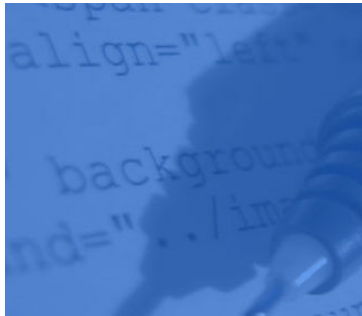**Miami University: Interactive Design**

Course Number and Section: IMS222 Interactive Design	
Term: Fall, 2009	Meeting Time: T/TH 2:15-5:00
	Location: Hiestand 200
Instructor: Lindsay D. Grace	
Office Phone: 513-529-2203	Email: LGrace@muohio.edu
Office Address: Hiestand 206	
Course Site: http://Miami.LGrace.com (no login required – public info)	
Course Site: http://my.csi.muohio.edu (login required, private info)	
Office Hours: 10:45 am – 1:45 pm Thursday and by appointment	

Course Overview:

This course is an opportunity to investigate interactive design as it relates to a variety of media types. Using industry standard tools, students will learn to design, implement and refine interactive media for specific audiences. For the purpose of this class, interactive media includes websites, menu systems, and the variety of software and hardware solutions that intersect the domain of human-computer interaction.

Effective interactive design is often achieved by the creative application of sometimes disparate disciplines. Students should expect to incorporate their understanding of art theory, psychology, commercial business practice and good old fashioned creative problem solving.

This course will use web design and web page development as the central case study for exploring the many challenges of interactive design.

Required Textbook:

HTML, XHTML, & CSS for the World Wide Web: Visual Quickstart Guide **6th edition**
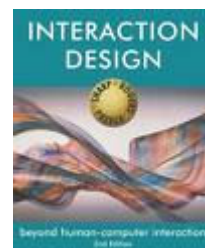Elizabeth Castro / Peachpit Press

Paperback: 456 pages
ISBN-10: 0321430840
ISBN-13: 978-0321430847

Suggested – but not required

Interaction Design: Second Edition
Yvonne Rogers and Helen Sharp

Paperback: 800 pages
- **ISBN-10:** 0470018666   **ISBN-13:** 978-0470018668

Students may also receive timely articles debating interactive design standards and practices as well as excerpts from standard texts available on the class site or distributed in class.

Required Materials

Reliable Storage Media: USB Drive or portable hard drive for in-class work

Access to Adobe Suite – CS4: Dreamweaver, Flash, Photoshop, Bridge

Estimated Homework Hours:

As always, learning a language takes practice. Expect at least 3-6 hours a week.

Objectives:

Upon successful completion of this course, students should be able to:

- Write and edit (X)HTML, CSS
- Understand and edit JavaScript code
- Optimize technical solutions for fluid design adjustments and appropriate response to user needs
- Identify, create, collect and organize assets appropriate to client standards
- Optimize a web design for search engines and specific technical needs (e.g. iPhone, Kiosk, etc)
- Use professional web authoring tools including Dreamweaver and Photoshop to produce websites and other interactive media
- Use and include Flash technology on a basic site
- Apply interface design principles to a variety of human-computer interaction environments
- Meet audience and client needs through considered research and inventive solutions
- Maintain a set of web pages on the Internet
- Apply usability standards including consideration for universal accessibility
- Use existing web scripts and write basic web scripting code (JavaScript)
- Identify and incorporate varied media assets in a web design (e.g. video, audio, games, etc)
- Understand how design and development dovetail to produce competent interactive media
- Understand and be able to draft a basic user task analysis
- Understand the framework under which a variety of web sites are produced (e.g. development, quality assurance, production pipeline, wireframes and mock ups)

Course Schedule

	Topic(s)	Due dates (reading to be completed by the end of the week it is posted)
Week 1: **Interaction Design** 1/12/10	Introduction **Design:** Defining interaction The feedback loop	**Design Reading:** Interaction Design, Beyond HCI pp 3-10
Week: **Web Design and Development** 1/19/10	**Development:** Making Websites - Client Server and the Browser - Language and Translation - HTML Coding introduced -	**Tech Reading:** Introduction: pages 13-26 Design Chapter 1: 27-42
Week 3: **Designing with People in Mind** 1/26/10	**Development:** (X)HTML Fundamentals - Writing Code - Habits of highly Effective Coders – the semantic web - CSS Introduction **Design:** It's About People - Optimizing Use - Determining audience needs - Demo, Psycho, Techno	**Tech Reading**: Chapter 2: 44-46 Chapter 3: 55-58, 64-65 **Design Reading**: Interaction Design Chapter 1, pp 10-18 **Don't Make Me Think** Chapter 2
Week 4: **Information Architecture** 2/2/10	**Development**: (X)HTML Code Continued - Foundation tags. Extended tags. Syntax. - How to make life easy on yourself – CSS Introduction **Design**: Information Architecture	**Tech Reading**: Chapter 7: 119-124 Chapter 8: 127-136 **Design Reading**: The Elements of User Experience – Chapter 2 *Assignment 1: Come to next week's class with an elevator pitch – what kind of site would you like to make? Have a 2-3 minute presentation read to present next class– who, what, where, why, etc. – think small*
Week 5: **Diagnosis and Design** 2/9/10	Elevator Pitches for site ideas Wireframes, Comps, and Paper Prototyping User task analysis	**Assignment 2 (In class): Comp Lab assignment – find a partner and diagnose your first design, document the diagnosis and prepare presentation for next week**
Week 6: **Visual Content**	**Design Pitches – Problems and Solutions**	**Tech Reading:** Chapter 5: 81-102 (skim)

and "Stimuli"
 	
2/23/10
	Present comp lab findings (2-3 minute presentation)
	
	CSS and Layout Basics
	
	Web Graphics and Media
	
	Photoshop for Web Design
	    - Choosing graphic formats
	    - Integrating other technologies and media
	    - Flash and other plugins
		Design Reading:
		  Interaction Design Chapter 1, 18-20
		
		Lab time provided (bring questions)

Week 7 Project 1 Due 3/2/10	**Present websites and critique**	**Project 1 Assignment Due with presentation** **-Completed project burned to CD (5 page min) - 5 minute presentation of your work** **This project is 25% of your grade**
Week 8 - 3/9	**Spring Break**	

**Week 9:
Back to the
Drawing Board**
 	
3/2/10
	CSS and Layout - continued
	    - Liquid, elastic, and static
	    - Photoshop for the Web and Image tricks – Animation
	
	Development: Dreamweaver
	    - Forms
	    - Flash, Java, Plugins and "instant" JavaScript
		Tech Reading:
		  Chapter 11: 169-182
		  Chapter 17: 253-280

Week 10 3/16/10	**Development**: Dreamweaver Tips and Tricks **Introduction to Flash and the Dreamweaver Timeline**	**Assignment 3 (in class)**: Begin Final Project Wireframes, Comps/Image mockups and research

**Week 11:
3/23/10**
	Development Tools: Dreamweaver and Ajax
	
	JavaScript Primer
	Refining your interface: Site navigation. Continuity. Etc.
		Continue work on wireframes, comps and image mockups
		  Chapter 18: 281-310
		  Chapter 19: 311-320

Week 12: 3/30/10		**Project 2: Due Present final project wireframes, comps/image mockups and research presentation**

Week 13: 4/6/10	Sound, video	Chapter 20: 321-326
Week 14: 4/13/10	Web Publication: FTP and SEO (Search Engine Optimization)	Scripting Supplement
Week 15: 4/20/10	User Study and task analysis	
Week 16: 4/27/10	Final Project Presentations and Beta Turn in (on CD and online)	**Project 3: Beta Due (working site with very minor problems)**
May 3- 7	Finals Week	**Project 4: Final version of site Due at the start of exam period**

*Schedule subject to change based on student need and at the instructor's discretion.

Grading System:

Point Score range	Letter Grade
93 and above	A
90-92	A-
87-89	B+
83-86	B
80-82	B-
77-79	C+
73-76	C
70-72	C-
67-69	D+
63-66	D
Below 62	F

Score Breakdown:

- **Assignments (includes traditional homework if needed):** **15%**
  - **Assignment 1: Elevator Pitch (5%)**
  - **Assignment 2: Comp lab / partner diagnosis (5%)**
  - **Assignment 3: Wireframe/Comp Prep for final site (5%)**
- **Project 1: Website #1 (basic 5 page site):** **25%**
- **Project 2: Site spec and pitch (presentation and documentation):** **10%**
- **Project 3: Site Beta**
       min 10 pages – (90% function and error free-ready for limited release) **30%**
- **Project 4: Site Final (revisions to project 3 –best work and uploaded)** **10%**
- **Participation:** **10%**

Course Requirements and Policies

All students must adhere to the guidelines set forth by the Miami University handbook.

Assignments (15%)

All assignments are due at the beginning of the class.

Students should provide a copy of their design work on a clearly labeled CD. All assignments must be clearly labeled (filenames, correct file extensions, etc), and provided in a system folder with the students first and last name.

Students should always keep a backup copy of their work. Lost data or computer failures are not excuses for poor or missing work.

No late assignments will be accepted. In this course, assignments build on the previous. Failure to complete prior assignments will make each subsequent assignment more difficult. It is in your best interest to complete each assignment on time and to the best of your ability. Always hand in what you have, even if it does not work. **Partial credit is better than no credit at all.**

A separate list of evaluation criteria are provided for the major projects in this class. Please review that list for further details.

Participation Grade (10%):

Students are encouraged to ask questions and initiate dialogue about interaction design in the course. Given the diverse set of majors participating in the course, there is terrific potential for informative discussion.

This course is delivered through a studio model. In a studio model students spend more time in class and are expected to participate in class critiques. Critiques are opportunities to share ideas and provide constructive feedback about design and technical considerations for everyone's project. Positive and negative feedback should be provided by all students in the class.

Participation grades are determined by students willingness to answer questions, preparedness for discussion (did you do the reading?), and the feedback they provide in class. Absences will negatively effect your participation grade. In cases where a blog or forum is used for the class, students' contributions to the blog or forum effect their participation grade.

Attendance / Absences:

As stated in the Student Handbook, you are expected to attend all scheduled class meetings. The attendance policy for this course is as follows: Up to two absences will be tolerated without penalty. Three unexcused absences will result in the final grade being lowered one letter grade (10pts. on a 100pt. scale). Four unexcused absences will result in the final grade being lowered two letter grades. The fifth unexcused absence will be regarded as the final cut and the Registrar will be notified to drop the student from the course. The three absence allowance is provided for emergency and health related situations. It is the student's responsibility to provide information concerning all absences and you should speak to the instructor before missing a class. The determination of an excused (vs. unexcused) absence is up to the discretion of the instructor (doctor's written excuse for example). Please do not arrive late or leave early from class. If you arrive late it is your responsibility to make sure you're counted as present. Please see the student handbook for specifics on university policies.

All planned absences should be clearly explained in an email sent to the instructor before the student misses the class. The instructor will reply indicating whether or not the absence is excused.

All issues of attendance and tardiness will be handled as school policy dictates and at the discretion of the instructor.

In Class Conduct:

In-class web surfing, email, electronic chat, text messaging, or related behavior is prohibited during class meetings. Please be attentive to people's comments and engage yourself in class.

No recording (audio or visual) of this class may be made without the prior written consent of the instructor.

Statement of Community and Non-Discrimination: Miami University is committed to fostering a supportive learning environment for all students irrespective of individual differences in gender, race, national origin, religion, handicapping condition, sexual preference or age. Students should expect, and help create, a learning environment free from all forms of prejudice. If disrespectful behaviors occur in class, please seek the assistance of your instructor or the IMS director.

Disability Support

Students who have any disability, either permanent or temporary, which might affect their ability to perform in this class, are encouraged to inform me immediately." (If a student self-identifies, please contact the Rinella Learning Center (9-8741). Website: http://www.units.muohio.edu/saf/lrn/

Cheating and Plagiarism:

Any student that cheats or plagiarizes will be reported to the academic standards committee and may be dismissed from the course. A student may be considered in violation of cheating and plagiarism policy if they present the work of others as their own, even if the work is provided through multiple online and print resources. Much like a writing course, students involved in web scripting, programming and related activities should attribute their work by stating the resource from which the work was derived. This is common practice in industry. Examples of such attribution are provided below:

<!--An implementation of the "floating div alignment hack" as first offered by Sarah Smith at CSSZenGarden.com on April 30, 2009-->

//Bubble Sort algorithm in Actionscript provided at //http://mike.newgrounds.com/news/post/59329

/* Derived from Craig Reynold's Boids Flocking Behavior as specified on pp. 48-52 of Great Game Algorithms, ISBN 1233131321 */

All homework is to be completed independently (except when told otherwise). Any student who is caught or suspected of working in conjunction with any other student will be penalized. Using lines of code borrowed from any source other than the prescribed book for this course will be considered plagiarism unless the student clearly credits their source. Do not use websites, message boards, chat rooms, or other related resources to solve homework problems.

When presenting your work, you should also credit sources and attribute work appropriately.