# CS-255: Client Side Web Development (Spring 2015)

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| **Instructor** | George Corser (www.georgecorser.com) |
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| **Office Hours** | 12:30 pm – 2:30 pm TR, or by appointment, Room SE-179 |
| **Class Hours** | 8:00 am – 12:10 pm TR, Room SE-135 |
| **Textbook** | *Fundamentals of Web Development (Connolly and Hoar)* |

## Course Description

This course focuses on web design and the client side of web application development. Topics include XHTML, Cascading Style Sheets (CSS), the Document Object Model, creating dynamic content and architecture, and building/deploying web pages and web sites. A large portion of the class is spent on examining the ECMA/JavaScript client side scripting language. Current topics of interest such as Web 2.0 and AJAX are explored. An introduction to using both commercial and open source web development tools is also provided. *Prerequisite: CS-116. Credits: 4.* (From: Undergraduate Academic Catalog listing.)

## Topics

Module A - Syllabus and Course Standards
Module B - Github and Personal Course Menu
Module C - Web Overview (Ch. 1) and Chrome DevTools
Module D - Basic HTML (Ch.2) and HTML Generators
Module E - Basic CSS (Ch. 3) and CSS Generators
Module F - HTML Tables and Forms (Ch. 4)
Module G - Advanced CSS (Ch. 5), Sass, Compass, Bootstrap
Module H - Basic JavaScript (Ch. 6)
Module I - jQuery (Ch. 15), AJAX
Module J - JavaScript Roadtrip (Code School)
Module K - Backbone.js (Ch. 15), Ember.js, Angular.js and MVC
Module L - CMS (Ch. 18) and Miscellaneous

## Course Goals

By the time you finish this course you will be able to beautify front ends and improve the user experience of web applications. You will prove this by building components to sample applications. Throughout the course we will periodically discuss current topics of concern to professional web developers. See also: Student Learning Goals. Specifically, you will be able to:

- Create HTML files which include elements such as hyperlinks, images, tables, and forms.
- Control the look and placement of HTML elements using Cascading Style Sheets (CSS).
- Create basic JavaScript and jQuery code to build more dynamic and interactive, front-end web application functionality and to validate user input using functions and events.
- Structure a web page effectively and document it with diagrams and comments.
- Demonstrate understanding of web concepts such as REST, SOAP, AJAX, Web 2.0, etc.
- Apply MVC(ish) frameworks such as Angular.js, Backbone.js, and/or Ember.js.

## Technology Components

The domain, www.cis255.com, has been registered for this course. The site link will redirect you to a specific page on the Computer Science and Information Systems (CSIS) server which contains more information about this course. You can host your files for this course at csis.svsu.edu/~yourSVSUid or www.svsu.edu/~yourSVSUid. **Canvas is the only acceptable method for turning in assignments.** Emailed work will be discarded ungraded.

The course will use many online tools for which you may need to create free accounts. If you are worried about spam, you may want to create a junk email account for this purpose.

## List of Assignments and Exams

This class consists of 6 small programming assignments and 2 exams.

| *Assignment* | *Points* | *Percent* | *Comments* |
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| Programming assignments | 60 | 60% | See rubric under "Assessment Measures and Grading Scale" section. |
| Midterm | 20 | 20% | Covers HTML, CSS, JavaScript, general web concepts. |
| Final Exam | 20 | 20% | Covers jQuery, MVC/frameworks, advanced web concepts. |
| **Total** | **100** | **100%** | |

## Class Policies

- *Attendance: Mandatory*. One point deducted for each absence, one-half point for each tardiness and for leaving class early.
- *Make-up assignments, exams: None.*
- *Extra credit: Possible*. Extra credit is given for **meaningful** exam questions, and for preparing a **good** YouTube tutorial. Whether or not the quality of the extra credit is worth any points is at the subjective discretion of the professor, so please don't waste time submitting rubbish hoping for extra credit.

## Academic Integrity

Cheating means submitting someone else's work and claiming it was your own. Cheating also includes giving work for someone else to use in such a way. Unless otherwise stated explicitly in an assignment, students must do their work independently. University and departmental policies on academic dishonesty apply. Publicly-available sources for code or other material may be freely used if appropriately attributed.

Similarly, code that is obtained from others must be appropriately attributed. However, using substantial amounts of code obtained from someone else will probably not yield full credit for the assignment. Students are responsible for protecting their files from access by others. Work that is essentially the same and submitted without proper attribution may be a violation of academic dishonesty policies by all those submitting the work, regardless of who actually did the work.

*Punishment for cheating*: First offense will be reported to university administration and will result in zeros for that assignment for all parties involved. Second offense will also be reported to university administration, and will result in a failing grade for the entire course for all parties involved. The university may impose additional penalties.

## Assessment Measures and Grading Scale

Letter grades will be based on the number of points awarded, as follows:

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| A | 93 or above | A- | 90 to < 93 | | |
| B+ | 87 to < 90 | B | 83 to < 87 | B- | 80 to < 83 |
| C+ | 75 to < 80 | C | 70 to < 75 | | |
| D | 60 to < 70 | F | 0 to < 60 | | |

For programming assignments, the following rubric applies. Note that the "maximum" number of points is supposed to be 10 per assignment. However it is possible to get 12.5 points (2.5 points extra credit) by going above and beyond what the assignment requires.

| ***Criterion*** | ***Excellent (10)*** | ***Above Avg. (8)*** | ***Average (6)*** | ***Below Avg. (4)*** | ***Poor (2)*** |
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| Design, Diagrams | Elegantly logical flow (2.5) | Reasonably logical flow (2) | Arguably logical flow (1.5) | Awkward logical flow (1) | Incoherent logical flow (0.5) |
| Executes error-free | Flawless execution (2.5) | Bug-free, Mostly (2) | 1,2 obvious bugs (1.5) | 3,4 obvious bugs (1) | 5+ obvious bugs (0.5) |
| Meets specifications | Exceeds specifications (2.5) | Satisfies all specs (2) | Satisfies most specs (1.5) | Satisfies some specs (1) | Does not satisfy specs (0.5) |
| Comments | Clear and meaningful (2.5) | Thorough, but wordy (2) | Thorough, not always clear (1.5) | Not thorough or not clear (1) | Missing or meaningless (0.5) |
| ***Extra Credit*** | ***Adds original functionality, diagrams and/or code comments (up to +2.5)*** | | | | |

## Disability Statement

Students with disabilities who seek accommodations must make their request by Contacting the Office of Disability Services located at Curtiss 112, or call 964-7000. All accommodations must be approved by The Office of Disability Services. (Verbatim from: Syllabus Statement.)

## Non-discrimination Statement

SVSU does not discriminate based on race, religion, color, gender, sexual orientation, national origin, age, physical impairment, disability or veteran status in the provision of education, employment and other services. (Verbatim from: Faculty Handbook.)

## Syllabus Change Statement

This syllabus is subject to change if class needs warrant. (Verbatim from: Faculty Handbook.)