

CSCI-215
Website Programming
Department of Computer Science
College of Charleston

Instructor	Sebastian van Delden	Office	HWEA 321
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Office Hours	MWF 130-230pm Or by Appointment	Class Time	MWF 2:30 AM –3:20 AM
Website	blogs.cofc.edu/sebastian	Class Location	Harbor Walk East (HWEA) Room 334

Course Description

A course teaching the design and development of interactive Web pages and client-side based Web programs using Rich Internet Applications (RIAs). Students will learn how to manage elements of a Web page using the Document Object Model (DOM), create and validate forms and communicate with Web servers using current Web technologies. Lectures three hours per week.

NO Required textbook. An electronic PDF of a textbook will be placed on OAKS which we will use some times: Eloquent Javascript by Marijn Haverbeke. Our main resource will be the PPT slides in class, but also w3schools.org is a great resource.

Pre-requisites: CSCI 115 (Web Design). However, due to a glitch in the matrix, many of you for the Fall 2016 do not have this pre-req... It is okay...

Topics Covered

- Write rich web-based programs that execute in a standard web browser
- Write web-programs that use JavaScript and HTML
- Using JavaScript to interact with the document object model (DOM)
- Interacting with the user through events
- Communicating with a server

Course Outcomes. Students will be able to

- Develop client-side web programs using variables, basic data structures (arrays, multidimensional arrays, and associative arrays), conditional logic and branching, loops, etc.
- Create and use functions.
- Manipulate and traverse DOM.
- Create interactive web-programs (create and handle user or machine generated events).
- Create dynamic web-based programs (programmatically add, remove, and update nodes in the DOM).
- Write client-side form verification scripts.

Very Tentative Schedule (Subject to Change)

Topics	Week
The Internet, HTML, XML, DOM	Week 1 and 2
CSS, JavaScript Basics – variables, conditions, loops, functions, arrays, etc	Week 3, 4, 5
JavaScript Objects, debugging, and user interaction (event handling)	Week 6, 7, 8
Advanced topics: JSON, Canvas, Form verification, RegEx	Week 9, 10, 11
Some modern JavaScript libraries (Angular.JS, jQuery, and Bootstrap)	Week 12
Group presentations on modern web development tools	Week 13 and 14

Course Policy

1. Attendance is mandatory. Within the first 10 minutes of each class attendance will be taken (which will be used to calculate the attendance portion of your final grade). If you walk into class after attendance has been taken, or leave before the class is finished (for any reason other than an emergency) both will be recorded as an unexcused absence – no exceptions. If you have more than 6 excused or unexcused absences (2 weeks worth of class), regardless of the reason, a WA grade will be given – no exceptions. If you do miss class, you're responsible for announcements made in class, assignment due dates, etc.
2. Assignment due dates will be strictly enforced. If you have a documented excused absence from the University a 24-hour homework extension will be provided, otherwise an extension will not be given and the late assignment will not be accepted.
3. Assignments will include a collaboration policy. Unless otherwise stated, all assignments are an individual effort. Failure to adhere to the policy will result in a grade of zero, and a possible report to the College Honor Board. Note: The Honor Board may now give a XF grade (Failure because of an honor code violation).
4. Most (to all) assignments will be submitted to a Dropbox on OAKS. However, a few pencil and paper assignments may be given. These will be due at the beginning of class on the assigned due date. All grades will be posted on OAKS.
5. No makeup exams will be given without a documented excused absence from the University. If you have an excused absence a 24-hour extension will be provided. Note: 24-hour extension starts on the next day of the excused period (If the next day falls on a Saturday or Sunday, then Monday will be used).
6. Most Wednesdays there will be an in-class lab assignment. You will be given the entire 50 minutes to complete and upload to a Dropbox on OAKS. In general, the lab assignment will be a coding exercise (JavaScript, HTML, or both), however a short quiz may also be given that the beginning of the lab. The quiz may include multiple choice, fill in the blank, or short answer questions. For example, the first 15 minutes of the lab is a quiz, and the remaining 35 minutes is a coding problem. **Lab assignment cannot be made up if missed! But, one lab assignment grade will be dropped.**

Final Grade Computation

Exam 1	10%
Exam 2	15%
Homework/Lab Assignments	25%
Final Exam (<i>Comprehensive</i>)	25%
Group Project/Presentation	25%

About the Group Project/Presentation

You will be placed on a team of 2-3 other students. You will need to research a modern web technology (**that is NOT being covered in class**), deliver a tutorial-style presentation on this technology, and also create a public website which implements what you can learned. The instructor will coordinate the creation of the groups, and you must get approval from the instructor on your topic and plan for individual implementations.

- The presentation must be 15 minutes, and each presenter must talk for at least 4 minutes. Professional dress is required. Typo-free, tutorial style PPT slide set is required. Your last slide must include 3 questions + answers (no true/false or yes/no questions) which will be used to form a question set for the Final Exam.
- Each student on the team must create a public website that demonstrates a feature/etc or example project of the technology they are researching. Students on the team must coordinate this efforts so that websites don't overlap. Whatever you do, you must implement it yourself, and so it must (non-sensitive) content about you, your degree program, or whatever.
- During the presentation, each student should demo their website and what they implemented.

Grading Scale

A	90-100
B+	85-89
B	80-84
C+	75-79
C	70-74
D+	65-69
D	60-64
F	0-59

Disability Statement

Any student who feels that he or she may need an accommodation due to a disability should speak to me individually to discuss your specific needs. For additional help please contact the College of Charleston Center for Disability services at <http://www.cofc.edu/~cdis/>.