THE UNIVERSITY OF WINNIPEG

APPLIED COMPUTER SCIENCE

Course Number: ACS-1805-001, 070L, 071L
Course Name: **Introduction to Programming**

Instructor Information
Instructor:　　James Deng
Office:　　　　3D17
E-mail:　　　　jdeng@uwinnipeg.ca
Office Hours: Wednesday: 1:20pm - 2:20pm Thursday: 2:15pm - 3:15pm
　　　　　　　　Room No.: 3D17
Class Time:　　Monday, Wednesday: 2:30pm - 3:45pm Room No.: 3D01
Lab Time:　　　Lab 070: 3D03 8:30am – 9:45am Friday
　　　　　　　　Lab 071: 3D03 9:45am – 11:00am Friday
Course Web Page: http://courses.acs.uwinnipeg.ca/1805-001

Important Dates
1. **First Class**: September 6, 2017
2. **Reading Week:** October 8 -14, 2017 (no classes)
3. **Last Class**:   December 4, 2017
4. **Midterm Test**: October 18, 2017 in class
5. **Final Withdrawal Date w/o academic penalty**: November 10, 2017 (A minimum of 20% of the work on which the final grade is based will be evaluated and available to the student before the voluntary withdrawal date.)
6. **Final Exam**: December 18, 2017 - 1:30 pm in 3D01
 http://www.uwinnipeg.ca/exam-schedules/index.html

Course Objectives/Learning Outcomes
This course introduces fundamental programming concepts using App Inventor. Students learn to develop and test programs that can run on Android phones and tablets. The framework we use for this is the App Inventor visual programming environment. The App Inventor framework runs on Windows, Macintosh, and Linux computers and includes an emulator for an Android phone (and so an actual Android phone or tablet is not needed). Topics include Android app architecture, software engineering principles, variables, functions, decision structures, iteration, lists, procedures, databases, user interface, events, and sensors.

Evaluation Criteria

1. Labs (10%)

Labs are expected to be completed during the Friday lab periods. Labs will involve App Inventor programming. Lab work is submitted via email (to a lab demonstrator account given out at the first lab).

2. Assignments (15%)

Three assignments will be given to the students. Assignments are equally weighted. Late assignments will not be accepted. All assignments are expected to be printed. All assignments will be submitted through emails. The details of submission procedure will be stated in each assignment. Problem solving and programming assignments could be very time consuming. So please start early. Students are responsible for maintaining backups of their work.

Should illness prevent you from participating in a lab or submitting an assignment on time, a medical certificate from a practicing physician may be required before any adjustments are considered. Students are responsible to review their assignments before submission to make sure the correct files are attached to the email.

3. Test (25%)

The midterm test is on Wednesday Oct 18 during class time.

4. Final Exam (50%)

The final exam covers all material discussed in the course. Photo ID at exam is required. No electronic devices (e.g. cell/smart phone, laptop, scientific calculators, translators, etc.) are permitted. Midterm and final exams are closed-book. Unless a medical certificate is provided, no accommodation is made for missed tests or final exam.

Final Letter Grade Assignment

Historically, numerical percentages have been converted to letter grades using the following scale. However, instructors can deviate from these values based on pedagogical nuances of a particular class, and final grades are subject to approval by the Department Review Committee.

A+	90+ - 100%	B	70 - 74%	F	below 50%
A	85 - 90%	C+	65 - 69%		
A-	80 - 84%	C	60 - 64%		
B+	75 - 79%	D	50 - 59%		

Email Communication

Emails from accounts at uwinnipeg.ca are usually not filtered by the UofW email filter. Thereby it is recommended electronic communication used for the course utilize a UofW email account to minimize the risk of filtering.

Services for Students

Students with documented disabilities, temporary or chronic medical conditions, requiring academic accommodations for tests/exams (e.g., private space) or during lectures/laboratories (e.g., note-takers) are encouraged to contact Accessibility Services

(AS) at 786-9771 or accessibilityservices@uwinnipeg.ca to discuss appropriate options. All information about a student's disability or medical condition remains confidential http://www.uwinnipeg.ca/accessibility .

Students may choose not to attend classes or write examinations on holy days of their religion, but they must notify their instructors at least two weeks in advance. Instructors will then provide opportunity for students to make up work examinations without penalty. A list of religious holidays can be found in the 2017-18 Undergraduate Academic Calendar.

All students, faculty and staff have the right to participate, learn, and work in an environment that is free of harassment and discrimination. The UW Respectful Working and Learning Environment Policy may be found online at www.uwinnipeg.ca/respect .

Exam Requirements
Photo ID at exam is required. No electronic devices (e.g. cell/smart phone, laptop, scientific calculators, translators, etc.) are permitted.

Required Text
App Inventor: Create your own Android Apps, David Wolber, Hal Abelson, Ellen Spertus, Liz Looney, ISBN 13: 978-1-4919-0684-7.

Students are also responsible for the contents covered during the class that are out of the text book.

The course web page is: http://www.acs.uwinnipeg.ca/1805-001.

Prerequisite Information
(This information can be found in the UW Undergraduate Academic Calendar)
None.

Misuse of Computer Facilities, Plagiarism, and Cheating
Academic dishonesty is a very serious offense and will be dealt in accordance with the University's policies. Be sure that you have read and understood Regulations & Policies #8, starting on page 27, in the 2016-2017 UW Undergraduate Academic Calendar or http://uwinnipeg.ca/academics/calendar/docs/regulationsandpolicies.pdf

Additional information is available at University of Winnipeg library video tutorial "Avoiding Plagiarism" https://www.youtube.com/watch?v=UvFdxRU9a8g

Additional Course Related Information
1. When it is necessary to cancel a class due to exceptional circumstances, instructors will make every effort to inform you via uwinnipeg email, as well as the departmental assistant and Chair/Dean so that class cancellation forms can be posted outside classrooms.

2. Your uwinnipeg email address will normally be used for course related correspondence.

3. Please note that withdrawing before the VW date does not necessarily result in a fee refund.

4. No classes: Oct. 8 – 14 Mid-term reading week.

9 Topics to be covered (tentative)

Chapters 1 through 13 are tutorials for programming. Chapters 14 through 24 cover more general topics including app architecture and programming concepts.

Tentative chapter sequence
1 Hello purr
2 Paint pot
14 App architecture
3 Mole mash
16 Programming your app's memory
5 Ladybug chase
17 Creating animated apps
6 Map tour
18 Programming decisions
8 Presidents quiz
19 Programming lists
9 Xylophone
4 No texting while driving
23 Sensors
20 Repeating blocks: iteration
15 Engineering and debugging an app
21 Defining procedures: reusing blocks
7 Where's my car?
10 Make quiz and take quiz
11 Broadcast hub
22 Working with databases
13 Amazon at the bookstore