

CSCI 270 - Web Development

Spring 2025

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Office Hours: www.cknuckles.com/office

Textbook: There are no required books for this course.

Course Web Page: www.cknuckles.com/csci270

All reference materials and required readings will be posted on the course Web page.

The course Web page also lists homework, quiz, and final exam information/dates.

Bookmark the course web page and check it regularly.

Pre-Requisites:

CSCI107 (Intro HTML/CSS) and Art142 (Intro Digital Graphics).

Official Catalog Course Description:

This course builds upon Web programming fundamentals. It includes a review of HTML and CSS fundamentals and detailed coverage of CSS topics including selectors, cascade specificity, positioning, page layout techniques, CSS media queries, and responsive/mobile design techniques. The course provides an introduction to server-side scripting and server side includes, advanced CSS/JavaScript frameworks, responsive grid design, and user interface tools.

Course Learning Objectives:

The first objective is that students become proficient in advanced CSS topics. The second objective is that students learn to use responsive grid design techniques and user interface CSS frameworks such as Bootstrap, Foundation, and W3.css. Students complete a semester-long project that results in a highly structured Web site incorporating advanced CSS techniques. A final project incorporates custom made graphics, and uses a CSS framework to implement responsive Web design strategies.

Course Expectations:

This course meets 2 times per week for 80 minutes, for a total of 160 minutes per week. The course carries 1.0 LFC course credit (equivalent to four semester credit hours). Students are expected to devote a minimum of 12 hours of total work per week (in-class time plus out-of-class work) to this course.

Course Requirements and Grading Policy:

Cumulative Project -- 40% of your grade: Homework will be assigned for most class meetings, will be assessed regularly, and is organized into a highly structured Web site you gradually build for this course.

Exams -- 35% of your grade: In-class written exams to periodically reinforce topics learned.

Final Project -- 25% of your grade: The final project lets you showcase the skills you have accumulated during the semester in a personalized Web site that uses a CSS framework and incorporates modern responsive design techniques. There is no written final exam, but we will meet at the final exam time to critique final projects. The college pre-determines all final exam times based upon course timeslots to ensure that finals for different courses do not overlap. You can find the final exam time at the top of the course Web page (listed above) or in my.lakeforest at Home -> Course Schedules.

Electronics Policy:

This is not a laboratory style class. Use of electronic devices, including laptop computers, is discouraged during class. Class time is best used focusing on concepts and discussion. Students are expected to complete the homework assignments outside of class.

Attendance Policy:

Students are encouraged to attend all course meetings. Late homework is assessed heavy penalties, if credited at all. Unless pre-arranged for a very compelling reason, a missed quiz or exam will require documentation (e.g. medical) excusing the absence.

Academic Honesty Policy:

This course observes the College's policy on Academic Dishonesty and Plagiarism as stated in the student and faculty handbooks.

General Academic Protocols and Policies:

This college maintains a general academic Protocols and Policy document at the following location.

<https://moodle.lakeforest.edu/mod/resource/view.php?id=532514>

Course Topics Include:

HTML Review

CSS Review (Properties, Classes, Basic Selectors)

CSS Block Behavior / Box Model

CSS Positioning (static, fixed, relative, absolute)

CSS Selectors (Grouped, Contextual, Parent/Child)

CSS Cascade / Selector Specificity

Page Layout Fundamentals / Columns / Grid Design

CSS Media Queries / Responsive Design

Advanced CSS Topics (Flexbox, Transitions, etc)

Brief intro to PHP / Server-Side Includes (SSI)

Intro to CSS Frameworks (Bootstrap, W3.css, Foundation, etc)

User Interface Tools (DHTML widgets, JQuery UI, etc)

Wireframing / Mockup Creation