



# THE UNIVERSITY OF WINNIPEG

## APPLIED COMPUTER SCIENCE

**Course Number:** ACS-2909-050  
**Course Name:** Introduction to Internet Programming  
**Course Webpage:** <http://courses.acs.uwinnipeg.ca/2909-050>

### Instructor Information

<b>Instructor:</b> Paulo Fernandes	<b>Class Room No:</b> 3D01
<b>Email:</b> <a href="mailto:p.fernandes@uwinnipeg.ca">p.fernandes@uwinnipeg.ca</a>	<b>Class Time:</b> Wed 6:00pm - 9:00pm
<b>Office:</b> 3C07	<b>Office Hours:</b> Wed 5:00pm - 6:00pm <i>(before lecture)</i>

### Important Dates

<b>First Class:</b>	September 4, 2019
<b>Reading Week:</b>	October 13 to 19, 2019 (No classes)
<b>Midterm Test:</b>	October 23, 2019
<b>Withdrawal w/o Academic Penalty:</b>	November 12, 2019
<b>Last Scheduled Class:</b>	November 27, 2019
<b>Final Examination:</b>	December 18, 2019 6:00 pm – 9:00 pm

The university is closed on October 14 and November 11.

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. Students not familiar with HTML and CSS are strongly encouraged to take ACS-1809(3).

## Evaluation Criteria

### Midterm Examination (26%)

- There will be one midterm test.
- The midterm will be 75 min, and there will be a lecture after the exam.
- One 8 1/2 x 11, double-sided, hand-written information sheet is allowed.

### Assignments (24%)

- There will be four assignments, each of which will consist of 6% of your final grade. Submission procedure and other requirements will be stated in individual assignments. They will be due at 11:59:59 pm on the due dates.
- **Late Penalties:** For each assignment, a late penalty of 25% a day will be imposed. "Late" is determined by when the assignment is received by the marker. NO EXCEPTIONS, exemptions or special consideration without medical certificate.
- No handwritten assignments will be accepted for evaluation.

### Final Examination (50%)

- The final examination is comprehensive.
- One 8 1/2 x 11, double-sided, hand-written information sheet is allowed.

## Exam Requirements

- Photo ID at exam is required.
- You are expected to write the test/exam on its given day.
- No electronic devices (e.g. cell/smart phone, laptop, scientific calculators, translators, etc.) are permitted.
- Unless a medical certificate is provided, no accommodation is made for missed exams.

## 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+	91 - 100%	B	70 - 74%
A	85 - 90%	C+	65 - 69%
A-	80 - 84%	C	60 - 64%
B+	75 - 79%	D	50 - 59%
		F	Below 50%

## Prerequisite and Restriction 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

## Text Books / Reading List / Tools

We use publicly available online resources for our reading material:

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

Class notices will be available on the course web page. Students are responsible for material covered in class and announcements made in class. We are going to use the following editor in-class:

PHPStorm (or WebStorm)

Available at <https://www.jetbrains.com/student/>

## Course Topics (*Subject to Changes and Adjustments*)

Blue indicates the chapter from the HTML+CSS site.

Red indicates the Part (I, II, III) and chapter and optional section from JavaScript site.

1. Introductions, Internet Basics, HTML, Developer Tools [ 1 / 2 / 3 ]
2. CSS, JS Fundamentals, Data Types [ 4 / 5 / 6 ] [ I : 1 / 2.1 – 2.13 / 3 / 5 ]
3. Functions, Objects, Prototypes [ I : 2.14 / 2.15 / 4 / 7 ]
4. Prototypes, Classes, DOM [ I : 6 / 8 / 9 ]
5. Events and Event Handlers [ II : 2 / 3 / 5.1 ]
6. Promises [ I : 11 ]
7. Network Requests [ III : 3.1 / 3.7 / 3.8 ]
8. Web Sockets [ III : 3.10 / 3.11 ]
9. Forms [ 13 ] [ II : 4 / III : 3.2 ]
10. Web Workers, Geolocation
11. Web Storage [ III : 4 ]
12. Internet History, Modern-day web development

## **Additional Course Related Information**

1. When it is necessary to cancel a class due to exceptional circumstances, instructors will make every effort to inform students via uwinnipeg email (and/or using the preferred form of communication, as designated in this outline), as well as the Departmental Assistant and Chair/Dean so that class cancellation forms can be posted outside classrooms.
2. Students are reminded that they have a responsibility to regularly check their uwinnipeg email addresses to ensure timely receipt of correspondence from the university and/or their course instructors.
3. Please note that withdrawing before the Voluntary Withdrawal date does not necessarily result in a fee refund.
4. No make-up classes scheduled

## **Email Communication**

Emails from accounts at uwinnipeg.ca are usually not filtered by the UofW email filter. Thereby it is recommended electronic communication used for the course use a UofW email account to minimize the risk of filtering.

## **Student Services and Information**

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 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 <http://www.uwinnipeg.ca/accessibility>.

All students, faculty and staff have the right to participate, learn, and work in an environment that is free of harassment and discrimination. The UW Respectful Working and Learning Environment Policy may be found online at [www.uwinnipeg.ca/respect](http://www.uwinnipeg.ca/respect)

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 2018-19 Undergraduate Academic Calendar.

## **Misuse of Computer Facilities, Plagiarism, and Cheating**

Academic dishonesty is a very serious offense and will be dealt with in accordance with the University's policies. Be sure that you have read and understood Regulations & Policies #8, in the 2018-2019 UW Undergraduate Academic Calendar available at <http://uwinnipeg.ca/academics/calendar/docs/regulationsandpolicies.pdf> .

Additional information is available at University of Winnipeg library video tutorial "Avoiding Plagiarism" <https://www.youtube.com/watch?v=UvFdxRU9a8g>

## **Academic Misconduct**

Avoiding Academic and Non-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/institutionalanalysis/docs/policies/academic-misconduct-policy.pdf> and

<https://www.uwinnipeg.ca/institutionalanalysis/docs/policies/academic-misconduct-procedures.pdf>

Non-Academic Misconduct Policy and Procedures:

<https://www.uwinnipeg.ca/institutionalanalysis/docs/student-non-academic-misconduct-policy.pdf> and

<https://www.uwinnipeg.ca/institutionalanalysis/docs/student-non-academic-misconduct-procedures.pdf>

## **Misuse of Filesharing Sites**

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.

## **Avoiding Copyright Violation**

Course materials are owned by the instructor who developed them. Examples of such materials are course outlines, assignment descriptions, lecture notes, test questions, and presentation slides. 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 photographing or recording slides, presentations, lectures, and notes on the board.

## **Research Ethics**

Students conducting research interviews, focus groups, surveys, or any other method of collecting data from any person, including a family member, must obtain research ethics approval before commencing data collection. Exceptions are research activities done in class as a learning exercise. For submission requirements and deadlines, see <http://www.uwinnipeg.ca/research/human-ethics.html>.