# WDIM355 Client-Side Scripting

Section A Winter 2011, 3 credits Thursdays, 6:00-9:45pm Room 216 Instructor: Peter Wooley Email: pwooley@aii.edu Phone: 360.904.8516 Web: peterwooley.com Office Hours: By Appointment Final: Monday, 7:45-9:45pm Required Text: None

Required Material: Removable Drive

## **Course Description**

Client-side scripting as a method to develop advanced web applications.

# **Extended Course Description**

Harness the power of JavaScript in an accessible, Standards-minded, and cross-browser way, focusing on code re-use through means of libraries and Object-oriented principles.

## Course Outcomes

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

- Create web applications using Object-Oriented JavaScript
- · Generate reusable code to increase efficiency
- Manipulate JavaScript to use the Document Object Model (DOM)
- Create dynamic web elements using JavaScript
- Explore JavaScript-based libraries to increase efficiency in web application development

## **Recommended Reading**

Learning jQuery by Karl Swedberg and Jonathan Chaffer (ISBN-13: 978-1847196705) jQuery in Action by Bear Bibeault & Yehuda Katz (ISBN-13: 978-1935182320) jQuery Cookbook, Edited by Cody Lindley (ISBN-13: 978-0596159771) JavaScript: The Good Parts by Douglas Crockford (ISBN-13: 978-0596517748)

## **Prerequisite**

WDIM262 Web Scripting: JavaScript

# 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.

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

# **Grading, Continued**

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.

## **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

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

## **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**

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 other's 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.

## Adding, Dropping and Withdrawing from courses

Schedule Adjustment period: 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.

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.

# **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 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.

## Students with Disabilities

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 Disabilities/Student Support Coordinator, Daynia Flynn, at 503-382-4836 or djflynn@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 (January 13, 2011)

#### **Discussion**

- Introduction to Epic JavaScript
- What can it do, what can't it do, and why?
- What Object-oriented is and why to use it
- Libraries, who needs 'em?
- What about this Asynchronous JavaScript and XML?

Assignment: Diving, due Week 2

#### Week 2

**Assignment Due: Diving** 

Quiz: Quiz 1
Discussion

- · Object-oriented JavaScript, in practice
- Implicit and Explicit Binding
- How Objects Interact
- Best Practices

Assignment: Objectified, due Week 3

#### Week 3

**Assignment Due:** Objectified

Quiz: Quiz 2 Discussion

- jQuery Selectors
- jQuery Events
- Object-Oriented & jQuery, putting things together

Assignment: Mock-up, due Week 4

## Week 4

Assignment Due: Mock-up

Quiz: Quiz 3
Discussion
• jQuery + Ajax

• jQuery UI

• jQuery + YUI

Assignment: Midterm Project, due Week 5

## Week 5 (February 10, 2011)

**Assignment Due: Midterm Project** 

**Discussion** 

- Present Midterm Projects
- My Development Environments
- Debugging in the Browser

# **Course Calendar, Continued**

#### Week 6

#### **Discussion**

- Extending jQuery
- Mobile Development
- Coding Best Practices
- Unit Testing

Assignment: Clean, due Week 7

#### Week 7

**Assignment Due: Clean** 

Quiz: Quiz 4
Discussion
• node.js

Assignment: Final Project Proposal, due Week 8

#### Week 8

Assignment Due: Final Project Proposal

Quiz: Quiz 5
Discussion

• Presentation of Final Project Proposals

#### Week 9

#### **Discussion**

- Final Project design critiques with Peter.
- Work on Final Projects

## Week 10

#### **Discussion**

- Final Project functional critiques with Peter.
- Work on Final Projects

### Week 11 (March 21, 2011)

**Assignment Due: Final Project** 

#### **Discussion**

- Present Final Projects
- Discuss the Triumphs and Failures of Client-side Scripting