THE UNIVERSITY OF WINNIPEG

APPLIED COMPUTER SCIENCE

Course Number: ACS-1903-050, 070L
Course Name: Programming Fundamentals I
Course Webpage: https://nexus.uwinnipeg.ca/d2l/home/44991
Lab Webpage: https://nexus.uwinnipeg.ca/d2l/home/44992

Instructor Information

Instructor: **Ron McFadyen, 3D21**
E-mail: r.mcfadyen@uwinnipeg.ca

Office Hours:	Tuesdays	10:00 am - 11:00 am
Class meeting time:	Monday/Wednesday **3D04**	6:00 pm - 8:00 pm
Lab time:	Wednesday **3D03**	4:15 pm - 5:45 pm

Important Dates

1. First Class: Monday, May 2, 2022
2. First Lab: Wednesday, May 4, 2022
3. Midterm Tests: Monday, May 30, 2022 (in class)
   Wednesday, June 1, 2022 (in lab)
4. Final Withdrawal Date w/o academic penalty*: Tuesday, June 14, 2022
5. Last Class: Monday, June 27, 2022
6. Last Lab: Wednesday, June 22, 2022
7. Final Exam: TBD
8. University closures: Victoria Day Monday, May 23, 2022

*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.

Course Objectives / Learning Outcomes

This course introduces fundamental programming concepts using the Java programming language. Topics to be covered include primitive data types and their manipulation, control structures, classes, objects, methods, and array lists.

Evaluation Criteria

1. Labs (10%)
   - Labs are equally weighted
   - Labs are to be completed during the lab period
   - No late lab submissions will be accepted

2. Assignments (15%)
   - 3 assignments, worth 5% each
   - Individual due dates will be posted on Nexus
   - Assignments will be accepted up to 1 day late with a 20% penalty

   Course IDE:
   BlueJ will be used during classes, and it is expected that students will use BlueJ to develop Java programs during labs and for assignments. BlueJ is free to download to your own computing environments (see http://www.bluej.org).

   Lab/assignment submissions:
   All work is to be submitted electronically via Nexus. All coding is to be submitted in .java format, and any written work in PDF format. Further details and submission procedure will be stated in each assignment.

   Students are responsible for backing up and protecting their lab and assignment work.

3. Midterm Tests (25%)
   - May 30 (15%) in class
   - June 1 (10%) in lab

4. Final Exam (50%)
   - Cumulative

Students should contact the instructor as soon as possible if extenuating circumstances require missing a lab, assignment, test or examination. A medical certificate from a practicing physician may be required before any adjustments are considered.

Lectures and Labs

This course is delivered in-person. It is expected that students attend all classes and labs.

Test / Exam Requirements

- Photo ID is required for the final exam.
- The use of computers, calculators, phones, or other electronic devices is not permitted during exams.
- Final exam is closed book.
- In-class midterm is closed book.
- In-lab midterm is open book.

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 204-786-9771 or accessibilityservices@uwinnipeg.ca to discuss appropriate options. All information about a student's disability or medical condition remains confidential.
https://www.uwinnipeg.ca/accessibility-services.

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 2019-20 Undergraduate Academic Calendar online at http://uwinnipeg.ca/academics/calendar/docs/important-notes.pdf

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+	75 – 79%	C	60 – 64%
A	85 – 89 %	B	70 – 74%	D	50 – 59%
A-	80 – 84%	C+	65 – 69%	F	below 50%

Required Textbook / Reading List

- Ron McFadyen, Jeanette Bautista; *Java with BlueJ Part 1, Version 4.0,* University of Winnipeg, 2019; www.acs.uwinnipeg.ca/rmcfadyen/CreativeCommons
- Class Notes will be available on Nexus

Prerequisite Information

- Pre-Calculus Mathematics 40S or Applied Mathematics 40S or a grade of at least C in ACS-1805.
- ACS-1903L (lab) must be taken concurrently

Mask Protocol

The UWinnipeg has extended the mask mandate until June 30.
This mask mandate applies to all students, staff, faculty, contractors, and visitors. Exemptions will be made for individuals who require a medical accommodation.
Facemasks must be worn when in the presence of others and in common indoor areas and shared spaces. This includes (but is not limited to) hallways, classrooms, laboratories, meeting rooms, lobbies, washrooms, parking garages, stairways, elevators, common spaces in residence.
More information:
https://news.uwinnipeg.ca/mask-mandate-extended-to-june-30/
https://www.uwinnipeg.ca/covid-19/docs/uwinnipeg-mask-mandate-2021-08-24-epp-approved.pdf

Regulations, Policies, and Academic Integrity

Academic dishonesty is a very serious offense and will be dealt in accordance with the University's policies.

Avoiding Academic Misconduct: Students are encouraged to familiarize themselves with the Academic Regulations and Policies found in the University Academic Calendar at:
https://uwinnipeg.ca/academics/calendar/docs/regulationsandpolicies.pdf

Particular attention should be given to subsections 8 (Student Discipline), 9 (Senate Appeals) and 10 (Grade Appeals). Please note, in particular, the subsection of Student Discipline pertaining to plagiarism and other forms of cheating.

Detailed information can be found at the following:

- Academic Misconduct Policy and Procedures: https://www.uwinnipeg.ca/institutional-analysis/docs/policies/academic-misconduct-policy.pdf and https://www.uwinnipeg.ca/institutional-analysis/docs/policies/academic-misconduct-procedures.pdf
- UW Library video tutorial "Avoiding Plagiarism" https://www.youtube.com/watch?v=UvFdxRU9a8g

Uploading essays and other assignments to essay vendor or trader sites (filesharing sites that are known providers of essays for use by others who submit them to instructors as their own work) involves "aiding and abetting" plagiarism. Students who do this can be charged with Academic Misconduct.

Non-academic misconduct. Students are expected to conduct themselves in a respectful manner on campus and in the learning environment irrespective of platform being used. Behaviour, communication, or acts that are inconsistent with a number of UW policies could be considered "non-academic" misconduct. More detailed information can be found here:

- Respectful Working and Learning Environment Policy https://www.uwinnipeg.ca/respect/respect-policy.html,
- Acceptable Use of Information Technology Policy https://www.uwinnipeg.ca/institutional-analysis/docs/policies/acceptable-use-of-information-technology-policy.pdf
- Non-Academic Misconduct Policy and Procedures: https://www.uwinnipeg.ca/institutional-analysis/docs/student-non-academic-misconduct-policy.pdf and https://www.uwinnipeg.ca/institutional-analysis/docs/student-non-academic-misconduct-procedures.pdf .

Copyright and Intellectual Property. Course materials are the property of the instructor who developed them. Examples of such materials are course outlines, assignment descriptions, lecture notes, test questions, and presentation slides—irrespective of format. Students who upload these materials to filesharing sites, or in any other way share these materials with others outside the class without prior permission of the instructor/presenter, are in violation of copyright law and University policy. Students must also seek prior permission of the instructor/presenter before, for example, photographing, recording, or taking screenshots of slides, presentations, lectures, and notes on the board. Students found to be in violation of an instructor's intellectual property rights could face serious consequences pursuant to the

Academic Misconduct or Non-Academic Misconduct Policy; such consequences could possibly involve legal sanction under the Copyright Policy
https://copyright.uwinnipeg.ca/docs/copyright_policy_2017.pdf

Student Wellness

The University of Winnipeg affirms the importance of student mental health and our commitment to providing accessible, culturally appropriate, and effective services for students. Students who are seeking mental health supports are encouraged to reach out to the Wellness Centre at studentwellness@uwinnipeg.ca or 204.988.7611. For community-based mental health resources and supports, students are encouraged to dial 2-1-1. This program of United Way is available 24/7 in 150 languages.

Privacy

Students have rights in relation of the collecting of personal data the University of Winnipeg: https://www.uwinnipeg.ca/privacy/admissions-privacy-notice.html .

More information:

- Zoom and Privacy: https://www.uwinnipeg.ca/privacy/zoom-privacy-notice.html
- Testing/Proctoring: https://www.uwinnipeg.ca/privacy/zoom-test-and-exam-proctoring.html.

Class Cancellation, Correspondence with Students and Withdrawing from Course

When it is necessary to cancel a class due to exceptional circumstances, the course instructor will make every effort to inform students via uwinnipeg email and Nexus.

Students are reminded that they have a responsibility to regularly check their uwinnipeg e-mail addresses to ensure timely receipt of correspondence from the University and/or the course instructor.

Please let course instructor know if you plan on withdrawing from the course. Note that withdrawing before the VW date does not necessarily result in a fee refund.

Topics to be covered (tentative, order may vary)

1. Introduction to Java/BlueJ
2. Basics
    - datatypes
    - variables
    - expressions
3. Control structures
4. Intro to Methods
5. Java class libraries
    - Scanner
    - Random
    - Math
    - Character, Integer
6. ArrayLists
7. Classes
    - fields & methods
    - associations
8. Graphical User Interfaces (time permitting)

A permitted or necessary change in mode of delivery may require adjustments to important aspects of course outlines, like class schedule and the number, nature, and weighting of assignments and/or exams.