APPLIED COMPUTER SCIENCE

Course Number:	ACS-2909-002
Course Name:	Internet Programming
Course Webpage:	https://nexus.uwinnipeg.ca/d2l/home/55481

Instructor Information

Instructor: Prof. Yaser Al Mtawa   **Office:** 3D06B   **E-mail:** y.almtawa@uwinnipeg.ca
Office Hours: Mon 1:00 pm - 2:00 pm   (3D06B)

Class Meeting Time: Friday @ 2:45 pm – 5:45 pm (Lockhart Hall, 2L17)

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

Important Dates

1. First Class: Friday, September 8, 2023
2. Reading Week (no classes):   October 9-15, 2023
3. Midterm Test: Friday, Nov. 3, 2023
4. Final Withdrawal Date w/o academic penalty*:   Monday, November 13, 2023
5. Last Class: Friday, December 1, 2023
6. Final Exam (Comprehensive):   TBD
7. University closures: Truth and Reconciliation Day   Saturday, September 30, 2023
                            Thanksgiving   Monday, October 9, 2023
                            Remembrance Day   Saturday, November 11, 2023

*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

- Assignments (30%)
  - Four assignments, worth 7,7,7, and 9 marks, respectively
  - Due date will be posted on Nexus
  - 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%)
  - The midterm test is during class time
- Final Exam (50%)
  - The final exam covers all material discussed in the course

Test / Exam Requirements

- Photo ID is required for the exams
- Exams will be delivered in person.
- The use of computers, calculators, phones, or other electronic devices is not permitted during exams
- Midterm and final exams are closed book

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 https://www.uwinnipeg.ca/accessibility-services/ 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 https://www.uwinnipeg.ca/respect/.

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%

Prerequisite and Restriction Information

(This information can be found in the UW Undergraduate Academic Calendar)

- Requisite courses: A grade of at least C in ACS-2909/3, ACS-2814/3, and ACS-1904.

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.

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 or 204.988.7611. 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.

Regulations, Policies, and Academic Integrity

Academic dishonesty is a very serious offense and will be dealt in accordance with 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:
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/institutional-analysis/docs/policies/academic-misconduct-policy.pdf and https://www.uwinnipeg.ca/institutional-analysis/docs/policies/academic-misconduct-procedures.pdf
- UW Library video tutorial "Avoiding Plagiarism"
  - 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.

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/institutional-analysis/docs/policies/acceptable-use-of-information-technology-policy.pdf
- Non-Academic Misconduct Policy and Procedures: https://www.uwinnipeg.ca/institutional-analysis/docs/student-non-academic-misconduct-policy.pdf and https://www.uwinnipeg.ca/institutional-analysis/docs/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
- ChatGPT: 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.

Privacy

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

Class Cancellation, Correspondence with Students and Withdrawing from Courses

- 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 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.

Text Book / Reading List / Tools

We will use the following book as a 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; 2nd Edition (Sept. 22 2016)
ISBN 9781284070682
We use also the following publicly available online resources:

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

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 https://code.visualstudio.com/
  Quick tour https://code.visualstudio.com/docs/introvideos/quicktour

- Google Chrome – https://www.google.com/chrome/

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.

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.