CS 3312: Web Programming
Spring 2018
Course syllabus

Class meetings
section 010: TR 9:30–10:45 in MCS 111B
section 020: TR 11:00–12:15 in MCS 111B

Instructor
Rob LeGrand
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office location: MCS 205I
office hours: MTWRF 2:00–4:00 and by appointment

Textbook
None required. I will recommend books and online resources throughout the semester.
The following books are excellent and are available in the ASU library.
• JavaScript: The Good Parts by Douglas Crockford
• Learning Web App Development by Semmy Purewal
• Speaking JavaScript by Axel Rauschmayer
• Programming JavaScript Applications by Eric Elliott

Catalog description
Techniques for creating dynamic and responsive web pages using the latest markup,
styling and client-side scripting technologies. Best practices for code maintainability and
for browser and mobile compatibility will be emphasized.

Prerequisites
Credit for either CS 1351 (Java Programming) or CS 1336 (Computer Science I) is a
prerequisite for this course. Please see me if you haven’t taken either one, especially if
you have no programming experience.

Grading breakdown
50% assignments/quizzes/homework
30% midterm exams (two or three)
20% final exam/project

Student learning outcomes
Students will
• create single-page Web applications using HTML, CSS and JavaScript.
• learn how to use JavaScript functions, objects and arrays.
• become familiar with tools that enforce correct and maintainable code.
• be introduced to techniques to make web apps responsive to devices of different sizes.
• be introduced to advanced techniques such as web storage, Ajax and timers.

Class format
This class meets in a computer lab, and most class sessions will feel like a cross between
a regular lecture class and a lab session; I call this approach a “studio” format. Some
studio sessions will be basically a guided lab exercise, a way to learn by doing, and some
will be a short lecture followed by class time to work on the relevant assignment; some
will require considerably more creativity than others. I hope that, by combining lecture
and homework in this way, classes will be more interesting and effective. I also expect
that the amount of work you have to do outside of class will be reduced, but you will
still likely need to spend some time outside of class on many of the assignments.

This class format requires that you
• get to class on time every time.
• do all assigned research before class and come with relevant questions.
• work hard for 75 minutes.
Discussion and giving and receiving help are generally encouraged during studio sessions. You may be asked to work with a partner in some sessions and individually in others. You must list everyone you worked with on each studio assignment. Failure to do so is considered taking credit for work not done and thus cheating. In-class exams must be completed independently.

Participation is especially important for this class, which makes attendance important. You have a duty to inform me as soon as you know that you’ll have to miss a class. Missing class can hurt your grade both directly and indirectly. Also, when working together on an assignment, it is the group members’ responsibility to keep in touch, especially when one will miss class.

Instead of a comprehensive final exam at the end of the semester, I am planning a final project. If we have a final project, I will suggest ideas for projects and approve project proposals sometime in the second half of the semester. Project demos/presentations will be scheduled for the last regular week of classes.

Blackboard (http://blackboard.angelo.edu/) will be used to keep track of grades and assignments.

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<thead>
<tr>
<th>Semester schedule</th>
<th>topic</th>
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<tbody>
<tr>
<td>January 16th</td>
<td>intro to single-page applications</td>
</tr>
<tr>
<td>January 23rd</td>
<td>HTML basics</td>
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<td>January 30th</td>
<td>CSS basics</td>
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<td>February 6th</td>
<td>JavaScript basics</td>
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<td>February 13th</td>
<td>JavaScript functions</td>
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<td>February 20th</td>
<td>event handlers</td>
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<td>February 27th</td>
<td>JavaScript objects</td>
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<td>March 6th</td>
<td>JavaScript objects</td>
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<td>spring break</td>
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<td>March 20th</td>
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<td>code organization</td>
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<td>April 3rd</td>
<td>web storage</td>
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<td>the canvas element</td>
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<td>April 17th</td>
<td>timers</td>
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<td>April 24th</td>
<td>Ajax techniques and responsive design</td>
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<td>May 1st</td>
<td>final projects</td>
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Final exam/project

The final exam for this course is scheduled for Thursday, May 10th, 8:00–10:00 (section 010) and Tuesday, May 8th, 10:30–12:30 (section 020). If we have a final project rather than a final exam, I plan to use this time for late demos of final projects.

Academic honesty

Angelo State University expects its students to maintain complete honesty and integrity in their academic pursuits. By remaining enrolled in this course you agree to adhere to the Academic Honor Code, which is contained in both print and web versions of the Student Handbook.

Accommodations

Persons with disabilities which may warrant academic accommodations must contact Student Services in order to request and to implement academic accommodations. For ASU’s policy on absences due to religious holy days, please see OP 10.19 at http://www.angelo.edu/opmanual/.