

Fall 2014

## MMC 4936 Web GIS for Journalists

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**WEB GIS FOR JOURNALISTS • MMC 4936 • FALL 2014**

Mondays & Wednesdays, 3pm-5pm

Room 210 AC1

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**COURSE DESCRIPTION**

MMC 4936: Web GIS is a special topics course designed to give students a solid foundation in Web publishing and Web GIS. By the end of the semester, students will:

- Learn the basics of HTML5 and CSS3.
- Learn the basics of JavaScript and JQuery
- Produce a new layout for the Zen Garden project.
- Participate in a crowdsourced project on King Tide Day.
- Produce an interactive photo slideshow with HTML5/CSS3.
- Participate in a mobile-social reporting project on Election Day.
- Produce a multimedia map story with HTML5/CSS3.
- Learn how to give and receive constructive criticism.

**REQUIRED TEXTS AND MATERIALS**

ALL STUDENTS must have the following by the second week of class:

- Signed a Release and Assumption of Risk form
- Joined the class blog - <http://fiuwebgis.wordpress.com>
- Created an account on Code Academy (<http://www.codeacademy.com>)

**Equipment Requirements**

All equipment that students will need for class assignments may be checked out through the **Equipment Room**, once you have signed a **Release and Assumption of Risk** form (we will do this in class).

## Helpful Links

- **Class Blog**  
<http://fiuwebgis.wordpress.com>  
The instructors will publish important information about the course, course assignments and helpful resources.
- **SJMC Equipment Room and Software Wiki**  
<http://fiuinfo.pbworks.com/w/page/5768851/FrontPage>  
Essential resource for all equipment room related questions, as well as questions about and access to software, manuals, equipment, etc.
- **CodeAcademy**  
<http://www.codecademy.com>
- **Zen Garden**  
<http://www.csszengarden.com/>
- **SublimeText**  
<http://www.sublimetext.com/>
- **JQuery UI**  
<http://jqueryui.com/>

## GRADING

### **Code Academy – 200 points**

Students must create an account on Code Academy (<http://www.codecademy.com>). Each week students will have assigned homework on Code Academy. Each homework assignment is worth 10 points. A few of the unassigned Code Academy tutorials will be available for Extra Credit at 5 points each. For a schedule of each assignment, refer to the class blog at <http://digitalpublishingworkshop.wordpress.com/ca/>

### **Zen Garden Layout – 100 points**

Students will use HTML5 and CSS3 to design a simplified version of the Zen Garden. For reference, the Zen Garden site: <http://www.csszengarden.com/>. Students must link this work to the class blog.

### **King Tide Day Crowdsourcing Project – 50 points**

Students will participate in a crowdsourced reporting project on some aspect of climate change or sea level rise during the week of October 6. See the class blog for ways to participate. **DUE Monday, October 13**

### **Interactive Photo Slideshow – 100 points**

The Interactive Photo Story will consist of a series of 5-12 photographs, with captions, that the user navigates by pressing buttons. Students must hand-code the HTML5 and CSS3 formatting for this project. The photos should tell a story. Students must publish their Web Story online and link it to the class blog. Students must submit a Project Brief and a source list to the instructor.

### **Election Day Project – 50 points**

Students will use their cell phones to report on Election Day activities on Tuesday, November 4. See the class blog for ways to participate. **DUE Wednesday, November 5.**

### **King Tide Day Map Project – 100 points**

Students will first sketch a design for a map featuring the King Tide Day data, and then create a map interface to the data using ArcGIS. **DUE Wednesday, November 12.**

### **Multimedia Package – 150 points**

Students will create a multimedia story consisting of (at least) 800 words and at least three other multimedia components, including photos, photo slideshows, video, audio slideshows, infographics and other graphic elements. You must hand in a Project Brief, a completed script, and a source list with your package. Students must hand-code the HTML5 and CSS3 for this project. Students must publish their Web Story online and link it to the class blog. **DUE Friday, December 12.**

### **Participation – 100 points**

Participation includes regular attendance, on-time arrival to class and participation in class discussions. This includes posting required material to the class blog and your blog in a timely manner. Things that count against participation include: arriving late, missing deadlines and using cell phones in the classroom.

### **MAXIMUM POINTS POSSIBLE – 850**

### **Final Grade Scale**

All grading will be done on a point system, with a letter grade assigned at the end of the term based on points earned from a total of 850 points. Grades of Incomplete will be given only for acceptable written medical reasons. You can calculate your final score as follows:

94% and higher or 799 points and higher:	A
90-93% or 765-798 points:	A-
87-89% or 739-764 points:	B+
84-86% or 714-738 points:	B
80-83% or 680-713 points:	B-
77-79% or 654-679 points:	C+
70-76% or 595-653 points:	C
65-69% or 552-594 points:	D
Below 65% or below 551 points:	F

### **COURSE POLICIES**

**Attendance** - Both your physical presence in class and your class participation are essential. You will be expected to attend every class with the assigned work completed, and to contribute meaningfully to class discussion. One (1) unexcused absence will be allowed during the semester. You may fail this course with more than one unexcused absence. Excused absences will only be granted with documentation for situations such as sickness, injury, family emergency and religious holidays.

**Deadlines** - Successfully meeting deadlines is an essential part of being a professional media producer. Therefore, late work will only be accepted in the case of a documented emergency or if circumstances are cleared with me prior to the due date. Late work submitted without prior approval will result in substantial grade reduction. **Work submitted more than 2 weeks late will not be accepted.**

**Academic Honesty** - As FIU students, you are expected to strictly follow the honor code regarding academic honesty. Florida International University outlines your responsibilities as follows: Florida International University is a community dedicated to generating and imparting knowledge through excellent teaching and research, the rigorous and respectful exchange of ideas and community service. All students should respect the right of others to have an equitable opportunity to learn and honestly demonstrate the quality of their learning. Therefore, all students are expected to adhere to a standard of academic conduct, which demonstrates respect for themselves, their fellow students, and the educational mission of the University. All students are deemed by the University to understand that if they are found responsible for academic misconduct, they will be subject to the Academic Misconduct procedures and sanctions, as outlined in the Student Handbook. Misconduct includes: **Cheating** – The unauthorized use of books, notes, aids, electronic sources; or assistance from another person with respect to examinations, course assignments, field service reports, class recitations; or the unauthorized possession of examination papers or course materials, whether originally authorized or not. **Plagiarism** – The use and appropriation of another’s work without any indication of the source and the representation of such work as the student’s own. Any student who fails to give credit for ideas, expressions or materials taken from another source, including Internet sources, is responsible for plagiarism. Any students who fail to meet these expectations will receive an “F” for the course grade and will be reported to the Chair of the Department, as well as the Dean of the School.

**Original Material** - All work in this class is assumed to be yours, and composed of your original material, or material that you have permission to use. Research and sourcing is fundamental to story construction. Quote attribution is basic. If you use images, audio or video that you did not create, you must GET PERMISSION FROM THE INSTRUCTOR AHEAD OF TIME and attribute them accordingly. Failure to cite material amounts to plagiarism, and you will fail the course.

**Factual Errors and Spelling Errors** - All student projects must be free of errors of fact. Each grammar, style or spelling error, will result in a 5-point deduction from the project final grade. Factual errors may result in a failing grade on the assignment. Meticulous research, careful copyediting, and a thorough proofreading of final work, will usually catch any errors before the project is submitted for grading.

**Blackboard** - This course will utilize Blackboard. Students are expected to log in regularly.

**Class Blog** - The instructor will use a WordPress blog to post course notes, and students are expected to link their completed projects to the class blog:  
<http://digitalpublishingworkshop.wordpress.com/>

**Lab Time** - You will need to schedule time to work on the computers outside of class.

**Constructive Criticism** -In this class, students will be required to present their work to the class and explain their production choices. Students will constructively critique each other's work. This communal display and critique of work will help produce a competitive environment wherein you push yourself to produce high quality work. However this situation should also be a cooperative one, where students help each other with challenges and ideas.

**Digital Challenges** - The digital medium presents many unique challenges. Learning to work with digital difficulties is part of learning to work with the digital medium. For best results, I recommend the following:

- Back up all of your files.
- Save your files often as you are working.
- Complete your production projects prior to the due date and test them.
- Pay close attention to all tutorials and take notes, even if you think you know the material.

**Online Resources** – This class is rich in material to help you with the technical aspects of your projects. Documents with technical details are available on Blackboard and the class blog. Often a Google search will turn up helpful information (ex: “How do I crop images in Photoshop?”).

## **CLASS SCHEDULE**

This is an outline of our planned schedule. This schedule is subject to change.

### **Week 1 – August 27**

Course Introduction

#### **Assignments:**

- Join class WordPress blog.
- Sign Release and Assumption of Risk form.
- Begin working on Code Academy HTML Basics and Build Your Own Web Page.

## **MONDAY, SEPTEMBER 1- NO CLASS**

### **Week 2 – September 3**

Intro to HTML5/CSS3

#### **Assignments:**

- Complete Code Academy HTML Basics 2
- Complete Code Academy Basics 3
- Begin Work on Zen Garden.

### **Week 3 – September 8**

HTML5/CSS3

#### **Assignments:**

- Complete Code Academy Introduction to CSS.
- Complete Zen Garden

### **Week 4 – September 15**

ZEN GARDEN DUE. Review Zen Garden.  
Creating Interactive Photo Slideshows.

**Assignments:**

- Complete Code Academy CSS Classes and IDs.
- Complete Code Academy CSS Positioning.
- Begin interactive photo slideshow.

**Week 5 – September 22**

Creating Interactive Photo Slideshows

**Assignments:**

- Complete Interactive Photo Slideshow
- Complete Code Academy JavaScript: Intro to JavaScript
- Complete Code Academy JavaScript: Intro to Functions in JavaScript
- Complete Code Academy JavaScript: Rock, Paper, Scissors

**Week 6 – September 29**

PHOTO SLIDESHOW DUE. Review Photo Slideshows.

**Assignments:**

- Watch this GIS Intro Video Prior to October 6: <http://geospatialrevolution.psu.edu/>
- Complete Code Academy JQuery: Intro to the DOM
- Complete Code Academy JQuery: Functions and Selectors

**Week 7 – October 6**

MEET IN HL ROOM 124  
GIS: Learning ArcGIS Desktop  
Basics of Map Projections  
Crowdsourcing King Tide Day

**Assignments:**

- Complete Code Academy JQuery: Modifying HTML
- Complete Code Academy JQuery: JQuery Events

**Week 8 – October 13**

MEET IN HL ROOM 124  
Finding Geographic Data in ArcGIS  
Address Geo-Coding with ArcGIS  
King Tide Day Crowdsourcing DUE

**Assignments:**

- Complete Code Academy JQuery: JQuery Effects.

### **Week 9 – October 20**

MEET IN HL ROOM 124

Creating and Sharing GIS Content Using ArcGIS online  
Intro to Web GIS

#### **Assignments:**

- Sketch Interface for King Tide Day data
- Complete Code Academy JavaScript: For-Loops
- Complete Code Academy JavaScript: While-Loops

### **Week 10 – October 27**

MEET IN HL ROOM 124

King Tide Day Sketch DUE

Introduction to GeoSpatial Service-Oriented Architecture (SOA) & Geospatial Mashups

#### **Assignments:**

- Begin Map of King Tide Day Data
- Complete Election Day Project on November 4
- Complete Code Academy JavaScript: Control Flow

### **11 – November 3**

MEET IN HL ROOM 124

Geospatial Mashups & WebGIS Applications

Election Day Project DUE November 5

#### **Assignments:**

- Complete King Tide Day Map
- Complete Code Academy JavaScript: Choose Your Own Adventure 2

### **Week 12 – November 10**

MEET IN HL ROOM 124

WebGIS Applications

King Tide Day Map DUE

#### **Assignments:**

- Complete Code Academy JavaScript: Arrays and Objects

### **Week 13 – November 17**

Creating Multimedia Packages.

#### **Assignments:**

- Begin working on Multimedia Package.
- Complete Code Academy Arrays and Objects.



**Week 14 – November 24**

Creating Multimedia Packages.

**Assignments:**

- Work on Multimedia package

**Week 15 – December 1**

In-Class Workshop for Multimedia Package.

**Assignments:**

- Complete Multimedia Package.

**FINALS WEEK – December 8-12 - MULTIMEDIA PACKAGE DUE**

**GRID FOR MMC4936 – Fall 2014**

WEEK	CLASS TOPIC	ASSIGNMENT	DUE THIS WEEK
8/25	Course introduction. Join class blog. Begin work on CodeAcademy	Sign Release and Assumption of Risk form. Complete Code Academy HTML Basics & Build Your Own Web Page.	
<b>MONDAY, SEPTEMBER 1 • LABOR DAY • NO CLASS</b>			
9/3	Intro to HTML5/CSS3	Complete Code HTML Basics 2 and HTML Basics 3 – DIV AND SPAN ONLY. Begin work on Zen Garden	Code Academy module on HTML Basics and Build Your Own Web Page.
9/8	HTML5/CSS3	Complete Code Academy CSS: An Overview. Complete Zen Garden.	Code Academy HTML Basics 2 & HTML Basics 3
9/15	Creating an interactive Photo Slideshow.	Review Zen Garden. Begin Photo Slideshow. Complete Code Academy CSS Classes and IDs, CSS Positioning.	ZEN GARDEN DUE. Code Academy CSS: an Overview
9/22	Creating an interactive Photo Slideshow	Complete Photo Slideshow. Complete Code Academy Intro to JavaScript, Intro to Functions in JavaScript, and Rock-Paper-Scissors.	Code Academy CSS Classes and IDs. CSS Positioning.
9/29	Programming Concepts.	Complete Code Academy JQuery Intro to the DOM, JQuery Functions and Selectors.	PHOTO SLIDESHOW DUE. Code Academy Intro to JavaScript, Intro to Functions, and Rock-Paper-Scissors.
10/6	ArcGIS Intro. Basics of Map Projections.	Complete Code Academy JQuery Modifying HTML and JQuery Events. Participate in King Tide Day.	Code Academy JQuery Intro to the DOM, JQuery Functions and Selectors.
10/13	Finding Geographic Data in ArcGIS. Address Geo-Coding.	Complete Code Academy JQuery Effects.	King Tide Day DUE. Code JQuery Modifying HTML and JQuery Events.
10/20	Creating & Sharing GIS with ArcGIS Online	Complete CodeAcademy JavaScript For Loops and While Loops.	Code Academy JQuery Effects.
10/27	Web GIS	Complete Code Academy Complete Code Academy Control Flow.	Code Academy For Loops and While Loops.
11/3	Web GIS Mobile-Social Reporting	Complete Code Academy Choose Your own Adventure 2	Code Academy Control Flow. Election Day Project DUE.
11/10	WebGIS	Complete Code Academy Code Academy Arrays and Objects.	ADVENTURE 2 DUE.
11/17	Creating Multimedia Packages.	Begin Multimedia Package.	Code Academy Arrays and Objects.
11/24	In-class workshop.	Continue Multimedia Package	
12/1	In-class workshop.	Complete Multimedia Package	

**FINALS WEEK – Friday, December 12 – Multimedia Package Due**