ISAT 348—The Multimedia Industry

Fall 2013 Syllabus

Catalog Description

Students are introduced to a variety of tools for viewing multimedia and to the issues in designing effective human-computer interactions. This includes an introduction to the many forms of media that occur in computing systems (text, graphics, images, sound, animation) and to the characteristics of well-produced media. Prerequisite: CS 139, ISAT 340 or permission of the instructor.

Potential Course Outcomes

As a *result of working hard* in this course, you will have the opportunity to *produce artifacts* that will allow you and others to come to see you as:

- Able to design, implement and launch a website
- Knowledgeable about various web protocols such as HTTP, FTP, SSH, SMTP, POP, IMAP, etc.
- Comfortable with one or more programming languages that are popular for web and/or mobile application development, such as PHP, Python, Ruby, Java, or Javascript
- Skilled with HTML5, CSS and current tools for developing web front-ends such as Bootstrap and LESS
- Highly proficient with Javascript and one or more Javascript frameworks, such as jQuery
- Competent to implement websites that have responsive designs (i.e. work well on mobile devices)
- Competent at building mobile apps
- Comfortable implementing web applications with database back-ends using a popular MVC framework, such as Code Igniter, Symfony, Rails, Django, or Sproutcore
- Familiar with agile software development methodologies such as TDD or Scrum
- An excellent proposal writer who is able to get to the heart of a problem and articulate a software solution that will convince others to hire you to build it
- Stellar at writing well-documented code
- A conscientious user of revision management systems such as GitHub or SVN
- Reliable and effective at teamwork and a rock-solid community member
- A conscientious worker who can make a commitment to a project and see it through to successful completion

For each one of these outcomes the goal is to have **tangible products that you can list on your resume**. Unless you can concretely demonstrate to yourself and to the world that you have these skills, it really makes no difference what your grade in the class is.

Course Grade

You will choose your own grade in this course.

Assessment

The quantity and quality of your effort in the course will be assessed in the following ways:

- · Weekly self-assessment via online surveys
 - You are encouraged to respond promptly to the weekly self-assessments, to take them seriously, and to use them to reflect upon whether or not you are living up to the standard you have set for yourself. By the end of the semester you should have a journal and a trajectory of goal-setting and goal-accomplishment.
- Weekly peer-assessment via group interaction
 You will be working in small teams. One of your jobs is to hold each other's feet to
 the fire. You are accountable to your team, and they are accountable to you. One of
 the best ways to support each other is to get into the regular habit of giving each
 other feedback on why and how you've been helpful to one another.
- Periodic assessment from your instructor
 I will meet with you individually or in small groups at regular intervals throughout the semester to give you specific feedback on your work and/or progress. You are strongly encouraged to seek me out frequently to ask questions and help get unstuck.

Signs that you are "doing well" in the course:

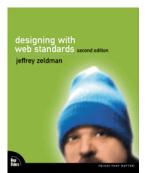
- You have written programs and/or designed databases that work
- You are enjoying meeting with your team, instructor, and other classmates on a regular basis
- You realize that you know everyone's name in the course, that they know you, and that you know something about them as people
- You are aware at any given time of what you need to be doing to be making progress in the course and have a plan for what to do next
- You are finding it easy to spend 6+ hours outside of class time every week on the course (and perhaps finding it difficult to spend fewer than 10+ hours!)
- You are experiencing amazing feelings of gratitude, both to your classmates for how
 much they're helping you out, and from them in reaction to the commitment you've
 shown to making their experience positive as well
- You are in regular contact with your instructor
- You are having fun

Signs that you are NOT "doing well" in the course:

- You're not showing up
- You have no tangible products to show for your time/effort
- You're not sure what you're supposed to be doing
- You don't know everyone's name and have spent little to no time with your instructor and/or your team
- You're not spending time outside of class on the course, and even when you do, it feels boring/confusing/frustrating/like work
- You are NOT having fun

If you find that you are NOT doing well, please go see your instructor ASAP!!!!

Textbooks



Zeldman, Jeffrey. 2009. Designing with Web Standards, 3rd Edition. Peachpit Press. ISBN 0321616952

Jeffrey Zeldman is one of the movers and shakers in the standards-based design movement that started in the early 2000's. He has a web development shop called Happy Cog studios in New York. One of the reasons this book does not go out of date is that it provides a very good historical account of the evolution of web coding practices. It uncovers some of the few unchanging principles that you'll find in this course. Also, he's a businessman so there is a very nice balance

between practical realism and idealism in this book. He's also a pretty funny guy.



Beaird, Jason. 2007. The Principles of Beautiful Web Design. SitePoint. ISBN 0975841963

This book covers topics related to web page aesthetics such as layout, color scheme, and font selection. For the most part it stays away from the nitty gritty details of how to code these things (details which are constantly changing) and instead focuses on the design process itself. I like this book because the principles it covers don't change. Also, I'm a pretty crappy designer myself and this book provides some really good rules of thumb that allow even design-

challenged people like myself to turn out some halfway decent work. The book itself is also very pretty and has lots of great illustrations and pictures.

If you are the type of person who prefers to learn from books, here are some other recommendations:

The O'Reilly Cookbook Series

I recommend that you go to Barnes and Noble or some place like that and browse through one or more of the cookbooks. These books are basically collections of tutorials. Like a real cookbook, it's not designed to be read from cover to cover, but rather you follow "recipes" as needed to complete specific coding tasks. These books exist for almost any technology that you can think of. Beware of cookbooks that are three or more years old as they may not contain up-to-date information.

The New Riders Voices That Matter Series

I've only read a couple of these books, but the quality has been high (Zeldman's book is one of these). They tend to be written by professionals in the industry who really know their stuff. They are about much more than web design, and I think you'll find them pretty interesting.

Please feel free to ask my opinion on any book you are thinking of purchasing. I may be able to steer you in a better direction in some cases.

Software

Many, if not all, of the software you need for this course can be found for free (or very cheap) online. Some suggestions for easy ways to get started:

- Install XAMPP on Windows or if on a Mac learn to use Homebrew or MacPorts to download an Apache/MySQL/PHP stack
- Sublime Text is a fantastic, cheap editor that works cross-platform

Schedule and Use of Class Time

As much as possible, I plan to make YOU responsible for how we spend class time. *I will only lecture if you specifically request a lecture on a specific topic.* Otherwise, my basic assumption will be that you have set yourself weekly tasks and that you are using your time wisely to accomplish them. Some signs that you are using your class time well:

- You always have a plan for what to do on any given day
- You come to class ready with specific questions to ask your instructor or your classmates
- At the end of each day you are able to point to specific things that you accomplished

Some signs that you are NOT spending your class time well:

- You find yourself in class with nothing to do
- You find yourself spending lots of class time checking email/Facebook and/or playing games
- Your instructor is sitting around not working with any of the students

It is my specific intention to force you to be self-reliant, self-directed learners who are engaged and know how to make the most of the time you have.

Important Dates

The following dates are for the Fall 2013 semester:

- Monday, August 26th: First Day of Class
- Tuesday, September 3rd: Last day to Drop/Add without Department Head signature
- Thursday, September 12th: Last day to Add a course with Department Head signature
- Friday, September 13th: Last day to Withdraw from JMU with a full refund
- Monday-Friday, November 25th-29th: JMU Thanksgiving Break
- Friday, December 6th: Last Day of Class

Your Prof

Name: Morgan Benton Office: ISAT/CS 124

Office Hours: I'm around most every day. Please let me know if you want to meet at a

specific time.

Office Phone: 540 568 6876

Cell Phone: 973 495 7736 (calls and texts are ok within reason)

Calendar: my Google calendar is usually pretty accurate

Email: bentonmc@jmu.edu

Facebook: http://www.facebook.com/morgan.benton

Twitter: http://twitter.com/morphatic

I'm a highly available person. I'm usually on campus 9-7 Mon-Sat. Tuesdays I shut my door to try to get some research done, so I'd appreciate your help in keeping that "me" time clear, but otherwise meeting with students is one of the most enjoyable parts of my job. You can check out my Google calendar above. If not otherwise indicated, I'm probably in my office.

Other Policies

You can see other JMU policies regarding inclement weather, disability accommodations, and religious observances can be found at http://www.jmu.edu/syllabus