



# J588 Storytelling with Emerging Technologies

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UNC School of Media and Journalism

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## **COURSE DESCRIPTION**

This course will introduce students to storytelling with emerging technologies used in storytelling in Augmented Reality, Virtual Reality, 360 Video, robots, drones and other new technologies. Students will have the opportunity to learn and work with the latest VR hardware including the Oculus Rift and the HTC Vive.

Student will learn

- Media Product Design Concepts (Human Centered Design)

- How Virtual Reality Works with the brain

- What makes a good VR and AR Experience

- Storytelling in both 360 video, AR and VR.

- Technical skills to produce storytelling including drones and robots

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Producing effective interactive media projects requires extensive and detailed skill sets. This class will teach skills in shooting and editing drone video, 360 video, creating virtual environments in Unity, file generations for multiple platforms and build on critical, ethical and journalistic decision-making to generate quality interactive storytelling.

## 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. It is difficult to pass the class if you don't come to class.

**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.

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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 or game either in the footer or a credits/about 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 and Scale

There are basic expectations that any supervisor or project manager would have for a project undertaken by a multimedia designers, developer or product manager and you are expected to produce professional work. 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

<b>A</b>	<b>&gt;=94%</b>
<b>A-</b>	<b>90-93</b>
<b>B+</b>	<b>87-89</b>
<b>B</b>	<b>84-86</b>
<b>B-</b>	<b>80-83</b>
<b>C+</b>	<b>77-79</b>
<b>C</b>	<b>74-76</b>
<b>C-</b>	<b>70-73</b>
<b>D+</b>	<b>67-69</b>
<b>D</b>	<b>60-66</b>
<b>F</b>	<b>&lt;=59%</b>

## RESOURCES, SOFTWARE AND ASSETS

### Text Book

<http://making360.com/> (Free)

### Udemy Drone Course

<https://www.udemy.com/remote-pilot-certificate-test-prep-for-part-107-exam/?couponCode=NEXTGEN>

Subscription is \$20 using the link above

### Access to Netflix

We will be using some videos found on Netflix as required readings (watching)

There will be outside readings and tutorials as assigned.

### Software

We will use many different applications and will try to use free or open source applications whenever possible. This includes:

Atom from Atom.io but any IDE or HTML/CSS/JavaScript Code editor will be fine.

Unity 3D

Wonda VR (in labs)

### 3D Assets

During the VR development you can use free 3D Assets but many students in the past have choose to purchase assets for their projects through various stores. This will save you time and make your projects more professional. These are optional but I suggest budgeting \$50-\$75 for assets

### FAA UAS Pilot Test

After completing the Remove Pilot training Course you will have the highly-encouraged option of taking the official FAA UAS Knowledge Test to obtain your drone pilot license. The cost is \$60 paid to the testing facility at RDU Airport.

### Total Cost of Class:

It should be noted that the cost to take the class will be at least \$100 but if you want to get your license and purchase quality 3D assets through out the semester **you could spend \$200-\$250** so please take this into consideration during the drop time and account for the optional cost later in the semester.

## ASSIGNMENTS

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

### In-class Assignments and Quizzes

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In-class exercises will cover the reading assignments and issues pertaining to the particular day's lessons. You will be able to use your notes and textbook to complete the exercises, so be sure to bring them to class everyday.

### Drone Test Completion and Training Day

Students will complete the Remote Pilot training course and pass the practice test to obtain the certificate of completion by a specific date about half way through the semester. This course requires about **30-40 hours** of out-of-class time.

### 360 Video Project

Student will work in teams of 2 to shoot a narrative story using 360 video. Due to the limited number of cameras. There will be a specific schedule for shooting assignments using the gear.

### Emerging Tech Research Presentation

Students will complete a research assignment to finding a new and emerging technology that could have storytelling potential. Each student will present a 3-5 minute presentation to the class along with a written post complete with images, links and videos of the technology.

### Final Project

The final project should demonstrate a comprehensive menu interactive media production skills and VR or AR storytelling 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. Think of it as your final exam. Additional information about required elements will be provided during class.

### Grading

Assignments	% of Grade
In Class Assignments and quizzes (~5)	20%
360 Video, VR and AR Projects	30%
Emerging Tech Research Presentation	10%
Drone Course Completion	20%
Final Project	20%
<b>Total</b>	<b>100%</b>

## Schedule

### Week 1:

#### Class Topics

Class Overview  
Future Technologies  
Human-Centered Design

#### Assignment

Design Concept from in-class  
Watch Pixar Story (1:30)

### Week 2:

#### Class Topics

Topic: Discuss Pixar and Creative Innovation  
Topic: Storytelling in 360  
Tech: Intro to Shooting 360 Video  
Quiz: Pixar Story

#### Assignment

Start Online Drone Learning  
Watch and Learn Sections 1,2 and 3  
Plan, shoot and edit a story for 360 video story with a teammate.

### Week 3:

#### Class Topics

Drone Storytelling  
Rules, Maps and Usage  
Quiz: Drone Section 1,2 and 3

#### Assignment

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Continue Drone Learning: Watch and Learn Sections 4 and 5.

## **Week 4:**

### **Class Topics**

Drone Flying Workshop Field Trip \*date subject to change

Quiz: Drone Section 4 and 5.

### **Assignment**

Complete Drone Learning: Watch and Learn Section 6 and 7.

## **Week 5:**

### **Class Topics**

Introduction to Virtual environments

Tech Introduction to Unity and scene creation

Quiz: Drone Section 6 and 7

### **Assignment**

VR storytelling example with critique of the story and production value.

Create a simple scene

Complete Drone Learning: Watch and Learn Section 8 and 9.

## **Week 6:**

### **Class Topics**

Introduction to Oculus and HTC Vive

Tech: Unity, Interactive Scenes

Quiz: Drone Section 8 and 9

### **Assignment**

Advance scene to include interactivity

Complete Drone Learning: Watch and Learn Section 10 and 11.

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## Week 7:

### Class Topics

Narrative in VR

Tech: Unity and 3D tools

Quiz: Drone Section 10 and 11

### Assignment

Animate a character

Complete Drone Learning: Watch and Learn Section 12 and 13.

## Week 8:

### Class Topics

Augmented Reality and 3D objects

DRONE EXAM 1 HR 60 Questions 100 points

### Assignment

Design Storyboards and flow for AR project.

## Week 9:

### Class Topics

AR technology development

Photogrammetry

### Assignment

Design and Develop a simple AR app

## Week 10:

### Class Topics

Character Development

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## **Assignment**

Design Storyboards and flow of your project.

## **Week 11:**

### **Class Topics**

Audio in 3D

## **Assignment**

Write proposal for final project

## **Week 12:**

### **Class Topics**

Gaming Speaker

## **Assignment**

Design Storyboards and flow of your project.

## **Week 13:**

### **Class Topics**

Field Trip: TBD

## **Week 14-15:**

### **Class Topics**

Working on final projects. Class and professor feedback

## **Week 16:**

Final Project Presentations

## **Final Exam:**

**Tuesday, April 30, 6pm.**

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\*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.

