USCAnnenberg

JOUR 553: Coding and Programming for Storytelling

Fall 2020 – Thursdays – 6:30-8:50 p.m.
Section: 21570D
Location: ANN 308 & Online

Instructor: Grace Manthey
Office Hours: By appointment.
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I. Course Description

The Internet has radically changed how we consume the news. Text, audio and video used to be siloed, with each form of media relegated to print, TV and radio, respectively. Audiences now expect to interact with news content that has all these previous forms of media combined, as well as complex data. No one knows exactly what content presentation will look like in 10 years, let alone in five years. It changes month to month, day to day. But one thing is certain: consumers expect current technology and up-to-date design. The most brilliant piece of investigative journalism still needs to look good and conform with coding best practices if it is to have an impact.

In this course you will learn the basic web technologies (HTML, CSS, JavaScript and jQuery) needed to build modern interactive multimedia projects. In addition, you will use contemporary storytelling skills to create advanced online story packages with multiple elements, including text, visuals (video, photos, graphics, etc.), audio, interactivity and navigation, with heavy emphasis on web development and coding. You will conceive, design, code and produce an advanced multimedia package.

Why are you learning these skills when apps and templates already exist to publish news stories? WordPress and other tools are indeed helpful when presenting a basic article that contains just words and photos. But the moment you want to do something creative, something that will draw the reader into the story and make her interact with its content, these plug-and-play tools become very restrictive. When you know how to write your own code, the possibilities for digital storytelling are endless.

The class will meet once a week for direct instruction, hands-on exercises and more. You will practice your coding skills with focused assignments. In addition to your assignments, you must pitch and produce one longer project during the semester. This can be an individual project or a group project of no more than three people working together.

While coding is the next crucial skill for creative professionals, not everyone will come out of this course as a developer. But no one will be left behind, and at the very least you will understand the role and potential for web development in the present and future of the creative professions. You will also be able to communicate your ideas in the vocabulary of web development. That in itself is invaluable in getting you a job in today's market.

II. Overall Learning Objectives and Assessment
The goal of this course is to teach you how to use front-end web development to produce engaging and innovative multimedia stories.

By the end of this course you should be able to sketch, design and code a mobile-friendly website from scratch, using HTML, CSS, JavaScript and JQuery plug-ins to tell a rich multimedia story. Building on your journalistic storytelling skills, this class focuses solely on the creation and production of stories told only via the web.

III. Description of Assignments
Assignment 0: Multimedia/interactive examples. Due Week 2.
Assignment 1: HTML/CSS problem set. Due Week 4.
Assignment 2: Flexbox and responsive. Due Week 6.
Assignment 3: JQuery problem set 1. Due Week 9.
Assignment 4: JQuery problem set 2. Due Week 12.
Final Project: Due on day of scheduled final exam.

IV. Grading
a. Breakdown of Grade

Assignment	Points	% of Grade
Assignment 0: Multimedia/interactive examples	5	5%
Assignment 1: HTML/CSS problem set	15	15%
Assignment 2: Flexbox and responsive	10	10%
Assignment 3: JQuery problem set 1	20	20%
Assignment 4: JQuery problem set 2	20	20%
Final Project	25	25%
Participation	5	5%
TOTAL	**100**	**100%**

b. Grading Scale

The final letter grade will be calculated as such:

95% to 100%: A	80% to 83%: B-	67% to 69%: D+
90% to 94%: A-	77% to 79%: C+	64% to 66%: D
87% to 89%: B+	74% to 76%: C	60% to 63%: D-
84% to 86%: B	70% to 73%: C-	0% to 59%: F

c. Grading Standards
The content of your projects must meet all journalistic standards: adherence to AP style, grammatically correct, well proofed, and most importantly, the work must be your own (see the plagiarism policies below under IX. Policies and Procedures).

This is a coding class so format, neatness and documentation will be graded. I will take up to 2 (of 20) points off for bad formatting on any given assignment.

Points will be taken off if problems on assignments are not completed.

Participation will be graded on a number of criteria, including (but not exclusively) collaboration and helping out classmates if you understand something that someone else is struggling with.

If on your assignments you simply copy and paste a classmate's work into your assignment, your instructor will be able to tell, and you will not get any credit. That is also called plagiarism.

I also grade on effort. Not everyone will find this course material easy, but if you try your hardest (and I can tell), your grade will reflect that. However, simply passing in an incomplete assignment does not count as effort. Effort means that you have tried to complete the assignment, identified where you are having trouble and then sought out your instructor for extra help.

"A" and "B" projects/assignments should have ALL components; i.e., students should not get higher than a C+ unless everything is turned in.

- "A" project/assignment is submitted on time, has only minor bugs, JS well formatted and documented, and shows exceptional effort and creativity.
- "B" project/assignment is on time, and completed but requires more than minor bug fixes (CSS styling as well as JavaScript/JS functionality) and/or is not documented correctly or is badly formatted. Fulfills all basic requirements, but nothing beyond that.
- "C" project/assignment is late, is not complete and/or functioning. Requires major bug fixes. The student should have requested help from the professor.
- "D" project/assignment is late, incomplete, failed to meet the major criteria of the assignment, has numerous errors. Should not have been submitted.
- "F" project/assignment has not been submitted or is plagiarized from someone else's code or project. You can use someone else's code as example or inspiration, but you can not present someone else's project as your own.

In addition, style errors and other breaches of journalistic standards will result in point deductions. Extra design and creativity is given extra credit.

- Fabricating a story or making up quotes or information.
- Plagiarizing a script/article, part of a script/article or information from any source.
- Staging video or telling interview subjects what to say.
- Using video shot by someone else and presenting it as original work.
- Shooting video in one location and presenting it as another location.
- Using the camcorder to intentionally intimidate, provoke or incite a person or a group of people to elicit more "dramatic" video.
- Promising, paying or giving someone something in exchange for doing an interview either on or off camera.
- Missing a deadline.

V. Assignment Submission Policy
A. All assignments are due on the dates specified. Lacking prior discussion and agreement with the instructor, late assignments will automatically be given a grade of F.
B. Assignments should be submitted via a Dropbox link that will be provided to you. All coding assignments should be .zipped up before submission. The project folder and the zip file should be named like so: "lastname-firstname-assignment[number]". Please rename your project folder *before* you zip it up for submission.

VI. Required Readings and Supplementary Materials
While there is no required text in this course, there are a number of websites and tutorials you will be asked to read and work your way through, including:

Assignments and reference materials can be found at http://peggybustamante.com/ascjcoding/

- ▪ HTML tutorial: http://w3schools.com/html/default.asp
- ▪ CSS tutorial: http://w3schools.com/css/default.asp
- ▪ Begin Bootstrap tutorials: http://www.w3resource.com/twitter-bootstrap/tutorial.php and http://getbootstrap.com/2.3.2/getting-started.html
- ▪ JavaScript tutorial: http://w3schools.com/js/default.asp
- ▪ JQuery tutorial: http://w3schools.com/jquery/default.asp

For reference textbooks, these are recommended:
"HTML & CSS: Design and build websites" by Jon Duckett (John Wiley & Sons, Inc., 2011)
"JavaScript & JQuery: Interactive front-end web development" by Jon Duckett (John Wiley & Sons, Inc., 2014)

These are also good reference and learning sites:
Lynda (http://www.usc.edu/its/lynda)
W3Schools (http://www.w3schools.com/)
Codecademy (http://www.codecademy.com)

VII. Laptop Policy
All undergraduate and graduate Annenberg majors and minors are required to have a PC or Apple laptop that can be used in Annenberg classes. Please refer to the **Annenberg Digital Lounge** for more information. To connect to USC's Secure Wireless network, please visit USC's **Information Technology Services** website.

X. Add/Drop Dates for Session 001 (13 weeks: 8/17/20 – 11/13/20)
Friday, September 4: Last day to register and add classes for Session 001
Friday, September 4: Last day to change enrollment option to Pass/No Pass or Audit for Session 001
Friday, September 4: Last day to drop a class and receive a refund to avoid a mark of "W" on student record and STARS report
Friday, September 4: Last day to purchase or waive tuition refund insurance for fall
Friday, October 2: Last day to drop a course without a mark of "W" on the transcript only. Mark of "W" will still appear on student record and STARS report and tuition charges still apply. [Please drop any course by the end of week three for session 001 (or the 20 percent mark of the session in which the course is offered) to avoid tuition charges.]
Friday, October 2: Last day to change a Pass/No Pass course to letter grade
Friday, November 6: Last day to drop a class with a mark of "W" for Session 001

IX. Course Schedule: A Weekly Breakdown
Important note to students: *Be advised that this syllabus is subject to change - and probably will change - based on the progress of the class, news events, and/or guest speaker availability.*

NOTE: Assignments and reference material can be found at **http://peggybustamante.com/ascjcoding/**

Week 1 (August 20): Orientation and introduction
Syllabus, Semester Overview, Intros. Skills assessment. A look at news interactive examples. Web development overview. Build basic "Hello, World" page.

- ● **Hands-on in class:** Download the web template. Install a text editor. Build a basic web page.

- ● **Assignment 0:** Find three recent examples of multimedia stories. Due before class Week 2.

  What constitutes a multimedia story? Here are some examples to help guide your search:

This Is Your Brain on Art:
https://www.washingtonpost.com/graphics/2017/lifestyle/your-brain-on-art/

Millennials Are Screwed:
https://highline.huffingtonpost.com/articles/en/poor-millennials/

Finding Home:
http://time.com/finding-home/

Bezos's Empire:
https://www.theguardian.com/technology/ng-interactive/2018/apr/24/bezoss-empire-how-amazon-became-the-worlds-biggest-retailer

Looming Floods, Threatened Cities:
https://www.nytimes.com/interactive/2017/05/18/climate/antarctica-ice-melt-climate-change-flood.html

The Uber Game:
https://ig.ft.com/uber-game/

Glitter in the Dark:
https://pitchfork.com/features/cover-story/reader/bat-for-lashes/

Be sure to look at these stories on both desktop and mobile and take note of any differences.

- **Reading:** HTML tutorial http://www.w3schools.com/html/default.asp

Assignment 0 due before class Week 2

Week 2 (August 27): Intro to HTML & CSS
Discuss interactive/ multimedia examples from homework assignment. The basics of HTML and the most important/most used elements.

- **Hands-on in class:** Constructing a basic page with photos and text. This is the foundation of all multimedia stories.
- **Assignment 1:** HTML/CSS problem set. Due before class Week 4
  You will build a page from scratch, based on an image that we provide you, that exhibits principles of traditional news layout. You will be practicing HTML and CSS, as well as exercising your ability to visually deconstruct a page and then build it using code. This is important as you become an active rather than passive consumer of news on desktop and mobile.
- **Reading:** CSS tutorial http://bit.ly/w3css: Sections "CSS Home" through "CSS Tables"

Week 3 (September 3): HTML & CSS: Part 2
Overview of CSS and properties necessary for page layout.

- **Hands-on in class:** Building a navigation menu and a photo gallery. These cover everything you need to complete Assignment 1.
- **Reading:** CSS tutorial http://bit.ly/w3css: Sections "CSS Box Model" through "CSS Pseudo-elements"

Assignment 1 due before class Week 4

Week 4 (September 10): HTML & CSS: Part 3

Positioning and new HTML5 elements: <audio> and <video> tags: Review problems with Assignment 2. CSS positioning. A look at new tags in HTML5, including audio and video. Hands-on in class: Add background video and images. Basic Parallax scrolling page.

- **Hands-on in class:** Inserting video and audio on a page. Positioning these elements in relation to each other, as well as in relation to the browser window.
- **Assignment 2:** Flexbox and responsive. Due Week 6 before class.
  This is a simple layout that makes use of flexbox, a common technique for creating responsive, mobile-friendly websites. People view websites on their phones more often than on their desktops, so optimization for mobile is a crucial best practice.
- **Reading:** Positioning tutorial: https://www.w3schools.com/css/css_positioning.asp.
  HTML5 tutorial: http://www.w3schools.com/html/html5_intro.asp_intro.asp

Week 5 (September 17): Flexbox and introduction to responsive design principles
Overview of Assignment 2.5 and 3. Flexbox and media queries. Hands-on in class: Making a basic page responsive and mobile ready.

- **Hands-on in class:** Making a basic page that is responsive and mobile-friendly. News consumers read on their phones more often than their desktops. Your content should look good on all screens.
- **Reading**: CSS Flexible Box Layout Module: https://www.w3schools.com/css/css3_flexbox.asp.
  Responsive Web Design: https://www.w3schools.com/css/css_rwd_mediaqueries.asp

Assignment 2 due before class Week 6

Week 6 (September 24): JQuery & JavaScript: Part 1
Overview of JavaScript and jQuery, from plugins to actual coding.

- **Hands-on in class:** Introducing jQuery, which makes a page interactive. One basic interaction is clicking a button to change a page's presentation.
- **Review:** USC FTP/Grad Template – how to upload your pages to the server.
- **Assignment 3:** JQuery problem set 1. Due Week 9 before class.
  This is a set of six interactive paradigms that are common on news sites, including a caption that fades in and out and another that scrolls up when the user mouses over an image. Consider it a worksheet to practice everything we learned in class.
- **Reading:** JQuery tutorial: http://w3schools.com/jquery/default.asp. Sections "jQuery Home" through "jQuery Events."
  JavaScript tutorial: http://www.w3schools.com/js/default.asp. Section "JS Home" through "JS Comments"

Week 7 (October 1): JQuery / JavaScript: Part 2
Covering basic built-in tools and animation using jQuery.

- **Hands-on in class:** Using CSS and jQuery to create dynamic captions for a photo gallery.
- **Reading:** JQuery tutorial: http://w3schools.com/jquery/default.asp. All sections under "jQuery Effects"

Week 8 (October 8): JQuery / JavaScript: Part 3
Dynamically changing HTML elements and CSS.

- **Hands-on in class:** Using the "this" variable to change specific elements on a page, depending upon how you interact with the content. "This" will be useful for many interactions to come and is vital to presenting your content in an engaging way.
- **Reading:** JQuery tutorial: w3schools.com/jquery/default.asp. Under "JQuery HTML", sections "JQuery Get" and "JQuery Set."
  JavaScript tutorial: http://www.w3schools.com/js/default.asp. Section "JS Variables" thru "JS Datatypes"

Assignment 3 due before class Week 9

Week 9 (October 15): JQuery /JavaScript: Part 4
Learning to get and set data from forms, attributes and HTML elements. Intro to variables.

- **Hands-on in class:** Using variables to change a page dynamically. You will be creating new attributes in your HTML, assigning data to different elements. Welcome to data journalism!
- **Assignment 4:** JQuery problem set 2. Due before class Week 12.
  With these five problems, you will be moving data and content around according to how a user interacts with the page. These problems include a dynamic photo gallery and a form input. The final problem is a rudimentary calculator -- and your introduction to advanced coding techniques used by all news developers.
- **Reading:** JQuery tutorial: http://w3schools.com/jquery/default.asp. Under "JQuery HTML", sections "JQuery Add" through "JQuery Dimensions"

Week 10 (October 22): JavaScript and JQuery: Fun with interactivity
More variables. A look at what's possible with jQuery plugins, widgets and more.

- **Hands-on in class:** Continuing to use variables and attributes to change a page dynamically. Building a modal popup from scratch. Modals are invaluable for displaying infographics or other embeds.
- **Reading:** Creating a modal/popup https://www.w3schools.com/w3css/w3css_modal.asp

Week 11 (October 29): JQuery Plugins and useful widgets Part 1:
Learning to use the Cycle plugin for photo galleries and other sliding elements.

- **Hands-on in class:** Introducing plugins, such as Cycle, which will help you create a dynamic, swipeable photo gallery.
- **Assignment: Final Project specs**
- **Reading:** JQuery Cycle Plugin: http://jquery.malsup.com/cycle/

Assignment 4 due before class Week 12

Week 12 (November 5): JQuery Plugins and useful widgets Part 2:
Learn to use the scrolling plugin Waypoints.js and Popcorn.js.

- **Hands-on in class:** Continuing with plugins, such as Waypoints and Popcorn, to trigger actions by scrolling down a page or by hitting a certain point in an audio track.
- **Review:** FTP uploads once again!
- **Reading:** Bootstrap tutorials: http://www.w3resource.com/twitter-bootstrap/tutorial.php

Week 13 (November 12): JQuery Plugins and useful widgets Part 3:
How to make an audio rollover gallery, use HTML5 audio and video tags, and change elements on the page as a user scrolls.

- **Hands-on in class:** Sizing media for upload to a server. Tying up loose ends in preparation for the final project. Creating an audio rollover gallery, making use of variables and other tricks from recent weeks. Add looping background videos and parallax scrolling to increase the visual engagement of your page.
- **Reading**: HTML 5 Media: <audio> and <video> http://www.w3schools.com/html/html_media.asp

FINAL EXAM PERIOD: Thursday, November 19, 7-9 p.m.
Summative Experience

Final Project: Due on the scheduled date of the final exam.

X. Policies and Procedures
Additional Policies
Collaboration and helping out classmates if you understand something that they are struggling with is very important to success in this class. I also grade on effort. Not everyone will find this course material easy, but if you try your hardest (and I can tell), your grade will reflect that.

Each class builds on the previous one, so it is crucial that you do not miss a class or fall behind. If you have to miss a class, let me know in advance so we can discuss how to keep you up to speed. If you are struggling with some concepts or code, let me know and I will meet with you separately to go over it.

This can be complicated material, especially if you are not paying attention. Do not text, chat with your friends on Facebook, or play on your computer during the instruction.

Communication
This material will be new to almost all of you. Some of you will find it easier than others. If you find you are struggling, contact your instructor and set up a meeting to go over the material. Do this sooner rather than later. Don't wait until the last minute before an assignment is due. All coding instructors are willing to help you out if you are putting in the effort. You should hear back from your instructor within 48 hours of a request for help.

Internships
The value of professional internships as part of the overall educational experience of our students has long been recognized by the School of Journalism. Accordingly, while internships are not required for successful completion of this course, any student enrolled in this course that undertakes and completes an approved, non-paid internship during this semester shall earn academic extra credit herein of an amount equal to 1 percent of the total available semester points for this course. To receive instructor approval, a student must request an internship letter from the Annenberg Career Development Office and bring it to the instructor to sign by the end of the third week of classes. The student must submit the signed letter to the media organization, along with the evaluation form provided by the Career Development Office. The form should be filled out by the intern supervisor and returned to the instructor at the end of the semester. No credit will be given if an evaluation form is not turned into the instructor by the last day of class. Note: The internship must by unpaid and can only be applied to one journalism or public relations class.

Statement on Academic Conduct and Support Systems
a. Academic Conduct
Plagiarism
Presenting someone else's ideas as your own, either verbatim or recast in your own words - is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Section 11, *Behavior Violating University Standards* (https://policy.usc.edu/scampus-part-b/). Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct (http://policy.usc.edu/scientific-misconduct/).

USC School of Journalism Policy on Academic Integrity
The following is the USC Annenberg School of Journalism's policy on academic integrity and repeated in the syllabus for every course in the school:

"Since its founding, the USC School of Journalism has maintained a commitment to the highest standards of ethical conduct and academic excellence. Any student found plagiarizing, fabricating, cheating on examinations, and/or purchasing papers or other assignments faces sanctions ranging from an 'F' on the assignment to dismissal from

the School of Journalism. All academic integrity violations will be reported to the office of Student Judicial Affairs & Community Standards (SJACS), as per university policy, as well as journalism school administrators."

In addition, it is assumed that the work you submit for this course is work you have produced entirely by yourself, and has not been previously produced by you for submission in another course or Learning Lab, without approval of the instructor.

b. Support Systems

Student Health Counseling Services - (213) 740-7711 – 24/7 on call
engemannshc.usc.edu/counseling
Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

National Suicide Prevention Lifeline - 1 (800) 273-8255 – 24/7 on call
suicidepreventionlifeline.org
Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

Relationship and Sexual Violence Prevention Services (RSVP) - (213) 740-4900 – 24/7 on call
engemannshc.usc.edu/rsvp
Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

Office of Equity and Diversity (OED) | Title IX - (213) 740-5086
equity.usc.edu, titleix.usc.edu
Information about how to get help or help a survivor of harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants. The university prohibits discrimination or harassment based on the following protected characteristics: race, color, national origin, ancestry, religion, sex, gender, gender identity, gender expression, sexual orientation, age, physical disability, medical condition, mental disability, marital status, pregnancy, veteran status, genetic information, and any other characteristic which may be specified in applicable laws and governmental regulations.

Bias Assessment Response and Support - (213) 740-2421
studentaffairs.usc.edu/bias-assessment-response-support
Avenue to report incidents of bias, hate crimes, and microaggressions for appropriate investigation and response.

The Office of Disability Services and Programs - (213) 740-0776
dsp.usc.edu
Support and accommodations for students with disabilities. Services include assistance in providing readers/notetakers/interpreters, special accommodations for test taking needs, assistance with architectural barriers, assistive technology, and support for individual needs.

USC Support and Advocacy - (213) 821-4710
studentaffairs.usc.edu/ssa
Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

Diversity at USC - (213) 740-2101
diversity.usc.edu
Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

USC Emergency - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call

dps.usc.edu, emergency.usc.edu
Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

USC Department of Public Safety - UPC: (213) 740-6000, HSC: (323) 442-120 – 24/7 on call
dps.usc.edu
Non-emergency assistance or information.

Annenberg Student Success Fund
https://annenberg.usc.edu/current-students/resources/additional-funding-resources
The Annenberg Student Success Fund is a donor-funded financial aid account available to USC Annenberg undergraduate and graduate students for non-tuition expenses related to extra- and co-curricular programs and opportunities.

XI. About Your Instructor
Grace Manthey is a graduate of Quinnipiac University in Connecticut and the M.S. in Journalism program at the University of Southern California. She is currently the data journalism fellow at ABC7 in Los Angeles. While at USC she worked on the Interactives Desk in the media center and won a reporting award at QU her senior year. She has attended the Investigative Reporters and Editors data journalism conference, the NICAR conference, and absolutely loves coding.