THE UNIVERSITY OF WINNIPEG

APPLIED COMPUTER SCIENCE

Course Number: ACS-1903-001, 070L, 071L
Course Name: Programming Fundamentals I
Course Webpage: https://nexus.uwinnipeg.ca/d2l/home/63244

Instructor Information

Instructor: Jeanette Bautista
E-mail: je.bautista@uwinnipeg.ca
Office Hours: Wednesdays 11:00 am - 12:00 pm 3D25

Class meeting time: Tuesdays/Thursdays 11:30 am - 12:45 pm 3D01
Lab time: L-070 Fridays 8:30 - 9:45 am 3C13
L-071 Fridays 9:45 -11:00 am 3C13

Important Dates

1. First Class: Tuesday, September 3, 2024
2. First Lab: Friday, September 6, 2024
3. Term Test 1: Thursday, October 3, 2024
4. Reading week (no classes): October 13 – 19, 2024
5. Term Test 2: Thursday, October 31, 2024
6. Final Withdrawal Date without academic penalty*: Wednesday, November 13, 2024
7. Last Class: Thursday, November 28, 2024
8. Last Lab: Friday, November 29, 2024
9. Final Exam: TBD
10. University closures: Truth and Reconciliation Day Monday, September 30, 2024
Thanksgiving Monday, October 14, 2024
Remembrance Day Monday, November 11, 2024

*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%)
   - Based on best 10 of 12 labs, worth 1% each
   - Labs are to be completed during the Friday 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. Term Tests (Test 1: 10%, Test 2: 15%)
   - During the regular class time (see Important Dates)

4. Final Exam (50%)
   - Cumulative

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.
- Midterm and final exams are closed-book.

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.

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 2024-25 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 Text Book / Reading List

- Ron McFadyen, *Java with BlueJ Part 1, Version 4.0,* University of Winnipeg, 2019.
    - Available at 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

Regulations, Policies, and Academic Integrity

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).

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

Detailed information can be found at the following:

- Academic Misconduct Policy and Procedures:
  https://www.uwinnipeg.ca/policies/docs/policies/academic-misconduct-policy.pdf and
  https://www.uwinnipeg.ca/policies/docs/procedures/academic-misconduct-procedures.pdf
- About Academic Integrity and Misconduct, Resources and FAQs:
  https://library.uwinnipeg.ca/use-the-library/help-with-research/academic-integrity.html

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.

Academic Integrity and AI Text-generating Tools: Students must follow principles of academic integrity (e.g., honesty, respect, fairness, and responsibility) in their use of material obtained through AI text-generating tools (e.g., ChatGPT, Bing, Notion AI). Use of AI Tools is prohibited in this course: students may face an allegation of academic misconduct if using them to do assignments.

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/policies/docs/policies/acceptable-use-of-information-technology-policy.pdf
- Non-Academic Misconduct Policy and Procedures:
  https://www.uwinnipeg.ca/policies/docs/policies/student-non-academic-misconduct-policy.pdf and https://www.uwinnipeg.ca/policies/docs/procedures/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/basics/copyright-policy.html

Privacy

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

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.