

# WDIM387 Advanced Scripting

## Section A

Summer 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: Brains

## Course Description

Exploration and practice of advanced scripting languages.

## Extended Course Description

Experiment with, learn about, and deploy fully-functional web applications utilizing database-driven back-ends, functionally-sound front-ends, with documented, tested code powering everything.

## Course Objectives

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

- Explore the use of client-side and server-side scripting in a single web application
- Describe the advantages of using AJAX with server-side languages
- Compose AJAX scripts with server-side languages to create dynamic web pages
- Develop working web applications using AJAX and server-side languages

## Recommended Reading

*JavaScript: The Good Parts*, by Douglas Crockford (ISBN-13: 978-0596517748)

*Adaptive Web Design*, by Aaron Gustafson (ISBN-13: 978-0983589501)

## Prerequisite

WDIM366 *Server-Side Scripting II*

## Grading

Participation ..... 10%

Assignments..... 40%

Final Project ..... 50%

**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.

**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.

## 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, practica, studio work, and other academic work leading to the award of credit hours.

## 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.

## 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

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](http://aidepartments.com) or dropping by the Tutoring Center in Room 328 inside the Education Department. You may also contact Kathleen O'Brien ([kpobrien@aii.edu](mailto:kpobrien@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 Student Support and Disabilities Coordinator, Daynia Flynn at ext. 4836 [djflynn@aii.edu](mailto:djflynn@aii.edu)

## Student Assistance Program

The college provides confidential short-term counseling, crisis intervention, and community referral services through the Wellness Corporation Student Assistance Program (SAP), <https://artinstitutes.personaladvantage.com>, 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, at 1.800.326.6142. 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.

## 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 (July 14th, 2011)

### Discussion

- What is the web missing?
- Git & GitHub
- Server- & Client-side frameworks
- Namespacing & JSON
- OOP, In Practice

**Assignment:** *Assignment 1*, due Week 2

## Week 2

**Assignment Due:** *Assignment 1*

### Discussion

- Design Patterns
- localStorage
- Closures
- Debugging Client- & Server-side

**Assignment:** *Assignment 2*, due Week 3

## Week 3

**Assignment Due:** *Assignment 2*

### Discussion

- Ajax Best Practices
- Canvas

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

## Week 4

**Assignment Due:** *Assignment 3*

### Discussion

- API Documentation
- Unit Testing
- Profiling Web Applications
- Automated Functional Testing

**Assignment:** *Assignment 4*, due Week 5

## Week 5

**Assignment Due:** *Assignment 4*

### Discussion

- Designing and Using Open APIs
- How To Write a Library

**Assignment:** *Assignment 5*, due Week 6

## Week 6

**Assignment Due:** *Assignment 5*

### Discussion

- *Final Project* idea exploration
- *Final Project* pitches

**Assignment:** *The Final Project*, due Week 10

# Course Calendar, Continued

## Week 7

### Discussion

- Server- and Client-side code optimization techniques
- Continuous integration
- Code standards and sniffing
- Issue tracking

## Week 8

### Discussion

- *Final Project* Design critiques

## Week 9

### Discussion

- *To Be Determined by Class*

## Week 10 (September 12th, 2011)

### Discussion

- *Final Project* presentations
- Discuss the triumphs and failures of Advanced Scripting