

# WDIM262 *Web Scripting: JavaScript*

## Section A

Fall 2010, 3 credits  
Mondays, 6:00-9:45pm  
Room 216

**Instructor:** Peter Wooley

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**Web:** www.peterwooley.com

**Office Hours:** By Appointment

**Final:** Monday, 5:30 - 7:30pm

**Required Text:** None

**Required Material:** Storage Device

## Course Description

Introduction to JavaScript and its use in a variety of tasks utilizing the Document Object Model built into web browsers.

## Extended Course Description

With JavaScript, students will explore everything from storing and retrieving data to validating form input and animating page content, thereby gaining a solid introductory knowledge into how JavaScript works and interoperates within Web browsers and the Internet at large. With this, I aim to provide a jumping-off point for students to delve into JavaScript, the DOM, and the client-side's true power.

## Course Objectives

Upon completion of this course, the student will be able to:

- Describe what JavaScript is and how it is implemented
- Define JavaScript operators, objects, and methods and demonstrate how they work
- Define language constructs
- Demonstrate the use of variables, functions, objects, and event handlers
- Identify JavaScript data types and define their use
- Define the Document Object Model (DOM) and demonstrate control over it
- Apply JavaScript to access, manipulate, and validate user-input data
- Use JavaScript to safely detect a browser's capabilities
- Create various JavaScript effects, such as hiding and showing content, timing events, and animating elements that involve a blending of HTML, CSS, and JavaScript

## Prerequisite

WDIM161 *Web Scripting: CSS*

## Grading

Participation ..... 10%

Assignments..... 40%

Quizzes ..... 10%

Midterm ..... 15%

Final Project ..... 25%

**A grades** are given for work that is truly excellent. It goes beyond the minimum criteria set, and is excellent in terms of craftsmanship, creativity and effort. Student shows that they challenge themselves in project design. Student exhibits commitment to expanding ideas, vocabulary and performance.

## Grading, continued

**B grades** are given for work that is above average in quality, craftsmanship and creativity. It pushes a little beyond the minimum expectations.

**C grades** are given for work that is adequate. It meets the criteria set, by the minimum standards. Craftsmanship, quality and effort are average.

**D grades** are below the standards set. The student has either not exhibited an adequate understanding of the subject, or has not put forth the minimum effort. Craftsmanship and quality are poor.

## Late Work

I will not accept late work that is turned in more than one week past the due date. Late work always receives a grade deduction of 10%. Feel free to redo work you are unsatisfied with—you may redo any assignment (provided you turned it in on time) for a higher grade. You cannot make up the final project.

## Attendance Policy for the Art Institute of Portland

Students who are absent from all scheduled classes over a 14-day period (2 weeks) are subject to automatic attendance suspension—from the Institute, not just from this course. This means the student is administratively withdrawn from all courses and cannot attend classes or continue in the current quarter unless he/she successfully appeals for reinstatement. Students who anticipate violating the attendance policy should contact their Academic Advisor or Academic Department Director immediately to discuss options such as withdrawing from the Institute or navigating the appeals process.

## Absences Policy

Regular attendance is required for successful completion of this course. A student who misses the equivalent of three (3) classes will not pass this class. Exceptions for extenuating circumstances will be considered at the discretion of the instructor.

## Participation

- Be on time for class
- Be considerate of others work and presentations
- Participate in discussions
- If you miss the midterm or final I will not allow you to make it up unless you arranged it previously with me.

## Tutoring

Free, one-on-one tutoring is available to you across all subjects through the Tutoring Center. The goal of tutoring is to help you learn and master skills so you can then confidently apply them on your own. Tutoring is helpful for students at all levels—freshman through senior, whether you want to move from a failing to a passing grade or whether you want to cement an “A.” Our tutors are faculty or, most often, fellow students who have excelled in the subject. You may find a tutor by visiting [aidepartments.com](http://aidepartments.com) or dropping by the Tutoring Center in Room 328 inside the Education Department. The Director of the Tutoring Center is Sara Cartmel, whom you are welcome to contact at 503-382-4811 or [scartmel@aii.edu](mailto:scartmel@aii.edu).

## Campus Email Policy

Please note that only your official campus email address will be used.

## Plagiarism

Plagiarism, presenting the writings, images or paraphrased ideas of another as one's own, is strictly prohibited

## Plagiarism, continued

at The Art Institute of Portland. Properly documented excerpts from others' works, when they are limited to an appropriate amount of the total length of a student's paper, are permissible when used to support a researched argument.

## ADA Statement

It is AiPD policy not to discriminate against qualified students with a documented disability in its educational programs, activities or services. If you have a disability-related need for adjustments or other accommodations in this class, contact the Dean of Student Services, Jason Clary, at 503-382-4710 or jclary@aii.edu.

## Evacuation Procedures

Please proceed to the nearest exit when the strobe lights flash and an audible alarm occurs. AiPD's evacuation location is 10th and Davis; wait there for further instructions.

**ALWAYS ASSUME ANY EVACUATION IS REAL.**

## Course Calendar

### Week 1 (October 4, 2010)

#### Discussion

- Introduction to JavaScript, "client-side powerhouse for the Web".
- The <script> tag and you: a match made in heaven.
- What can it do, what can't it do, and why?
- The magic of Version Control using git.

**Assignment 1:** *Peering into the vast storehouses of JavaScript*, due Week 2.

### Week 2 (October 11, 2010)

**Assignment Due:** Assignment 1

#### Discussion

- Commenting, storing data, and saving variables with our favorite: math!
- Grabbing and giving user feedback with alert(), prompt(), confirm(), and other available functions.
- Data types and type conversion.
- Types of Operators.

**Assignment 2:** *JavaScript Sensitivities and Swap-outs*, due Week 3.

### Week 3 (October 18, 2010)

**Assignment Due:** Assignment 2

**Quiz:** Quiz 1

#### Discussion

- Flow control statements, boolean operators, and logic statements.
- The <noscript> tag.
- Arrays, Building and Working with.

**Assignment 3:** *Array Assignment*, due Week 4.

### Week 4 (October 25, 2010)

**Assignment Due:** Assignment 3

**Quiz:** Quiz 2

#### Discussion

- Loops.
- Functions.

**Assignment 4:** *Making things Functional*, due Week 6.

# Course Calendar, continued

## Week 5 (November 1, 2010)

Midterm Exam

## Week 6 (November 8, 2010)

Assignment Due: Assignment 4

Discussion

- The Document Object Model (DOM).
- Events and Event Handlers.

Recommended Reading:

Quirksmode Introduction to the Document Object Model (<http://www.quirksmode.org/dom/intro.html>)

Assignment 5: *Event-driven Application*, due Week 7.

## Week 7 (November 15, 2010)

Assignment Due: Assignment 5

Quiz: Quiz 3

Discussion

- Basics of parsing HTML Form data.
- Form validation – calling the javascript before sending the data to the server.

## Week 8 (November 22, 2010)

Quiz: Quiz 4

Discussion

- jQuery Enlightenment.
- Dynamic HTML (DHTML): Using DOM Scripting to update, animate, and redefine the UI.
- Cookies—setting, getting, and deleting.

Assignment 6: *Final Project*, due Week 11.

## Week 9 (November 29, 2010)

Quiz: Quiz 5

Discussion

- jQuery Enlightenment.

## Week 10 (December 6, 2010)

Discussion

- Final Project individual critiques with Peter.

## Week 11 (December 13, 2010)

Assignment Due: Final Project

Discussion

- Present Final Projects.
- Discuss the Triumphs and Failures of Web Scripting: JavaScript.