

# WDIM262 Web Scripting: JavaScript

## Section A

Spring 2012, 3 credits  
Thursdays, 6:00-9:45pm  
Room 216

**Instructor:** Peter Wooley

**Email:** pwooley@aii.edu

**Phone:** 360.904.8516

**Web:** @peterwooley

**Office Hours:** By Appointment

**Final:** Monday, 7:45 - 9:45pm

**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 inter-operates within Web browsers and the Internet at large. Students will then be able to delve more deeply 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 two weeks 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.

## 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.

## Campus Email Policy

Email communication will be through eCompanion. Be sure to check your Profile in eCompanion to update your email address so that you will receive course communications in a timely manner.

## Tutoring

One-on-one tutoring is available to you across all subjects through the Tutoring Center at no extra cost. 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. Our tutors are faculty or, most often, fellow students who have excelled in the subjects for which they tutor. You may find a tutor by visiting <http://tutoring.aidepartments.com/tutors>. If you need assistance email [astevenson@ai.edu](mailto:astevenson@ai.edu) or drop by the Tutoring Center, 3rd floor inside the Education Department.

## Student Assistance Program

The college provides, confidential short-term counseling, crisis intervention, and community referral services through Talk One2One (888.617.3362) for a wide range of concerns, including relationship issues, family problems, loneliness, depression, and alcohol or drug abuse. Services are at no extra cost, available 24 hours a day, 7 days a week. If you have any further questions or are ever in need of immediate on-campus assistance, please stop by the Student Services Office on the 2nd Floor or email Daynia Flynn (Director) at [djflynn@aia.edu](mailto:djflynn@aia.edu). Her phone number is 503.382.4836.

## ADA Statement

The Art Institute of Portland provides accommodations to qualified students with disabilities. The Disability Services office assists qualified students with disabilities in acquiring reasonable and appropriate accommodations and in supporting equal access to services, programs and activities at The Art Institute of Portland. Students who seek reasonable accommodations should notify the Disabilities Services Coordinator, Daynia Flynn at [djflynn@aia.edu](mailto:djflynn@aia.edu) or 503.382.4836, of their specific limitations and, if known, their specific requested accommodations. Students will be asked to supply medical documentation of the need for accommodation. Classroom accommodations are not retroactive, but are effective only upon the student sharing approved accommodations with the instructor. Therefore, students are encouraged to request accommodations as early as feasible with the Disability

Services Coordinator to allow for time to gather necessary documentation. If you have a concern or complaint in this regard, please contact the Daynia Flynn in Room 271, or call her at 503.382.4836. Complaints will be handled in accordance with the school's Internal Grievance Procedure for Complaints of Discrimination and Harassment.

## **Evacuation Procedures – Brewery Blocks**

Please proceed to the nearest exit when the strobe lights flash and an audible alarm occur. AiPD's evacuation location is around the corner on 10th between Everett and Davis; do not stand in front of the Armory or Deschutes Brewery - someone will come to tell you when it is safe to back in the building.

**Always assume any evacuation is real!**

## **Evacuation Procedures – Park Blocks**

Please proceed to the nearest exit when the strobe lights flash and the audible alarm occur. The evacuation location is the large metal elephant located just west of the Culinary/Industrial Design buildings within the North Park Blocks between NW Park Ave. and NW 8th Ave. Someone will come and inform you when it is safe to come back into the building.

**Always assume any evacuation is real!**

## **Lab Policies**

Leave food and drink outside the class. Disciplinary action will be taken toward any student found using the equipment in an inappropriate manner, taking cell phone calls or surfing the web. Disruptive, disrespectful or rude behavior will not be tolerated.

## **Plagiarism**

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

## **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, who must notify the Associate Dean and Registrar's Office of any such exceptions.

## **Adding, Dropping and Withdrawing from courses**

The schedule adjustment period runs through the first week of the quarter (ending at 5 pm on Monday of Week 2). To add or drop a course, the student must complete a schedule adjustment form, available from the Registrar's Office. The signature of the student's academic advisor is required to make any changes to the student's schedule.

## Adding, Dropping and Withdrawing from courses, Continued

**Withdrawal (W/WF):** The student who withdraws from a course or from the program during the first nine weeks of the quarter will be assigned a “W” code for each course. The “W” code is not used in computation of the student’s grade point average; however, “W” credits are counted toward total credits attempted. The student who withdraws from a course or from the program after the ninth week of the quarter will be assigned a “WF” code for each course. The “WF” code is the equivalent of a grade of “F” and is used in computing the student’s grade point average. Students wishing to withdraw from The Art Institute of Portland must file an official status change form with the Registrar.

## Quarter Credit Hour Definition

A quarter credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably approximates not less than:

- (1) One hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for 10-12 weeks, or the equivalent amount of work over a different amount of time; or
- (2) At least an equivalent amount of work as required in paragraph (1) of this definition for other academic activities as established by the institution including laboratory work, internships, practice, studio work, and other academic work leading to the award of credit hours.

## Course Calendar

### Week 1 (January 10th, 2013)

#### 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?
- Commenting, storing data, and saving variables with our favorite: math!

**Assignment 1**, due Week 2

### Week 2

**Assignment Due:** Assignment 1

#### Discussion

- Grabbing and giving user feedback with alert(), prompt() and confirm()
- Data types and type conversion
- Types of Operators

**Assignment 2**, due Week 3

### Week 3

**Assignment Due:** Assignment 2

**Quiz:** Quiz 1

#### Discussion

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

**Assignment 3**, due Week 4

# Course Calendar, continued

## Week 4

**Assignment Due:** Assignment 3

**Quiz:** Quiz 2

**Discussion**

- Functions

**Assignment 4, due Week 6**

## Week 5 (February 7th, 2013)

**Midterm Exam**

## Week 6

**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, due Week 7**

## Week 7

**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
- Using DOM Scripting to update, animate, and redefine the UI
- Cookies—setting, getting, and deleting

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

## Week 8

**Quiz:** Quiz 4

**Discussion**

- jQuery Enlightenment

## Week 9

**Quiz:** Quiz 4

**Discussion**

- Pragmatic jQuery

## Week 10 (March 14th, 2013)

**Discussion**

- Final Project individual critiques with Peter

## Week 11 (Monday, March 18th, 2013 @ 7:45pm)

**Assignment Due:** Final Project

**Discussion**

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