# **CSS 233 Interactive Media Technologies**

Spring 2013

TTh 5:45pm UW1-221 http://courses.washington.edu/css233/timots/

**Instructor:** Timothy C. Stewart (timots@u.washington.edu)

Office: UW1-349

Office Hours: TTh before class; or by appointment

### Course description:

Examines the core technologies used to design, build and support media applications. Create interactive media projects using media production processes and tools; applying programming constructs, incorporating text and multimedia content, and using standard formats and languages.

# **Learning Objectives:**

- Conversant on technologies used to design and build interactive media applications
- Understand and apply basic programming constructs such as functions, data types and variables, conditionals, and loops using a scripting language
- Describe and use standard formats for structuring and presenting content
- Describe and create multimedia assets using standard lossless and lossy formats
- Build simple interactive media projects that incorporate programming, content, multimedia assets, and presentation
- Describe and follow common processes and tools used for managing team projects

#### Homework:

You will be responsible for completing several homework assignments that allow you to apply the concepts and skills learned in class. Homework assignments are expected to be done on an individual basis unless otherwise explicitly discussed in class. Each homework assignment will build upon the previous work, so you are expected to make corrections as warranted to be able to fulfill the additional requirements provided. All homework should be submitted online through Canvas. Each homework project will be assessed on: meeting requirements; design quality; content; and code structure.

## **Projects:**

Projects will involve small teams of 2-3 students using approved methods and creating a small interactive media application. You will be expected to apply media production processes, good design concepts, and the skills learned as part of the course to your projects. During the first week, we will form teams and identify the nature of the project (based on class input). Teams will be responsible for providing regular project status (each *sprint* cycle) throughout the quarter, culminating in a class demonstration during the final class sessions. You will have the opportunity to provide peer review of your team members with regards to the quality and performance of the collaboration, effort, and work products; this peer review will have an impact on individual grades with respect to the project. Projects will be graded on the ability to meet schedule deadlines and in the overall scope and quality of the final project delivered.

#### Quizzes and Exams:

There will be two quizzes and a final exam as noted in the schedule. The quizzes will focus on concepts, definitions, and syntax for each unit of the course. The final exam will focus on lectures, readings, discussion, projects, and homework leading up to the course conclusion. You will be expected to be able to create and use artifacts related to the class projects. A study guide will be provided for the quizzes and the final exam on the class website.

### Grading:

Homework 30% / Projects 30% / Quizzes & Final exam 40% (A scale of 90's (3.5-4.0), 80's (2.5-3.4), 70's (1.5-2.4), 60's (0.7-1.4) is a general guide to grade assignments but may not be *rigidly* followed.)

## **Textbooks and Readings:**

- Cruse, D. and Jordan, L. (2011). <u>HTML5 Multimedia Development Cookbook</u>, Packt Publishing. ISBN: 978-1849691048
- Devlin, I. (2011). <u>HTML5 Multimedia: Develop and Design</u>, Peachpit Press. ISBN: 9780321793935
- Haverbeke, M. (2011). <u>Eloquent JavaScript: A Modern Introduction to Programming</u>, No Starch Press. ISBN: 978-1593272821
- Additional Readings: Various articles, papers, and publications available through the internet or electronic reserve may be assigned. This supplementary reading may be updated throughout the guarter as needed.

#### **Class Website and Notes:**

Canvas will be used to host the class resources, where you will find the schedule, assignments, grades, ad hoc forums, and other material. You should be able to access these class materials at: <a href="http://uw.instructure.com">http://uw.instructure.com</a>. You are **strongly** encouraged to participate in discussion threads at this site, both to ask questions and to volunteer answers and assistance to your classmates.

### **Academic Integrity:**

You are expected to provide original work based on your own effort for this course. You will be expected to participate as an equal member of a project team in any group projects. You will receive zero credit for any exam or coursework for which you are discovered in violation of the University's Academic Integrity policies.

### **Disability Accommodations:**

To request academic accommodations due to a disability, please contact Disability Resources (DRS) in UW1 175, (425) 352-5307, (425) 352-5303 (TDD). If you have a documented disability on file, please have your DRS counselor contact me so that we can discuss any accommodations you might need for this class.

#### Other Policies & Information:

Unless otherwise directed, computer use during lecture is limited to taking notes only.
 You will not display any images on your screen during lecture that may be distracting

- to your neighbors. Please turn off cell phones during class; any form of cell phone use during class time is prohibited.
- Assignments are due at Midnight on the posted due date. Late assignments will not be accepted. No make-up exams will be given except under dire and exceptional circumstances.

# **Topics Covered and Tentative Schedule:**

This is an approximate ordering of topics and the schedule below is subject to change. All changes will be announced in class and/or via Canvas announcement. Topical reading is labeled according to the textbook author.

(P = Project assignment; H = Homework assignment; Q = in-class Quiz)

Sessions		Topics	Material	Assignments
4/2 4/4		Introduction to media technologies (notes 1)	Cruse 1; Devlin 1	P: Inception
4/9 4/11		Presentation (notes 2)	Cruse 2,3; Devlin 6	H: Simple content
4/16 4/18		Presentation / accessibility (notes 3)	Cruse 4	P: Backlog
4/23 4/25		Introduction to programming (notes 4)	Haverbk 1	H: Presentation O: Content/presentation
4/30 5/2		Functions; simple data structures (notes 5)	Haverbk 2,3	H: Simple programming P: Sprint 1
5/7 5/9	7	Manipulating simple content (notes 6)	Haverbk 5	<b>^</b>
5/14 5/16		Multimedia content (notes 7)	Devlin 2-4	H: Interactive content P: Sprint 2
5/21 5/23		Simple DOM interaction (notes 8)	Cruse 5,7; Haverbk 10,11	Q: Programming
5/28 5/30		Graphical manipulation (notes 9)	Cruse 6; Devlin 9,10	P: Sprint 3
6/4 6/6		Summary; pulling it all together (notes 10)		P: Presentation
6/11/13		Final exam, in class		