



# THE UNIVERSITY OF WINNIPEG

## APPLIED COMPUTER SCIENCE

Course Number: ACS-2909-052  
Course Name: Internet Programming  
Course Webpage: <https://nexus.uwinnipeg.ca/d2l/home/75761>

### Instructor Information

<b>Instructor:</b>	Paulo Fernandes		
<b>E-mail:</b>	<a href="mailto:p.fernandes@uwinnipeg.ca">p.fernandes@uwinnipeg.ca</a>		
<b>Office Hours:</b>	Thursdays	3:00 - 4:00 pm	Zoom (link on nexus)
<b>Class meeting time:</b>	Wednesdays	6:00 pm - 9:00 pm	2D12

### Important Dates

1. First Class:	Wednesday, January 7, 2026
2. Reading week (no classes):	February 15 – 21, 2026
3. Midterm Test:	Wednesday, February 11, 2026
4. Final Withdrawal Date without academic penalty*:	Friday, March 13, 2026
5. Last Class:	Wednesday, April 1, 2026
6. Final Exam:	TBD
7. Final Exam Period:	April 9 – 22, 2026
8. University closures: Louis Riel Day Good Friday	Monday, February 16, 2026 Friday, April 3, 2026
9. Make-up classes/labs on holiday closures:	Monday, April 6, 2026

\*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 (25%)**

- 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 prior to the midterm
- Students can bring in one 8.5"x11", **single**-sided, hand-written information sheet

### **2. Assignments (15%)**

- 3 assignments, worth 5% 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 (60%)**

- 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. You are expected to write the text/exam on its given day.
2. The use of computers, calculators, phones, smart watches, or other electronic devices is not permitted during exams.
3. Midterm and final exams will be delivered in person on campus.
4. Photo ID is required for the final exam.
5. Closed book, with exception of the information sheet

*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 with accommodations that include more time for assignments must explicitly request extensions to deadlines as they are not granted implicitly for AS-registered students.

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

NOTE: Final grades require departmental/program approval and may be subject to change.

### **Reading List / Software**

We use publicly available online resources for our reading material:

1. HTML+CSS <https://internetingishard.netlify.app/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**

- This information can be found in the UW Undergraduate Academic Calendar)
- **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). Suspected misuse of AI may result in a report to the Senate Academic Standards and Misconduct Committee. If AI tools are used, students must cite them. According to the MLA (<https://style.mla.org/citing-generative-ai/>), “you should

- a. 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
- b. acknowledge all functional uses of the tool (like editing your prose or translating words) in a note, your text, or another suitable location
- c. take care to vet the secondary sources it cites.”

***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.

## **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](mailto:studentwellness@uwinnipeg.ca) or 204-258-3809. 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. Other resources and contact information can be found at the following link: <https://www.uwinnipeg.ca/student-wellness/contact-us.html>.

### **Sexual Violence and Human Rights Advisor (SVHRA)**

Students who have experienced Sexual Violence can access support from the SVHRA. The SVHRA receives disclosures and can support students with on and off-campus reporting. In collaboration with the Sexual Violence Response Team (SVRT), the SVHRA also provides fast-track referrals to Student Wellness, academic accommodations, security support, and other on and off campus supports. The SVHRA and SVRT operate within a confidential, survivor-centered, and trauma-informed framework. <https://www.uwinnipeg.ca/respect/sexual-violence/>

*Disclosures may be made in-person, email, by text, by phone, or Zoom/Teams.*

5Ri55, 5<sup>th</sup> Floor (Rice Centre)  
204.230.6660 – *call or text (confidential line)*  
[svrt@uwinnipeg.ca](mailto:svrt@uwinnipeg.ca)

### **Topics to be covered (tentative)**

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. HTTP
14. Forms
15. 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.*

*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.*