

# THE UNIVERSITY OF WINNIPEG

## APPLIED COMPUTER SCIENCE

Course Number:	ACS-2909-001
Course Name:	Internet Programming
Course Webpage:	https://nexus.uwinnipeg.ca/d2l/home/38443

#### **Instructor Information**

Instructor: Prof. Yaser Al MtawaOffice: 3C07Office Hours: Thu 1:00 pm - 2:00 p.m (via Zoom)

E-mail: y.almtawa@uwinnipeg.ca

Class Meeting Time: Tu, Thu @ 2:30 pm - 3:45 pm (Hybrid)

Instructor's Home Page: https://acs.uwinnipeg.ca/yalmtawa

#### **Important Dates**

First Class	Sep 7, 2021
Day of Truth and Reconciliation(university closed)	Sep 30, 2021
Reading Week (no classes)	Oct 10 – 16, 2021
Midterm Exam	Nov. 4, 2021
Remembrance Day (university closed)	Nov 11, 2021
Final Withdrawal Date w/o academic penalty	Nov 16, 2021 <sup>*</sup>
Last Class	Dec <del>6-</del> 8, 2021 <sup>**</sup>
Final Exam	TBD

\* 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.

\*\*The make-up days for the stat holidays (which both fall on Thursday) are on December 7 and 8. For T/Th and Th classes, the last class is on Wednesday December 8.

## **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).

## **Remote Learning**

All course material including lecture notes, slides and videos, sample code, assignment and lab details will be available on Nexus. Students are responsible for material covered in video lectures and announcements made in the Nexus course web pages.

Students must be available via Zoom during class times, lab times, midterm, and final exam.

- Students must display their real/full name
- Use of Video is optional.
- Participants must be muted when not speaking
- Students may interact via chat, voice, or gestures

Some of the lectures will be recorded and delivered as video on demand. Students will be notified in advance about the dates of asynchronous classes.

Students can find answers to frequently asked questions related to remote learning here: <u>https://www.uwinnipeg.ca/covid-19/remote-learning-faq.html</u>.

#### **Evaluation Criteria**

- Assignments (40%)
  - Four assignments, worth 10% each
  - Due date will be posted on Nexus
  - o Due at 11:59:59 pm (Nexus clock) on due dates
  - No late assignment will be accepted, or under special circumstances accepted with 20% off for each late day.
  - All assignments are to be completed individually and only submitted via Nexus
  - Students are responsible for making sure the correct files are submitted through Nexus.
- Midterm Exam (20%)
  - o The midterm test is during class time
- Final Exam (40%)
  - o The final exam covers all material discussed in the course

## Test / Exam Requirements

- Photo ID is required for the final exam
- Midterm and final exams will be delivered via Nexus. Students must have video capability and be prepared to present their student ID
- Midterm and final exams are open book. However, students are permitted to view **only** the following authorized course material:

- Class notes, slides, and assignment descriptions and solutions
- Course textbook
- Student's own course notes and assignment submissions
- Students may use an external tool such as a text editor or IDE to write answers to questions before entering them into the exam
- Students may contact the instructor to ask questions during the exam
- External resources (or any material not listed above) are NOT PERMITTED
- Communication with others (except the instructor) is NOT PERMITTED
- All work must be entirely the students' own. Collaboration or sharing of work is NOT PERMITTED
- You are expected to write the test/exam on its given day. Unless a medical certificate is provided, no accommodation is made for missed exams.

## **Student Services and Information**

- Students are responsible for regularly checking their UWinnipeg e-mail addresses to ensure timely receipt of correspondence from the University and/or their course instructors.
- 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 the opportunity for students to make up work or examinations without penalty. A list of religious holidays can be found in the 2020-21 Undergraduate Academic Calendar.
- Students with documented disabilities, temporary or chronic medical conditions, requiring academic accommodations for tests/exams or during lectures/laboratories are encouraged to contact Accessibility Services (AS) at 204.786.9771 or <a href="https://www.uwinnipeg.ca/accessibility-services/">https://www.uwinnipeg.ca/accessibility-services/</a> to discuss appropriate options. All information about a student's disability or medical condition remains confidential.
- 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 at <a href="https://www.uwinnipeg.ca/respect/">https://www.uwinnipeg.ca/respect/</a>.

## 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+	95+ - 100%	B+	75 - 79%	С	60 - 64%
А	85 - 95%	В	70 - 74%	D	50 - 59%
A-	80 - 84%	C+	65 - 69%	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

## **E-mail Communication Requirements**

- E-mails from accounts at uwinnipeg.ca are usually not filtered by the UofW e-mail filter. Thereby, it is recommended that electronic communication used for the course utilize a UofW e-mail account or the Nexus platform to minimize the risk of filtering.
- Use 'ACS-2909-001' as subject in e-mail communication related to the course.

#### **Regulations, Policies, and Academic Integrity**

Academic dishonesty is a very serious offense and will be dealt with per the University's policies.

Avoiding Academic Misconduct: Students are encouraged to familiarize themselves with the Academic Regulations, and Policies found in the University Academic Calendar at: <a href="https://uwinnipeg.ca/academics/calendar/docs/regulationsandpolicies.pdf">https://uwinnipeg.ca/academics/calendar/docs/regulationsandpolicies.pdf</a> 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

Detailed information can be found at the following:

pertaining to plagiarism and other forms of cheating.

- Academic Misconduct Policy and Procedures: <a href="https://www.uwinnipeg.ca/institutional-analysis/docs/policies/academic-misconduct-policy.pdf">https://www.uwinnipeg.ca/institutional-analysis/docs/policies/academic-misconduct-procedures.pdf</a>
- UW Library video tutorial "Avoiding Plagiarism" <u>https://www.youtube.com/watch?v=UvFdxRU9a8g</u>

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.

*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\_ <u>https://www.uwinnipeg.ca/respect/respect-policy.html</u>,
- Acceptable Use of Information Technology Policy\_ https://www.uwinnipeg.ca/institutional-analysis/docs/policies/acceptable-use-of-

information-technology-policy.pdf

Non-Academic Misconduct Policy and Procedures: <u>https://www.uwinnipeg.ca/institutional-analysis/docs/student-non-academic-misconduct-policy.pdf</u> and\_
<u>https://www.uwinnipeg.ca/institutional-analysis/docs/student-non-academic-misconduct-procedures.pdf</u>.

*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/docs/copyright\_policy\_2017.pdf

## <u>Privacy</u>

Students have rights in relation of the collecting of personal data the University of Winnipeg: <u>https://www.uwinnipeg.ca/privacy/admissions-privacy-notice.html</u>.

More information:

- Zoom and Privacy: <u>https://www.uwinnipeg.ca/privacy/zoom-privacy-notice.html</u>
- Testing/Proctoring: <u>https://www.uwinnipeg.ca/privacy/zoom-test-and-exam-proctoring.html</u>.

## <u>Class Cancellation, Correspondence with Students and Withdrawing from</u> <u>Courses</u>

- When it is necessary to cancel a class due to exceptional circumstances, the course instructor will make every effort to inform students via uwinnipeg e-mail and Nexus.
- 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 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.
- 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.

# Text Book / Reading List / Tools

We will use the following books as guide, supplemented with readings throughout the course: Recommended Textbook:

 Web Programming and Internet Technologies: An E-Commerce Approach" Porter Scobey and Pawan Lingras Publisher: Jones & Bartlett Learning; 2<sup>nd</sup> Edition (Sept. 22 2016) ISBN 9781284070682

We use also the following publicly available online resources:

- HTML+CSS <u>https://internetingishard.com/html-and-css/</u>
- JavaScript <u>https://javascript.info</u>
- JavaScript <u>https://www.learn-js.org/en/Welcome</u>

Class notes and notices will be available on Nexus. Students are responsible for material covered in class and announcements made in class.

There are different Integrated Development Environments (IDEs) you can use to program and test HTML, CSS, and JavaScript code such as Visual Studio Code (VS Code) and Atom. We are going to use VS Code for our class lectures.

- Visual Studio Code Available at <u>https://code.visualstudio.com/</u> Quick tour <u>https://code.visualstudio.com/docs/introvideos/quicktour</u>
- Google Chrome <u>https://www.google.com/chrome/</u>

## Topics to be covered (Tentative)

- 1- Web Development Basics
- 2- HTML
- 3- CSS
- 4- JavaScript Fundamentals
- 5- Control Structures
- 6- Functions
- 7- Arrays
- 8- Objects
- 9- Prototypes
- 10- Classes
- 11- Document Object Model
- 12- Events and Event Handlers
- 13- Asynchronous and Network Requests
- 14- Forms
- 15- Website Security

Note that all topics listed may not be covered and may be offered in a slightly different time order.