



THE UNIVERSITY OF WINNIPEG

Applied Computer Science

Course Number: ACS-2909-051
Course Name: Internet Programming
Course Webpage: <http://courses.acs.uwinnipeg.ca/2909-051>

Instructor Information

Instructor: Daniel Slack, P.Eng. **Email:** d.slack@uwinnipeg.ca
Class Room No: 3D01 **Class Meeting Time:** T 6:00 - 9:00 pm
Office Room No: 3C07 **Office Hours:** Tue. 5:00 - 6:00 pm

Important Dates

First Class: January 9th, 2018
Assignment 1: January 30th, 2018
Assignment 2: February 13th, 2018
Reading Week (no classes) February 18th – February 24th 2018
Midterm Test: 6:00 pm February 27th, 2018
Withdrawal date w/o academic penalty¹: March 14th, 2018
Assignment 3: March 13th, 2018
Assignment 4: April 3rd, 2018
Last Scheduled Class: April 3rd, 2018
Final Examination (Comprehensive): April 10th, 2018
<http://www.uwinnipeg.ca/exam-schedules/index.html>

¹A 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 (25%)
There will be **one** midterm test.

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.

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.

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

Exam Requirements

- Photo ID is **required**
- Unless a medical certificate is provided, no accommodation is made for missed exams
- No equipment (*e.g.* calculators, dictionaries, handheld devices) are authorized for use in tests/exams

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.

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 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 2017-18 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.

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 2017-2018 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>

Avoiding Academic Misconduct. Uploading essays and other assignments to essay vendor or essay 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 same class without prior permission of the instructor/presenter, are in violation of copyright law and University policy. Students must also obtain instructor/presenter permission before photographing or recording slides, presentations, lectures, and notes on the board.

Required Text Books

Main texts (available online):

1. Eloquent JavaScript; 2nd Edition; Marijn Haverbeke; William Pollock, ISBN-10: 1-59327-584-6

2. JavaScript Design Patterns; Addy Osmani; O'Reilly; ISBN-10: 1-44933-181-5

Supplementary text:

1. Head First HTML5 Programming; Eric Freeman, Elisabeth Robson; O'Reilly, ISBN: 978-1-449-39054-9
2. Head First HTML with CSS & XHTML; Eric Freeman, Elisabeth Robson; O'Reilly, ISBN: 978-0-596-10197-8
3. HTML, XHTML, and Dynamic HTML: Comprehensive, 4th Edition; Patrick Carey; Cengage, ISBN-13: 978-14239-2543-9
4. Javascript: The Good Parts; Douglas Crockford; ISBN-13: 978-0596517748
5. jQuery Fundamentals; Rebecca Murphey; available at: <http://jgfundamentals.com/>
6. jQuery: Novice to Ninja; Earle Castledine, Craig Sharkie; available at: <http://www.sitepoint.com/books/jquery1/samplechapters.php>
7. Essential JavaScript & jQuery Design Patterns; Addy Osmani; available at: <http://addyosmani.com/blog/essentialjsdesignpatterns/>

Besides the information contained in these books, I may also discuss appropriate material and examples from other sources. Students are responsible for all material covered in the class.

Prerequisite Information² (This information can be found in the UW General Calendar)

A grade of at least C in ACS-1903/3 or ACS-1905/3.

²Make sure that you have the necessary prerequisites to take this course. If you have not successfully completed the above listed courses, it is in your interest to drop the course.

Course Topics (Tentative)

1. HTML5
2. JavaScript
3. Document Object Model
4. Events and Event Handlers
5. Geolocation
6. Web Services
7. Canvas Object
8. Effects
9. Web Storage
10. Web Workers
11. Design Patterns
12. JQuery
13. Bootstrap

Note: not all of the above topics may be covered.

Course Readings

Relevant textbook chapters and sections will be given during lectures.

Recommended Study Habits

Students who do well in this class tend to spend an extra 3-5 hours per week doing the following:

- Read the textbook before coming to class
- Attend lectures
- Take notes
- Attempt the problems and exercises at the end of the chapters
- Submit all the exercises and assignments
- Form study groups to study for the midterm and exam
- Regularly ask questions

Advice: Students who fall behind find it very hard to catch up.

Additional Course Related Information

1. When it is necessary to cancel a class due to exceptional circumstances, instructors will make every effort to inform you via uwinnipeg email, as well as the departmental assistant and Chair/Dean so that class cancellation forms can be posted outside classrooms.
2. Your uwinnipeg email address will normally be used for course related correspondence.
3. Please note that withdrawing before the VW date does not necessarily result in a fee refund.