



# J487 Intermediate Interactive Media

Professor: Steven King, Assistant Professor of Interactive Media

UNC School of Media and Journalism

Reese Innovation Lab, 142 E. Franklin St.

Class: Mondays and Wednesday from 12:30-2:15pm

Office Hours: Mondays from 10:30 - 11:30 am or by appointment.

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Course Website: Sakai

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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

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## TECHNICAL CONCEPTS

- Advanced CSS
- Command Line
- Server Technologies
- Git and Git Hub
- Vanilla JavaScript
- Charting Library
- D3.JS
- React.JS (If time allows)
- 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 even during COVID.**

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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.

During COVID, you have the option of attending remotely via Zoom for the in-person sessions. The class will be divided into two groups and one group will attend in-person on Monday, the other in-person on Wednesday. All will be required to attend either remotely or in-person for every day.

You are required to wear a mask during class and to maintain social distancing.

**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.

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## 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/JSession>

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## **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.

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Assignments	Points Each	% of Grade
Exercises and Quizzes	20	20%
Three Projects	100	30%
Midterm	150	15%
Final Project	200	20%
Final Exam, Professional Test	150	15%
<b>Total</b>		<b>100%</b>

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%

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## SCHEDULE

Week	Topic	Assignments
1	Intro, Bootstrap, CSS	CSS Project
2	SASS and Advanced CSS	Continue CSS Project
3	Intro to JavaScript and Programming Concepts	JS Exercise 1
4	Problem Solving Logic, Ifs, Loops and Array	JS Exercise 2
5	JavaScript Logic Part 2	JS Exercise 3
6	JavaScript Frameworks, jQuery and others	Project 2 JS Assigned
7	Plugin Concept	Work on Project 2
8	Quizzes and Conflicts in JS	Project 2 Due
9	Data Visualization: Understanding Charts and Graphs	Charts Exercise 1
10	Data Visualization: Building Charts and Graphs	Project 3 Assigned
11	Data Visualization: Building Charts and Graphs Part 2	Project 3 Due
12	Data Visualization: D3.js	D3 Exercise 1
13	Data Visualization: D3.js	Final Project Assigned
14	Rest APIs	Work on Final Project
15	Final Project Development	Work on Final Project
16	Presentation and Demo of Final Projects	Turn In Final Project

EXAM: November 24th at 12:00 Noon.

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

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