# WDIM387 Advanced Scripting

Section A Summer 2010, 3 credits Mondays, 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, 6:00 - 9:45pm Required Text: None

Required Material: Removable Drive

# **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**

Learning jQuery 1.3, by Jonathan Chaffer, Karl Swedberg, and John Resig (ISBN-13: 978-1-847196-70-5) JavaScript: The Good Parts, by Douglas Crockford (ISBN-13: 978-0596517748)

# **Prerequisite**

WDIM366 Server-Side Scripting II

# Grading

Participation ...... 10% First Project ....... 20% Second Project ...... 50% 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.

# Grading, continued

**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 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.

# **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 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 Disability Services Coordinator, Mara Sievers, at 503-382-4836 or msievers@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 (July 12th, 2010)

#### Discussion

- What is the web missing?
- Using source control management software
- A basic, OOP approach to web applications
- · Server- and Client-side frameworks
- Writing & generating API documentation

Assignment: First Project, due Week 4

### Week 2 (July 19th, 2010)

#### **Discussion**

- First Project progress
- · Ajax file uploading
- JSON with Padding
- Understanding unit testing

### Week 3 (July 26th, 2010)

#### **Discussion**

- Applying game mechanics to web applications
- UI design patterns

#### Week 4 (August 2nd, 2010)

**Assignment Due:** First Project

#### **Discussion**

- First Project presentations
- Code review: group critique of code and design
- Profiling web applications
- Automated functional testing

Assignment: Second Project, due Week 7

### Week 5 (August 9th, 2010)

#### **Discussion**

- Designing, building and using an open API
- · Developing for mobile consumption

# **Course Calendar, Continued**

### Week 6 (August 16th, 2010)

#### **Discussion**

- Second Project progress
- Server- and Client-side code optimization techniques
- Continuous integration
- · Code standards and sniffing
- Issue tracking
- · Lessons from World of Warcraft

### Week 7 (August 23rd, 2010)

**Assignment Due: Second Project** 

#### **Discussion**

- Code review: group critique of code and design
- Final Project groups
- Final Project idea exploration
- Final Project pitches

Assignment: Final Project, due Week 10

### Week 8 (August 30th, 2010)

#### **Discussion**

• Final Project Design critiques

### Week 9 (September 6th, 2010)

No Class, Memorial Day

### Week 10 (September 13th, 2010)

#### **Discussion**

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