



# THE UNIVERSITY OF WINNIPEG

## APPLIED COMPUTER SCIENCE

**Course Number:** ACS-2909-051 (Thursday)  
**Course Name:** Programming Fundamentals I  
**Course Webpage:** pending

### Instructor Information

**Instructor:** Paulo Fernandes  
**E-mail:** [p.fernandes@uwinnipeg.ca](mailto:p.fernandes@uwinnipeg.ca)  
**Office Hours:** Wednesday 3:00-4:00 pm Zoom (link on nexus)  
**Class meeting time:** Thursday 6:00-9:00 pm 1L07

### Important Dates

1. First Class: Thursday, January 11, 2024
2. Reading Week (no classes): February 18-24, 2024
3. Midterm Exam: Thursday, February 15, 2024
4. Final Withdrawal Date w/o academic penalty\*: Friday, March 15, 2024
5. Last Class: Thursday, April 4, 2024
6. Final Exam: TBD
7. University closures: Louis Riel Day Monday, February 19, 2024  
Good Friday Friday, March 29, 2024
8. Make-up class for lab that falls on holiday closure: Monday, April 8, 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 provides students with an overview of Internet and World Wide Web programming, development tools, resources, utilities, multimedia, and security issues. Students gain hands-on experience in JavaScript, Rich Internet Applications (RIAs), Web services, Design Patterns and Mobile Application Development.

## Evaluation Criteria

1. **Midterm(26%)**
  - Midterm will be 60 minutes during the first half of regular class time
  - There will be a lecture after the exam, during the second half of regular class time
  - It will cover material from weeks 1 to 6
  - Students can bring in one 8.5"x11", **single**-sided, hand-written information sheet
  
2. **Assignments (24%)**
  - 4 assignments, worth 6% each
  - Details and due dates will be posted on Nexus
  - Assignments will be accepted up to 1 day late with a 20% penalty
  - "Late" is determined by when the assignment is received in Nexus.  
NO EXCEPTIONS, exemptions or special consideration without medical certificate.
  
3. **Final Exam (50%)**
  - The final exam will be cumulative, covering material from the entire course.
  - Students can bring in one 8.5"x11", **double**-sided, hand-written information sheet
  - Photo ID are required for the exam

## Test / Exam Requirements

1. *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.
2. You are expected to write the text/exam on its given day.
3. No electronic devices are permitted
4. Midterm and final exams will be delivered in person on campus.
5. Photo ID is required for the final exam.

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

## **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](mailto: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%

## **Text Books / Reading List / Software**

We use publicly available online resources for our reading material:

1. HTML+CSS <https://internetingishard.com/html-and-css/>
2. JavaScript <https://javascript.info>

Students are responsible for material covered in class and announcements made in class. We are going to use the following software in class:

3. Visual Studio – <https://code.visualstudio.com/download> (any other IDE is also fine)
4. Google Chrome – <https://www.google.com/chrome/>

## **Prerequisite Information**

1. This information can be found in the UW Undergraduate Academic Calendar)
2. **Requisite courses:** ACS-1903 or ACS-1905 with a minimum grade of C

## **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). If an instructor prohibits the use of AI tools in a course, students may face an allegation of academic misconduct if using them to do assignments. If AI tools are permitted, students must cite them. According to the MLA (<https://style.mla.org/citing-generative-ai/>), writers should

- cite a generative AI tool whenever you paraphrase, quote, or incorporate into your own work any content (whether text, image, data, or other) that was created by it
- acknowledge all functional uses of the tool (like editing your prose or translating words) in a note, your text, or another suitable location
- take care to vet the secondary sources it cites

If students are not sure whether or not they can use AI tools, they should ask their professors.

***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.

## **Course Topics (tentative)**

The following topics will be covered. These are subject to change and adjustments based on the pace of learning and discretion of the instructor.

1. Internet Basics
2. HTML
3. CSS
4. JS Fundamentals
5. Functions
6. Objects
7. Prototypes
8. Arrays
9. Classes
10. Document Object Model
11. Events and Event Handlers
12. Asynchronous and Network Requests
13. Forms
14. Web Storage

*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.*