WDIM355 Client-Side Scripting

Section A Winter 2012, 3 credits Thursdays, 6:00-9:45pm Room 216 Instructor: Peter Wooley Email: pwooley@aii.edu Phone: 360.904.8516 Web: wdim355.heroku.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

Participation10% Assignments......40% Quizzes10% Midterm15% Final Project25%

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.

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.

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 Student Support and Disabilities Coordinator, Daynia Flynn at ext. 4836 or djflynn@aii.edu.

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.

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.

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.

Evacuation Procedures

Please proceed to the nearest exit when the strobe lights flash and an audible alarm occurs. 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 come back in the building.

Always assume any evacuation is real!

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 subject. You may find a tutor by visiting aidepartments.com or dropping by the Tutoring Center in Room 328 inside the Education Department. You may also contact Anne Coleman-Stevenson (astevenson@aii.edu).

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 FREE and 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@aii.edu. Her phone number is (503) 382-4836.

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.

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.

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 12, 2012)

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
- ¡Query the Great
- What's all 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

Assignment: Objectified, due Week 3

Week 3

Assignment Due: Objectified

Quiz: Quiz 2 Discussion

- jQuery Events & Custom Events
- Loose Coupling
- 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

Assignment: Midterm Project, due Week 5

Week 5 (February 9, 2012)

Assignment Due: Midterm Project

Discussion

- Present Midterm Projects
- An Introduction to CoffeeScript

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

- An introduction to node.js
- A bit more CoffeeScript

Assignment: Final Project Proposal, due Week 8

Week 8

Assignment Due: Final Project Proposal

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 19, 2012)

Assignment Due: Final Project

Discussion

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