

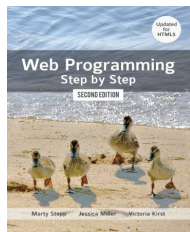
Web Software Development

CS 346 - Fall 2017

Credits: 3 hours

Class Meetings: MWF 9:10AM-10:10AM in HS 208
Prerequisites: A grade of C or better in CS 262
Class Web Page: UWO D2L site - You are responsible for checking the class web site and your email **frequently** since I will be communicating with you using both.
Instructor: David Furey **Office:** Halsey 221
Email: furcyd@uwosh.edu
Office Hours: MWF 10:10-11:10AM, TuTh 9:30-11:00AM or by appointment

Textbook:



Web Programming Step by Step

Marty Stepp, Jessica Miller, and Victoria Kirst
2nd Edition, Self-Published, Lulu

The textbook is **required** for this course.

Wi-Fi-enabled Device: Since we will use a web-based clicker-like system for unannounced quizzes, you are **required** to bring a **charged** WiFi-enabled device (smartphone, tablet, or laptop) to each Monday and Wednesday class meeting.

Tests: There will be two tests, around the middle and end of the semester, respectively. Specific dates will be announced at least 10 days in advance.

Course Description

An introduction to the tools for developing internet applications. Topics covered include: Internet history, the HyperText Markup Language, graphic images and manipulation, multimedia, programming in the JavaScript and PHP languages.

Topic Coverage

We will discuss the following topics:

- Internet history
- HTML, CSS, JavaScript, forms, the DOM, events, libraries (e.g., jQuery)
- PHP and MySQL
- AJAX
- Cookies and sessions
- Web security

If you have special needs, please come and talk to me as soon as possible so I can accommodate your needs right away.

Learning Outcomes

1. Explain the key concepts associated with internet architecture that facilitates web application development.
2. Explain the basic components of web architecture and describe how web browsers and servers work in tandem.
3. Describe a web engineering framework to support the development of web-based applications.
4. Apply the web engineering process to the development of a moderately complex web application.
5. Utilize an integrated development environment to construct and deploy a web application.
6. Construct and validate web pages.
7. Design and implement client-side application logic with selected scripting languages.
8. Design and implement server-side application logic with selected technologies.
9. Design and implement the model-view-controller architecture for web-based applications.
10. Design and construct web pages that interact with persistent storage.
11. Read and apply web standards to the design and creation of web-based applications.
12. Identify trends in web technologies and develop an evaluation strategy for assessing emerging web technologies.
13. Work effectively with a small team of web developers to produce a web application.

Course Grading Policy

Your final grade for this course will be based on six components listed in the table below. Your overall numerical grade for the course will be computed as the weighted sum of the component grades using the following weights:

Component	Weight
Class preparation and participation (see below)	15%
Labs	15%
Exam 1	15%
Exam 2	15%
Individual component of the project	15%
Team component of the project	25%

Finally, your letter grade for the course will be computed as follows:

Numerical Score	Grade	Numerical Score	Grade
≥ 92	A	≥ 72	C
≥ 90	A-	≥ 70	C-
≥ 88	B+	≥ 68	D+
≥ 82	B	≥ 62	D
≥ 80	B-	≥ 60	D-
≥ 78	C+	< 60	F

While this overall grading scheme is fixed, I will be happy to discuss any issue you may have with individual grades. If you notice a mistake or have a question regarding a specific grade, please come and talk to me *as soon as possible*. Do not wait until the end of the semester to bring up grading issues. Also, I will *not* be available to discuss grades after the end of the final week.

Attendance and Participation

You are expected to not only attend **every** class meeting but also to come **prepared** for and **participate** actively in it. Necessary preparation requires you to have studied and assimilated the material covered in previous sessions, to have met with the instructor outside of class to discuss any questions you may have, to have completed the reading assignments, and to have completed the lab assignments on time.

Recall that this component of the course accounts for 15% of your grade (really much more, since it will more or less indirectly impact your performance in the course as a whole). It will be assessed based on the quality of your answers to unannounced questions administered via a web-based clicker-like system. These questions will be based on your remembering and understanding of the material in previous reading materials as well as in-class discussions. **Make sure to complete the reading assignment, and to bring your device, EACH DAY.** There is no way to cover all of the materials related to this course in face-to-face meetings. Therefore, **you are responsible for doing your own reading, research, and testing. Class time will focus on answering your questions, not on lecturing from scratch.**

It is hard to imagine how a student could do well in this course while missing classes or attending them unprepared. On the positive side, I have high expectations for my students and will always support and encourage you. I **strongly encourage you to ask any question** or raise any issue you have with the course either during class or in my office hours. I will also gladly meet with you by appointment. Send me email to make an appointment. While I will meet with you as soon as my schedule permits, do not expect me to be widely available just before an exam or the due date for an assignment since you may not be the only one needing help at the last minute.

Late Submissions

I will describe the submission procedure for your labs and assignments when the time comes. However, let me point out right away that each one of them will come with a deadline (day and time) after which any submission will be considered late. The late-submission policy works as follows:

Turned in	Penalty
On the due date but after the deadline	10%
One day after the due date	30%
Two days after the due date	60%
Three or more days after the due date	100%

Note that submissions that are more than two days late receive no points. Weekend days and holidays count as "regular days" when computing late penalties. Each (late) day starts precisely at midnight. Extensions may be granted at the discretion of the instructor if you provide a valid

justification (in the form of a written excuse from a medical doctor or the Dean of Students Office) before the due date. Late submissions can easily be avoided by starting work right away and asking for help early if you get stuck.

If you miss a scheduled exam, you **may** be able to take a make-up exam provided you give the instructor a valid justification (see above), ahead of time if possible. Only one make-up exam will be given. It will be a comprehensive exam scheduled at the end of the semester. **There is no way to make up class participation, even if the reason you need a make-up is because you forgot your device or it died during class.**

Collaborating versus Cheating

While it is acceptable to discuss the problem statement, premises, goals, constraints, etc., of the assignments with others, you must submit your OWN work EXCLUSIVELY. You may not “borrow” any piece of code or design or written answer of any length from anybody else, unless you can live with a zero and the other potential academic sanctions of cheating (see the [UWO Student Discipline Code](#) - Chapter UWS 14).

In conclusion, remember that computer science classes require a lot of work in addition to active participation in class. It takes considerable practice to develop the technical and analytical skills targeted by this course. You will need to spend **at least (and typically much more than) three hours of effort outside of class for each in-class hour**. Having said this, I expect every hardworking student to do well in this course.

Have fun this semester and good luck!