



J487 Intermediate Interactive Media

Professor: Steven King, Assistant Professor of Interactive Media

UNC School of Media and Journalism

Carroll Hall Rm 392

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COURSE DESCRIPTION

Learn web programming, digital design and interactive data visualizations for storytelling and information sharing. Students will use HTML5 CSS3, JavaScript and other web publishing languages and libraries like React.js and D3.js while learning how to design, storyboard and script an interactive storytelling project. Students will collect and incorporate photos, text, video, graphics and database information into interactive media applications.

This course will expand on the knowledge and skills learned in J187 and multimedia design by increasing your ability to develop and present media. You will learn more advanced CSS and HTML in 187 in addition to the basics of JavaScript, JS frameworks and libraries.

LEARNING OBJECTIVES

Learn how to Solve Problems using logic and technology

Learn how to design and build interactive experiences for specific audiences

Learn how to work with and visualize complex data sets for a specific audience

TECHNICAL CONCEPTS

- Advanced CSS
- Command Line
- Server Technologies
- Git and Git Hub
- Vanilla JavaScript
- Charting Library
- D3.JS
- React.JS
- REST APIs

PREREQUISITES AND PRIOR KNOWLEDGE

JOMC 187 Introduction to Interactive Media or proven experience of HTML, CSS and responsive design

ACCREDITATION

The School of Journalism and Mass Communication's accrediting body outlines a number of values you should be aware of and competencies you should be able to demonstrate by the time you graduate from our program.

Learn more about them here:

<http://www2.ku.edu/~acejmc/PROGRAM/PRINCIPLES.SHTML#vals&comps>

No single course could possibly give you all of these values and competencies; but collectively, our classes are designed to build your abilities in each of these areas. In this class, we will address a number of the values and competencies, with special emphasis on "Professional values and competencies" listed below.

- Understand concepts and apply theories in the use and presentation of images and information;
- Demonstrate an understanding of professional ethical principles and work ethically in pursuit of truth, accuracy, fairness and diversity;
- Think critically, creatively and independently;
- Apply tools and technologies appropriate for the communications professions in which they work.

COURSE POLICIES

Attendance and Assignments

Attendance is required, participation is expected and deadlines are absolute.

To succeed in this class you must attend and participate in the discussion and hands-on, in-class assignments. Each in-class assignment is worth 20 points and can only be completed during class and will not be turned at a later date. You are allowed one un-excused absence. Any other missed class assignments will receive a 0 grade.

LATE ASSIGNMENTS WILL NOT BE ACCEPTED unless special arrangements are made prior to the due date. Major projects will be due at 11:59 p.m. Deadlines are vital to success in this industry and you are expected to make deadline.

Honor Code and Plagiarism

It is expected that each student in this course will conduct himself or herself within the guidelines of the UNC honor code. All academic work should be done with the high level of honesty and integrity this university demands. You are expected to produce your own work in this class. If you have any questions about your responsibility or your instructor's responsibility as a faculty member under the Honor Code, please talk with me or Senior Associate Dean Charlie Tuggle, or you may speak with a representative of the Student Attorney Office or the Office of the Dean of Students.

It is acceptable to use coding resources such as tutorials, libraries and **some** source code on sites like GitHub but the software license must allow for the usage and the **code should be credited**, linked and commented in your source code and credited visibly on the site either in the footer or a credits page.

Seeking Help

If you need individual assistance, it's your responsibility to contact me. If you are serious about wanting to improve your performance in the course, the time to seek help is as soon as you are aware of the problem – whether the problem is difficulty with course material, a disability, or an illness.

Diversity

The University's policy on Prohibiting Harassment and Discrimination is outlined in the 2011-2012 Undergraduate Bulletin <http://www.unc.edu/ugradbulletin/>. UNC is committed to providing an inclusive and welcoming environment for all members of our community and does not discriminate in offering access to its educational programs and activities on the basis of age, gender, race, color, national origin, religion, creed, disability, veteran's status, sexual orientation, gender identity, or gender expression.

Special Accommodations

If you require special accommodations to attend or participate in this course, please let the instructor know as soon as possible. If you need information about disabilities visit the Accessibility Services website at <https://accessibility.unc.edu/>

Grading Policy

There are basic expectations that any supervisor or project manager would have for a project undertaken by a multimedia design specialist. All of your assignments must meet the following minimum basic standards to be considered for a grade of “B” or better.

The project must be:

- completed according to the assignment specifications.
- completed on time.
- free of typographical, grammatical and mechanical errors.
- completed so as to evidence a clear grasp of interactive development standards and design concepts.

When appropriate your multimedia work also will be evaluated for:

- consumer value
- architecture of information presentation
- aesthetic design choices
- creativity and innovation

RESOURCES AND SOFTWARE

Text Book

Learning JavaScript: JavaScript Essentials for Modern Application Development

Ethan Brown, 3rd Edition ~\$25

<http://bit.ly/JSessent>

D3 for the Impatient: Interactive Graphics for Programmers and Scientists

Philip Janert, 1st Edition ~\$25-\$30

<http://bit.ly/d3jsBook>

Software

We will use Atom code editor but any IDE or HTML/CSS/JavaScript Code editor will be fine. Many students use Sublime Text but NEVER USE Dreamweaver.

ASSIGNMENTS

This class follows a project-driven approach and is built on four major projects that demonstrate the skills taught in the class.

In-class Assignments and Quizzes

In-class exercises will cover the reading assignments and issues pertaining to the particular week's lessons. You always will be able to use your notes and textbook to complete the exercises, so be sure to bring them to class everyday. Some of these assignments may count as a quiz grade.

You also will have unannounced more traditional quizzes on reading assignments throughout the semester. If you keep up with the reading assignments, the quizzes will be easy to complete.

Professional Test

There will be one exam during the second half of the semester, possibly on exam day. Date will be determined and you will be informed in plenty of time to study. This test will be similar to what you might see on a job interview. This exam helps you prepare for such a day and show you have the deeper knowledge of what you build.

Projects

On four occasions during the semester you will be assigned projects that will require you to create an original Web site or interactive. More information about these projects will be provided during class.

The final project should demonstrate a comprehensive menu of Web design and multimedia production skills commensurate with what you learned during this course. The same grading criteria used for other assignments submitted during the semester will be used when evaluating your final project but this project is worth 4x the points because it requires extra efforts and proves you have mastered all the skills and concepts for the entire semester. Think of it as your final exam. Additional information about required elements will be provided during class.

Assignments	Points Each	% of Grade
Exercises and Quizzes	20	20%
Three Projects	100	30%
Midterm	150	15%
Final Project	200	20%

Assignments	Points Each	% of Grade
Final Exam, Professional Test	150	15%
Total		100%

Grading	Grade
A	>=94%
A-	90-93%
B +	87-89%
B	85-86%
B-	80-83%
C+	77-79%
C	74-76%
C-	70-73%
D+	67-69%
D	64-66%
D-	60-63%
F	<=59%

Class	Date	Topic/Assignment
1	Wednesday, Aug 21	Introductions, Policies CSS Review,
2	Monday, Aug 26	Advanced CSS, Sprints Project 1 Assigned
3	Wednesday, Aug 28	Command Line
	Monday, Sept 2	Labor Day No CLASS
4	Wednesday, Sept 4	Command Line Day 2
Project 1	Sunday, Sept 8	Project 1 Due by 11:55pm

Class	Date	Topic/Assignment
5	Monday, Sept 9	Git
6	Wednesday, Sept 11	GitHub and Server Setup
7	Monday, Sept 16	Intro to JavaScript
8	Wednesday, Sept 18	JS: Events, Variables
9	Monday, Sept 23	JS: Logic, problem solving
10	Wednesday, Sept 25	JS: Implementing Libraries Project 2 Assigned
11	Monday, Sept 30	JS: Buffer
Project 2	Tuesday, Oct 1	Project 2 Due by 11:59pm
12	Wednesday, Oct 2	Charting
13	Monday, Oct 7	Charting: Dynamic Charts
14	Wednesday, Oct 9	React JS
15	Monday, Oct 14	React JS UI
16	Wednesday, Oct 16	React JS Adv. Project 3 Assigned
17	Monday, Oct 21	Fall Break NO CLASS
18	Wednesday, Oct 23	MID TERM D3: Intro
19	Monday, Oct 28	D3: Graphing
Project 3	Tuesday, October 29	Project 3 Due
20	Wednesday, Oct 30	D3. Dynamic Data
21	Monday, Nov 4	Intro To REST APIs
22	Wednesday, Nov 6	Mapping APIs
23	Monday, Nov 11	Visual APIs Final Project Assigned
24	Wednesday, Nov 13	News APIs
25	Monday, Nov 18	Twitter API
26	Wednesday, Nov 20	Twitter API Part 2

Class	Date	Topic/Assignment
27	Monday, Nov 25	Server Tech
BREAK	Wednesday, Nov 27	Thanksgiving Break
28	Monday, Dec 2	LAB DAY
Project 4	Tuesday, Dec 3	FINAL PROJECT DUE
29	Wednesday, Dec 4	Present Project
EXAM	Friday, Dec 13 at Noon	Professional Test

*Schedule is a guid and a goal for the class but is subject to change based on how quickly the class understands the material, weather and other factors.
