

APPLIED COMPUTER SCIENCE

Course Number: ACS-1904-001, L-070, L-071 **Course Name:** Programming Fundamentals II

Course Webpage: https://nexus.uwinnipeg.ca/d2l/home/73026

Instructor Information

Instructor: Isheeta Nargis

E-mail: i.nargis@uwinnipeg.ca

Office Hours: Thursdays 2:30 pm – 3:30 pm 3C07

Class meeting time:Mondays/Wednesdays4:00 pm - 5:15 pm2D12Lab time:L-070 Fridays10:30 am - 11:30 am3D03L-071 Fridays11:30 am - 12:30 pm3D03

Important Dates

First Class: Wednesday, September 3, 2025
 First Lab: Friday, September 5, 2025

3. Reading week (no classes): October 12 – 18, 2025

4. Midterm Test: Wednesday, October 22, 2025
 5. Final Withdrawal Date without academic penalty*: Wednesday, November 12, 2025

6. Last Class: Monday, December 1, 20257. Last Lab: Friday, November 28, 2025

8. Final Exam: TBD

9. Final Exam Period: December 8 – 20, 2025

10. University closures: Truth and Reconciliation Day Tuesday, September 30, 2025

Thanksgiving Monday, October 13, 2025

Remembrance Day Tuesday, November 11, 202

Remembrance Day Tuesday, November 11, 2025

^{*}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 examines more advanced programming concepts using the Java object-oriented programming language. Topics to be covered include major concepts of object-oriented design, inheritance, polymorphism, string/text processing, wrapper classes, searching and sorting algorithms, recursive programming, exceptions, and advanced file I/O among others.

Evaluation Criteria

- 1. Labs (10%)
 - Eleven weekly labs, worth 1% each
 - Best ten lab grades out of eleven will be taken
 - No late lab submissions will be accepted
- 2. Assignments (15%)
 - Three 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
- 3. Midterm Test (25%)
 - During the regular class time (see Important Dates)
- 4. Final Exam (50%)
 - Cumulative
 - Date and location to be announced

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 2025-26 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%	С	60 – 64%
Α	85 – 89 %	В	70 – 74%	D	50 – 59%
A-	80 – 84%	C+	65 – 69%	F	below 50%

Required Text Book / Reading List

- Java with BlueJ Part 2
 Ron McFadyen
 University of Winnipeg, March 2016
 - Available at www.acs.uwinnipeg.ca/rmcfadyen/CreativeCommons
- Class notes will be available on Nexus

Prerequisite Information

- Requisite courses: ACS-1903 with a minimum grade of C must be completed prior to taking this course
- ACS-1904L (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: The use of AI tools in this course is prohibited. This includes all forms of generative AI, like ChatGPT, Claude, Gemini, etc., as well as AI writing and paraphrasing tools, such as Grammarly, Quillbot, etc. If you are unsure if the use of a specific technology is permitted, ask the instructor prior to using the tool for coursework. Suspected misuse of AI may result in a report to the Senate Academic Standards and Misconduct Committee.

Non-academic misconduct: Students are expected to conduct themselves in a respectful manner on campus and in the learning environment, irrespective of the 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://www.uwinnipeg.ca/policies/docs/policies/copyright-policy.pdf

Privacy

Students have rights in relation to the collection of personal data by 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
- Exam and 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 the 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. Arrays
- 2. Text Processing
- 3. Enumeration
- 4. Inheritance
- 5. Classes and Object Orientation
- 6. Files and I/O
- 7. Exception Handling
- 8. Recursion
- 9. Sorting and Searching Algorithms

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.

In order to ensure a safe and comfortable learning environment for everyone, we kindly ask that all students refrain from wearing or using scented products while attending class.