lab 5	6%
Quiz 1	2%
Quiz 2	2%
Quiz 3	2%

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Quiz 4	2%
Quiz 5	2%
Test 1	20%
Test 2	40%

**Date:** August 6, 2021

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

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