

## CS 275, Introduction to Internet Programming, 3 credits, Fall 2015

CRN 44639, MWF 11:30-12:20, Dana 318

CRN 45883, MWF 12:30-1:20, Dana 318

**Dr. Carolyn Pe Rosiene**

**Email** [rosiene@hartford.edu](mailto:rosiene@hartford.edu)

**Work Phone** 860.768.4699

**Office Location** Dana Hall 335 and Skype

**Office Hours** Mondays 9-11, Wednesdays 9-11, Fridays 1:30-2:30, and by appointment.

### Course Description

This course serves as an introduction to programming models used to generate and support Web-based applications. The course covers markup, presentation, and front-end interactivity concerns through an in-depth examination of current client-side scripting techniques. Other topics include the document-object model (DOM), event-driven programming, form validation, debugging, and asynchronous web processing.

### Course Objectives

By the end of the term, you should be able to:

- Use JavaScript with well-formed Web pages
- Work with JavaScript variables and data types and learn how to use the operations that can be performed on them
- Add functions, events, and control structures to your JavaScript programs
- Write JavaScript code that controls the Web browser through the browser object model
- Use JavaScript to make sure data was entered properly into form fields and to perform other types of preprocessing before form data is sent to a server
- Include object-oriented programming techniques in your JavaScript programs
- Manipulate data in strings and arrays
- Trace and resolve errors in JavaScript programs
- Save state information using hidden form fields, query strings, and cookies
- Add animation and interactivity to your Web pages using the Document Object Model (DOM) and Dynamic HTML (DHTML)
- Dynamically update Web pages with AJAX

### Course Pre-requisites

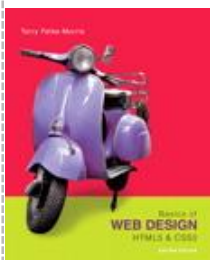
CS 111 or CS 114 (minimum grade of C) or permission of instructor.

### Expectations

Each student is expected to attend classes and take notes. Read the textbook(s) before attending class. Turn in homework, and other assignments on time. Take quizzes and exams as scheduled. The instructor is available for help during scheduled office hours (check "Instructor Information") and also by appointment. Please do not wait until an exam to get help. Seek help as soon as possible. You will need to allocate about **12 hours of your week** towards this course. This time will be used for the following:

- reading the chapters in the text book assigned
- completing activities assigned
- completing homework assignments
- studying for tests and exams

### Textbooks



#### Basics of Web Design: HTML5 & CSS3, 2/E

- Terry Felke-Morris, Harper College
- ISBN-10: 0133128911 • ISBN-13: 9780133128918
- ©2014 • Addison-Wesley • Paper, 432 pp
- Published 01/18/2013

[http://www.pearsonhighered.com/pearsonhigheredus/educator/product/products\\_detail.page?isbn=9780133128918&forced\\_logout=forced\\_logged\\_out#sthash.h3M8hmvw.dpuf](http://www.pearsonhighered.com/pearsonhigheredus/educator/product/products_detail.page?isbn=9780133128918&forced_logout=forced_logged_out#sthash.h3M8hmvw.dpuf)



## JavaScript: The Web Technologies Series, 6th Edition

- Sasha Vodnik and Don Gosselin
- eText:eText:ISBN-10 1305458826, ISBN-13 9781305458826
- Print: ISBN-10 1305078446, ISBN-13 9781305078444
- Publisher: Cengage Learning
- Copyright year: © 2015
- Pages: 896

<http://www.coursesmart.com/javascript-the-web-warrior-series-6th-edition/vodnik-gosselin/dp/9781305078444#extendedisbn>

### Software

- Text editor: Brackets - brackets.io
- Not all Web Browsers behave the same, so install:
  - Firefox - <http://www.mozilla.org/en-US/firefox/new/#download-fx>
  - IE - <http://windows.microsoft.com/en-us/internet-explorer/download-ie> (or Edge)
  - Chrome - <https://www.google.com/intl/en/chrome/browser/>
  - Safari - <http://support.apple.com/downloads/#safari>
- Debugging Tools:
  - Firebug (for Firefox) - <http://getfirebug.com/>
  - Chrome Developer Tools - <https://developers.google.com/chrome-developer-tools/?csw=1>

### Hardware Notes

Data is erased from lab computers in the classroom every time you log out. You must remember to manage the various files you use/create accordingly.

Students may choose to use a USB flash drive (jump drive) to store their work. If so, you will need a 1GB or larger drive and you should bring it to every class. Alternatively, you may upload your files to another location (Google Drive, DropBox, etc.). Remember that computer storage devices do fail. You are advised to make regular backups of your work using multiple devices. Loss of data due to disk failure is not an acceptable excuse for missing a homework deadline.

### CS Computer Account

All CS students have been given a "CS Account". This computer account works in Dana 230 (CS lab) and Dana 318 (CS classroom). The software required for this course are available in these rooms.

The Department Computer Science, as custodian of all information stored on the network, may inspect and/or close an account without prior notice upon any indication of abuse. Account owners must adhere to the computer use policies established by the University of Hartford. These policies can be found in the conduct section of The Source student handbook. Each account owner is responsible for his or her own account. If any abuse originates from your account you will be held liable.

### Schedule

*Subject to change.*

Week	Date	Topic	Lab
1	2-Sep	Syllabus	
	4-Sep	HTML5 Chapter 1 Basics of Web Design	
2	7-Sep	<b>Labor Day - No Class</b>	
	9-Sep	HTML5 Chapter 2 HTML Basics HTML 5 Chapter 3 Web Design Basics [Read on your own] HTML5 Chapter 4 Cascading Style Sheets Basics HTML5 Chapter 5 Web Graphics Styling Basics [Read on your own]	
	11-Sep		Lab 1
	14-Sep	HTML5 Chapter 6 More CSS Basics HTML5 Chapter 9 Table Basics (accidentally skipped)	
	16-Sep	JavaScript Chapter 1 Intro to JavaScript. WWW, Basic JavaScript (JS), Expressions and Events, Validation	

	18-Sep		Lab 2
<b>4</b>	21-Sep	HTML5 Chapter 9 Table Basics	
	23-Sep	<b>Test Review</b>	
	25-Sep	<b>Test 1</b>	
<b>5</b>	28-Sep	JavaScript Chapter 2 Working with Functions, Data Types, and Operators. Defining and Calling Functions, Numeric, Boolean, and String Data Types, Operators and Expressions	
	30-Sep	JavaScript Chapter 3 Building Arrays and Controlling Flow. Storing Data in Arrays, if Statements, while Statements	
	2-Oct		Lab 3
<b>6</b>	5-Oct	JavaScript Chapter 4 Debugging and Error Handling. Basic Debugging Techniques, Tracing Errors, Handling Exceptions	
	7-Oct	JavaScript Chapter 4 continued HTML5 Chapter 10 Form Basics	
	9-Oct		Lab 4
<b>7</b>	12-Oct	Workshop Day	
	14-Oct	<b>Test Review</b>	
	16-Oct	<b>Test 2</b>	
<b>8</b>	19-Oct	JavaScript Chapter 5 Working with the Document Object Model (DOM) and DHTML. Browser Object Model and DOM, Accessing Document Elements, Content, Properties, and Attributes, Manipulating the Browser, Window, History, Location, Navigator, and Screen Objects	
	21-Oct	JavaScript Chapter 5 continued	
	23-Oct	NO CLASS – Work on Assignment 4	
<b>9</b>	26-Oct	JavaScript Chapter 6 Enhancing and Validating Forms. Improving Form Usability, Customizing Browser-Based Validation, Custom Validation	
	28-Oct	JavaScript Chapter 6 continued	
	30-Oct		Lab 5
<b>10</b>	2-Nov	JavaScript Chapter 7 Using Object-Oriented JavaScript. Object Reuse, Encapsulation, Built-in JS Classes, Date, Number, and Math Classes, Custom Objects	
	4-Nov		
	6-Nov		Lab 6
<b>11</b>	9-Nov	Workshop Day	
	11-Nov	<b>Test Review</b>	
	13-Nov	<b>Test 3</b>	
<b>12</b>	16-Nov	JavaScript Chapter 8 Manipulating Data in Strings and Arrays. Strings, Regular Expressions, Arrays	
	18-Nov	JavaScript Chapter 8 continued	
	20-Nov		Lab 7
<b>13</b>	23-Nov	JavaScript Chapter 9 Managing State Information and Security. Hidden Form Fields, Query Strings, Cookies	
	25-Nov	<b>Thanksgiving Break - No Class</b>	
	27-Nov	<b>Thanksgiving Break - No Class</b>	
<b>14</b>	30-Nov	JavaScript Chapter 9 continued	
	2-Dec	JavaScript Chapter 10 Programming for Touchscreens and Mobile Devices	
	4-Dec		Lab 8
<b>15</b>	7-Dec	JavaScript Chapter 10 continued	

	9-Dec	JS Chapter 11 or 12? JavaScript Chapter 11 Updating Web Pages with AJAX. Working with HTTP, Requesting and Receiving Server Data, Creating Cross-Domain Requests Without a Proxy Server JavaScript Chapter 12 Intro to jQuery. jQuery Library, Traversing and Manipulating the DOM with jQuery, Built-in Effects	
	11-Dec	JavaScript Chapter 11 or 12 continued	Lab 9
<b>16</b>	14-Dec	<b>Final Exam Review</b>	
<b>11:30 Section</b>	Monday, 21-Dec, 2pm-4pm	<b>Final Exam</b>	
<b>12:30 Section</b>	Thursday, 17-Dec, 11am-1pm	<b>Final Exam</b>	

### Grading

**Quality Work** All oral and written work submitted must be of the highest quality. You will be graded on your performance and quality of the work required and not on the amount of time spent nor amount of effort. Any piece of work turned in for a grade is subject to an oral examination and the grade for the work hinges on the result of the student's knowledge, not what is submitted.

### Final Grade

Assignments	30%
Labs	15%
Tests	40%
Final Exam	15%

	86.67 to 89.99 = B+	76.67 to 79.99 = C+	66.67 to 69.99 = D+	
>= 94 = A	83.34 to 86.66 = B	73.33 to 76.66 = C	63.33 to 66.66 = D	<= 59.99 = F
90.00 to 93.99 = A-	80.00 to 83.33 = B-	70.00 to 73.33 = C-	60.00 to 63.33 = D-	

### "My Grades"

Up-to-date grade information is available 24/7 under "My Grades". It also shows your "Weighted Total". This is your up-to-date, cumulative, weighted grade.

### Lab Guidelines

There will be several lab activities distributed throughout this semester. The intent is for labs to be completed in class to help enhance your understanding of the concepts being presented. All labwork will be completed individually, in pairs or small groups as announced in class and will be submitted for grading. A running total of your lab points earned will be kept and can be used to replace your lowest homework grade at the end of the term.

If you do not complete the lab in class, you must submit the work by the end of the day.

Should you miss a class session where a lab is given, it must be completed individually and submitted by the end of the day to receive credit.

### Assignment Guidelines

**Work independently** All homework assignments are to be worked on independently by each student. Discussions as to what the problem is and very general, top-level solutions are allowed between students. Work may not be copied from another source and will constitute cheating if done so. Any work, or part of your work, that is borrowed from another source must be stated so in the assignment and must be pre-approved by the instructor or preceptor. Failure to do so will constitute plagiarism. All assignment submitted is subject to an oral examination. Upon the request of the instructor, the student will explain (in person) the work submitted. The grade of the assignment hinges on how well the student knows and understands what was submitted.

**Submission** Each assignment must be submitted by following instructions posted on Blackboard. Electronic submissions are due at the end of the day (11:59 pm) on the date due. All assignments must be submitted through Blackboard (View/Complete... link). Do not email your assignment to the instructor; no homework is accepted via email. Similarly, no assignment will be submitted through the Digital Dropbox unless it is pre-approved by the instructor.

**Late Penalty** Any assignment that is late will receive a deduction of 10% every 24 hours (a day). Work that is more than **3 days late will not be accepted**. Assignments of which answers have been given will also not be accepted. For example, if an assignment is due Friday evening and if you turn it in anytime on Sunday, the grade is deducted 20%; any work turned in after the following Monday will receive a grade of 0.

**Tests and Examination Guidelines**

All exams are closed book exams and typically take the entire class period. Make up exams will not be given except in cases of extremely extenuating circumstances and are pre-arranged.

**Class Participation**

Even though class participation is not figured into your final grade, your attendance and participation is crucial to your success in this class. The following should give you a guideline on how to actively and positively participate.

Level of participation	Rubric
A	Actively supports, engages and listens to peers (ongoing) Arrives fully prepared at every class Plays an active role in discussions (ongoing) Comments advance the level and depth of the dialogue (consistently) Group dynamic and level of discussion are consistently better because of student’s presence
B	Makes a sincere effort to interact with peers (ongoing) Arrives mostly, if not fully, prepared (ongoing) Participates constructively in discussions Makes relevant comments based on the assigned reading material (ongoing) Group dynamic and level of discussion are occasionally better (never worse) because of the student’s presence
C	Limited interaction with peers Preparation, and therefore level of participation, are both inconsistent When prepared, participates constructively in discussions and makes relevant comments based on the assigned material Group dynamic and level of discussion are not affected by the student’s presence
D	Virtually no interaction with peers Rarely prepared Rarely participates Comments are generally vague or drawn from outside of the assigned material Demonstrates a noticeable lack of interest (on occasion) Group dynamic and level of discussion are harmed by the student’s presence
F	No interaction with peers Never prepared Never participates Demonstrates a noticeable lack of interest in the material (ongoing) Group dynamic and level of discussion are significantly harmed by the student’s presence

**UH Academic Honesty Policy: Strictly Enforced**

**University of Hartford Academic Honesty Policy**

The purpose of the academic honesty policy is to provide a clear statement to students and faculty of the University’s expectations regarding academic honesty and to set forth procedures for the enforcement of that policy. The procedures in this academic honesty policy are administrative functions and are not subject to the same rules as in criminal or civil proceedings. Throughout the following policy, the term college refers to any one of the schools or colleges of the University. The term University-wide program refers to programs such as multimedia Web design and development or the Bachelor of University Studies, which do not reside in a college. The term department chair refers to a department chair or, in the case of colleges that do not have departments, the equivalent of a department chair.

- All students are expected to observe generally accepted principles of scholarly writing in all examinations, compositions, papers, essays, tests, quizzes, reports, and dissertations whether written in the class room or outside. Sources of information used by a student in the preparation of work submitted as a basis for credit, or for a grade, or to satisfy graduate or undergraduate thesis requirements shall be clearly indicated in some conventional manner, such as by the use of quotation marks, footnotes, and bibliography.
- Students are forbidden to submit as their own any project, paper, or creative work that is in whole or part the work of another.
- The use of a term-paper writing service is prohibited. Also prohibited is the use of term papers obtained from the Internet, in whole or in part.
- All examinations and quizzes are to be completed without reference to books or notes except when the instructor of a course shall have given explicit authorization for an “open-book examination” or some other specified sort of assistance. Except as authorized by the instructor, no student is to give or receive assistance in the completion of an examination or a quiz.
- Other examples of academic dishonesty include, but are not limited to, the falsification of academic documents, such as transcripts, registration materials, withdrawal forms, or grade reports, as well as the unauthorized reading, removing, or copying of any academic document or record maintained by any member of the faculty or administration.

Your work for this course (assignments, labs, quizzes, tests, exams) must be completed by you - the student - without the help of external sources such as the Internet or a friend. **Googling answers online is NOT ACCEPTABLE and constitutes academic dishonesty.**

**At the first violation of academic dishonesty, the student receives a 0 for the work. On second offense, the student receives an F for the course.**

**Academic Misconduct:** In the event that it is determined that you violated the Academic Honesty Policy, found in "the Source," the dean of your college will be notified and a note will be placed in your permanent file. If previous violations have been filed, any penalty that may be assigned for the offense may be more severe than for a first time offense. If this is the first recorded offense, subsequent violations of the honesty policy may then incur a steeper penalty.

### Email & Blackboard

Course materials (announcements, homework assignments, etc.) will be made available through Blackboard at <http://blackboard.hartford.edu>. Blackboard is to be used as a supplement to class lectures. All important announcements will be made in class. Routine announcements will be made available on Blackboard. However, you are responsible for all announcements and expectations explained in both Blackboard and during class. You are not to rely solely on Blackboard.

Your Blackboard account allows you to personalize your information, including your preferred email account. In your "Blackboard Home Page" on the left frame, there is a "Personal Information" link which allows you to edit your information. It is your responsibility to make sure that the email account set here is the one you check regularly and that the Inbox for that email is not rejecting incoming mail.

### Collaboration

Collaboration with fellow students can be a valuable activity. In fact, some of the labs and assignments will require you to work in pairs, which has been shown to have many educational benefits. However, sometimes it is difficult to understand what is and is not acceptable. Here are guidelines to help you understand the line between allowable collaboration and plagiarism.

- Acceptable forms of collaboration involve talking through assigned problems, discussing possible solution strategies, explaining course concepts, and assisting with debugging techniques.
- At **no point** should you exchange code or written materials with other students, nor should you write code for other people.
- Students may **only** collaborate with other students currently enrolled in this class, the instructor(s), or the CS department tutors.
- On individual assignments, each student is expected to submit a unique solution.
- On assignments that are clearly marked as pair assignments, you and your partner should submit identical solutions. However, both of you are expected to fully understand the work submitted and may be asked to explain your solution during a demo that affects your grade on that assignment.
- Following the allowed collaboration methods will still result in unique, acceptable solutions. Practices that cross the line (e.g., swapping code) can lead to issues of plagiarism and will be treated as academic misconduct.
- The top of all submitted work must include the following materials:
  - Your name (and your partner's name on pair assignments)
  - Your collaboration statement, which will resemble one of the following:
    - "I (or we in pair work) completed this assignment alone, using only materials provided by Dr. Rosiene this semester."
    - "I/We completed this assignment collaborating with [ names of the people you worked with ] and/or referring to [ cite textbooks, websites, or other materials you used that were not provided by the instructor ]."

In the event that your collaboration statement includes citations to external resources, you must also explicitly indicate which portions of your code were completed with this assistance through comments in the code. Note that even in solutions which cite external sources, the vast majority of the code must be your own---it is never acceptable to turn in a solution copied entirely from the web, even if you cite the source.

Any and all actions deemed outside of these policies will be treated as violations of the academic honesty policy and will be handled according to the procedures outlined in the following section.

Note: If you find that you have spent a substantial amount of time on a programming assignment and are still having difficulties, by all means stop and ask for help from me or a CS department tutor. Spinning your wheels in frustration is often not educationally effective, and these collaboration policies are here to help you succeed.

### **Student Illness**

The instructor recognizes that students may occasionally become incapacitated by a brief illness or injury and will be unable to attend class or complete a graded assignment or test on time. In the latter case, you are expected to notify your instructor (in advance if at all possible) that you cannot complete the work due to illness or injury. Following the [University of Hartford's Policy of Student Illness](#) as listed on [The Source](#), the student must:

1. visit the University Health Center, a doctor, or hospital for treatment on the day that you are sick and get documentation of the visit,
2. email the instructor in advance (or if not possible, within 24 hours of missed class, test, or assignment) to tell her that you cannot attend (and/or complete work) and that you are seeking or have sought treatment, and
3. as soon as you are able to come to class, bring your documentation of your doctor's visit to your instructor and arrange to make up missed work.

Allowing you to make up missed tests and assignments is at the instructor's discretion. For extended illness (a week or more), email the academic services office of YOUR college or school. Documentation of treatment is required. Do not visit the University Health Center after the day you are sick. They will not issue documentation that you were sick on the previous day.

### **Participation & Attendance**

Students are expected to attend ALL classes and are responsible for missed classes and lecture materials. Again, you are expected to attend every single class during the semester. Additional material will be provided and covered in class as the instructor deems appropriate. Any material and information you miss is your responsibility. No excuses will be accepted for poor grades. If you must be absent from a class, you must let me know either by phone or e-mail and you are responsible for any material covered or homework assigned. Informing me of your absence does NOT excuse you from any work due that day nor permit you to makeup an exam.

### **Computer and Other Electronic Equipment-use Policy**

When classes meet in a room equipped with computers, students are expected to use the computers for the purposes of completing assigned work only. At no circumstances will a student be allowed to surf the Internet, check email during a class, or use the computers for any other purpose. In violation, a student will face serious consequences.

Use of any electronic equipment (or otherwise) that is annoying or disrupting is not allowed in class. Such devices include mobile phones, beepers, PDAs, laptops, among others.

### **Students with Special Needs**

Student athletes and students registered with Learning Plus must inform the instructor of their special needs as soon as possible. This also applies to other students with any other concerns. The instructor will accommodate the student based on their special needs.