

Miami University: Interaction Design

Course Number and Section: IMS222 Interactive Design	
Term: Fall, 2009	Meeting Time: T/TH 2:15-4:50
	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	
Office Hours: 10:00 am – 1:00 pm Wednesday 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-13: 978-0321430847



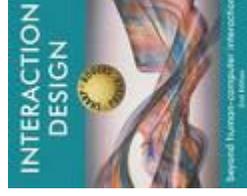
ISBN-10: 0321430840

Available as a no-fee electronic text from the Library

Suggested – but not required

Interaction Design: Second Edition

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



Yvonne Rogers and Helen Sharp

Students may also receive timely articles debating interactive design standards available on the class site or distributed in class.

and practices as well as excerpts from standard texts

Required Materials

Reliable Storage Media: **USB Drive or portable hard drive** for in-class work (must have by second class meeting)

Access to Adobe Suite – CS5: Dreamweaver, Flash, Photoshop, Bridge (available in Hiestand 200)

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

	Day 1 – Design Day	Day 2 - Development/Making Day	Due (reading to be completed by the end of the week it is posted)
Week 1: 8/24 -8/26 Interaction Design	Introduction and Orientation Design: Defining interactions and HCI Overview of Technology	Development: Making Websites <ul style="list-style-type: none"> - Client, Server and the Browser - Language and Translation-HTML,CSS and Dreamweaver - Markup Coding introduced 	Design Reading: Interaction Design, Beyond HCI pp 3-10
Week: 8/31 – 9/2 Web Design and Development	Design: Understanding the feedback loop Interesting Interactions Designing Interactions – Process and Creative Workflow	Development: Introduction to Dreamweaver: <ul style="list-style-type: none"> • Linking, Images and text Introduction to Photoshop <ul style="list-style-type: none"> • Resolution and document editing 	Tech Reading: Introduction: pages 13-26 Design Chapter 1: 27-42
Week 3: 9/7 – 9/9 Designing with People in Mind	Design: It's About People <ul style="list-style-type: none"> - Optimizing Use/Usability - Determining audience needs Demo, Psycho, Technographics	Development: Dreamweaver Continued: <ul style="list-style-type: none"> - (X)HTML Fundamentals - Habits of Highly Effective Coders – the semantic web - CSS Introduction 	Design Reading: Interaction Design Chapter 1, pp 10-18 Don't Make Me Think Chapter 2 Tech Reading: Chapter 2: 44-46 Chapter 3: 55-58, 64-65
Week 4: 9/14 – 9/16 Information Architecture	Design: Information Architecture Formal Paper Prototypes and Testing Pitching your idea	Development: <ul style="list-style-type: none"> - CSS Crash Course - Web Page Layout and structure: Layers, Tables, and Frames - Liquid, elastic, and static 	Design Reading: The Elements of User Experience – Chapter 2 Tech Reading: Chapter 7: 119-124 Chapter 8: 127-136 Assignment 1 Prep: Come to next week's class with an elevator pitch – what kind of site would you like to make? Have a 2-3 minute graphical presentation (e.g. Powerpoint) ready for 9/21– who, what,

					where, why, etc. –think small, simple site
Week 5: 9/21 – 9/23 Diagnosis and Design	Due: Assignment 1 Due: Pitch In Class Presentation of Elevator Pitches (site ideas) Design: User task analysis	Development: Making Wireframes, Comps, and Paper Prototyping with Photoshop and others Design Reading: Interaction Design Chapter 1, 18-20 Tech Reading: Chapter 5: 81-102 (skim)	Review feedback from pitches and revise your design Create a 2-3 screen “comp” for in class review	Development: Making Wireframes, Comps, and Paper Prototyping with Photoshop and others Assignment 2 Due: Comps Present audience observations from the comp review – please include your final comps in presentation Student Requested Topics: How to . . .	
Week 6: 9/28 – 9/30 Visual Content and “Stimuli”	Design: Review your comps with at least 2 other people, document the diagnosis and prepare presentation for next class.	Design: Review your comps with at least 2 other people, document the diagnosis and prepare presentation for next class.	Design: Review your comps with at least 2 other people, document the diagnosis and prepare presentation for next class.	Design: Review your comps with at least 2 other people, document the diagnosis and prepare presentation for next class.	
Week 7 10/5 – 10/7		Lab Week – Individual help with implementing your web page design			
Week 8 - 3/9 10/12 – 10/14 Project 1 Due Due: Present Midterm websites and provide critique -Completed project burned to CD (5 page min) - 5 minute presentation of your work ready 25% of your grade					
Week 9: Back to the Drawing Board 10/19 – 10/21	Design: Animation and Engagement Balance doing and seeing Flash, Javascript , Java and Plugins (with a little development)	Development: Animation with Photoshop Animation with Dreamweaver Animation with 3 rd Party Tools	Tech Reading: Chapter 11: 169-182 Chapter 17: 253-280		
Week 10 10/26-10/28	Calculation and Engagement AJAX	Development: Dreamweaver SPRY Introduction to Flash and the Dreamweaver Timeline	Assignment 3 Prep (some in class): Begin Final Project Wireframes, Comps/Image mockups and research		
Week 11: 11/2-11/4	Showcasing: Galleries and Data Visualization	Development: JavaScript Primer – Lightbox and others	Continue work on wireframes, comps and image mockups Chapter 18: 281-310 Chapter 19: 311-320		

Week 12: 11/9-11/11	Assignment 3: Due Present final project draft: wireframes, comps/image mockups and research presentation 5-7 Minute presentation		10% of your grade
Week 13: 11/16-11/18	Design: Sound, Video Making Content for other Devices	Sound, video	Tech Reading: Chapter 20: 321-326
Week 14: 11/23	Design: SEO (Search Engine Optimization) – Making your site more visible Development: Web Publication: FTP and Publishing Optimizing page information	Thanksgiving Break – No Class Meeting	
Week 15: 11/30-12/2	User Study and task analysis Lab/Studio	Development: Pre Beta Development Support	
Week 16: 12/7-12/9	Final Project Presentations and Beta Turn in due (on CD and online) Project 3: Beta Due (working site with very minor problems) -		25% of your grade
12/13	Finals Week Project 4: Final version of site Due at the start of exam period		10% of your grade

*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): 25%
 - Assignment 1: Elevator Pitch for Midterm Site (5%)
 - Assignment 2: Midterm Site Comps (5%)
 - Assignment 3: Competency Quiz(es) – if needed (5%)
 - Assignment 3: Pitch/Comp/Wireframe Prep for final site (10%)
- Project 1: Website #1 25%
 - Basic 5 page site: good design, working site
- Project 2: Site Beta Website #2 25%
 - min 10 pages – (90% function and error free-ready for limited release)
- Project 4: 15%
 - Site Final (revisions to site 2 –best work and uploaded)
- Participation: 10%
 - Critique comments, questions in class, preparedness

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.