



# THE UNIVERSITY OF WINNIPEG

## APPLIED COMPUTER SCIENCE

**Course Number - ACS-2909-050**

**Course Name – Introduction to Internet Programming**

### Instructor Information

**Instructor:** Daniel Slack, P.Eng

**Office:** 3C07

**E-mail:** d.slack@uwinnipeg.ca

**Office Hours:** Wed 5:00 pm - 6:00 p.m.

**Class Meeting Time:** Wed @ 6:00 pm – 9:00 pm    **Room No:** 3D01

**Course Web Page:** <https://courses.acs.uwinnipeg.ca/2909-050>

### Important Dates

First Class:

Sep 5<sup>th</sup>, 2018

Reading Week (no classes)

Oct 7<sup>th</sup> – Oct 13<sup>th</sup>, 2018

Midterm Exam:

Oct 24<sup>nd</sup>, 2018

Final Withdrawal Date w/o academic penalty: Nov 12<sup>th</sup>, 2018

(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)

Last Class:

Nov 28<sup>th</sup>, 2018

Final Exam:

Dec 12<sup>th</sup>, 2018

### 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 (25%)**

There will be **one** midterm test.

The midterm will be 75 min, and there will be a lecture after the exam.

One 8 ½ x 11, single-sided, hand-written information sheet is allowed.

- **Assignments (25%)**

There will be **four** assignments, the first three consist of **6%** (each) of your final grade and the final assignment is **7%**. Submission procedure and other requirements will be stated in individual assignments. They will be due at 11:59:59 pm on the due dates.

**Grace days:** Each student will receive 3 grace days (for assignments only). These are to cover scheduling crunch, out-of-town trips, illness, and minor setbacks. I recommend saving them until the end of the term.

**Late Penalties:** For each assignment, students can use their grace days to extend the due date. Once a student has used all their grace days, a late penalty of 15% a day (for a maximum of 3 days) will be imposed. After 3 days the student will not receive any marks for the assignment. **NO EXCEPTIONS** without medical certificate.

No handwritten assignments will be accepted for evaluation.

**Final Examination (50%)**

The final examination is comprehensive.

One 8 ½ x 11, double-sided, hand-written information sheet is allowed.

**Note:** Students will be given the option of reducing the weight of their midterm mark to 12% and adjusting their Final Examination to 63%. This option will be available to students up until the day of the Final Examination.

**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+    90+ - 100%    B+    75 - 79%    C    60 - 64%

A	85 - 90%	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: ACS-1903 or ACS-1905 with a minimum grade of C

### **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 utilize a UofW email account to minimize the risk of filtering.

### **Services for Students**

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>.

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.

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).

### **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> and the UW academic misconduct policy available at <http://pace.uwinnipegcourses.ca/sites/default/files/pdfs/publications/Academic%20Misconduct%20Policy.pdf>

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

## **Avoiding Academic Misconduct**

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.

## **Text Book(s) / Reading List / Tools**

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

- Eloquent Javascript; 3<sup>rd</sup> Edition  
Marijn Haverbeke  
Available at <https://eloquentjavascript.net/>  
ISBN-13: 978-1593279509
- JavaScript Design Patterns  
Addy Osmani  
O’Reilly  
Available at <https://addyosmani.com/resources/essentialjsdesignpatterns/book/>  
ISBN-13: 978-1449331818

Class notes and 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:

- Visual Studio Code  
Available at <https://code.visualstudio.com/>

We will also use NodeJS later in the course:

- NodeJS (8.11.x)  
<https://nodejs.org/en/>

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

1. HTML5/CSS
2. JavaScript Language and Syntax
3. Document Object Model (DOM)
4. Events and Event Handlers
5. Javascript Design Patterns
6. Canvas Object
7. Geolocation
8. Web Services
9. Effects
10. Web Storage
11. Web Workers
12. Web Sockets

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

### **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 e-mail addresses (and/or using the preferred form of communication, as designated in this outline) to ensure timely receipt of correspondence from the university and/or their course instructors
3. Please note that withdrawing before the VW date does not necessarily result in a fee refund (November 12 is VW date for classes that begin in September and end in December).
4. No make-up classes scheduled
5. No classes:  
October 8, 2018 Thanksgiving  
October 7-13, 2018 Mid-term reading week  
November 11, 2018 Remembrance Day  
Dec 22/18-Jan 2/19 University closed