# J499 - Experiential Interactives in Mobile Augmented Reality

Instructor: Jason Porter // Email: jp14@email.sc.edu Office Hours: By appointment only via Zoom Delivery Method: Online

# **Course Description**

Introduction to the history, theory, skills and techniques of developing interactive mobile experiences using current augmented reality (AR) technology platforms, such as Snapchat, with interactive graphics, animation and video to generate new forms of shared realities.

# More Details

This course focuses on the foundational concepts and development of augmented reality experiences for visual communications through studio exercises and geo-localized, spatial, and visual problem-solving. This includes historical, visual, conceptual, technical and creative strategies and process to produce interactive experiences generated for shared realities. This course will cover the rapidly evolving landscape of AR technology and software to engage in challenges that build competencies in visual communication interactive contexts.

#### Prerequisites

None, however, students will need a working knowledge of Adobe Photoshop and Illustrator.

#### Restrictions

Junior and Seniors Visual Communications students or with instructor permission.



#### Learning Outcomes

After successful completion of this course, you should be able to:

- Identify the history and development of AR as a method of interactive storytelling
- Recognize and discuss fundamental concepts of AR and idea development
- Distinguish and critique major historical and contemporary approaches to interactive media development through weekly reading responses and class discussions
- Implement organization, time management, and leadership abilities while steadily growing creative development skills.
- Demonstrate understanding of the basics of interactive design within the Lens Studio software platform and Snapchat social network.
- Execute the effective, integrated use of design, typography, geolocation, time, and space to generate new forms of reality by bringing digital objects into the physical world and bringing physical world objects into the digital world.
- Critique your own work and the work of others based on standards of professionallevel work.
- Interpret legal and ethical issues surrounding AR and interactive technology.
- Distinguish the different types of and appropriate uses for AR and the degree to which they impact messaging and design.

#### **Course Methods**

Students will gain knowledge and abilities through readings, lecture /case study presentations, technical demonstrations, design exercises, tutorials, processbased studio assignments (fundamentally experiential, these are the primary means of learning and assessment), critique and class discussions, and individual student conferences.

# The Professor

My name is Jason Porter. I have created art as an animator, illustrator, designer, and motion graphics artist for social media, the web, video games, film, broadcast and television. My current research is in mobile augmented reality and virtual historic site interpretation. To find out more about my work, my website is jasonthewebsite.com.

#### Communications

My office hours are by appointment only via Zoom. Class communications, when outside of office hours, will primarily take place via UofSC email (jp14@email.sc.edu) and through the class Slack channel. This will be the primary means of day-to-day communication for this class. Please check your email and Slack daily for class communications.

Use the following link (also posted on blackboard) in order to join the class Slack Channel; your first homework assignment will be there:

# **Course Materials**

Required readings, articles, useful website links, assignments, projects, grading information, and other course materials will be posted on Blackboard throughout the semester. The class Slack channel will be used for further class discussion and extended course materials. It is your responsibility to familiarize yourself with these materials and keep them handy for in-class and study use.

# Readings

- Agosto, Denise E. "One and Inseparable: Interdependent Storytelling in Picture Storybooks." Children's Literature in Education[G1] 30.4 (1999): 268-280.
- Balsamo, Anne. "Taking Culture Seriously in the Age of Innovation." *Designing Culture: The Technology Imagination at Work*. Duke University Press, 2011: 1-25.
- Bobotis, Chris. "Beyond the Screen and Into True Immersion: How Storytelling Happens in the Viewer's Mind." Augmented World Expo, Mar 29-31, 2019. Web. 9 August 2020 (https://youtu.be/izTEenPxQGA)
- Bogost, Ian. "The Rhetoric of Video Games." *The Ecology of Games: Connecting Youth, Games and Learning*. The MIT Press, 2008: 117-140.
- Bolter, Jay David, Kozel, Susan, & Engberg, Maria. "The Virtual Reality Hype." Audio blog post. Medea Vox, Malmö University. 22 June 2016. Web. 1 September 2017 (<u>https://medea.mah.se/2016/06/vox-virtual-reality/</u>)

- Frank, Jenn. "All the Spaces Between Us: Struggling to Connect in a Pixilated World." Kill Screen Magazine, Issue 3: Intimacy (2011): 1-19.
- Miller M.R., Jun H., Herrera F., Yu Villa J., Welch G., & Bailenson, J.N. "Social Interaction in Augmented Reality." PLoS ONE 14(5) (2019): 1-26.
- Poretski, Arazy & Lanir, Shahar. "Virtual Objects in the Physical World: Relatedness and Psychological Ownership in Augmented Reality." 2019 CHI Conference on Human Factors in Computing Systems Proceedings, May 4–9, 2019, Glagsow, Scotland, UK (2019): 1-13.
- Poyntz, Stuart R & Hoechsmann, Michael. "Children's Media Culture in the Digital Age." Sociology Compass 5/7 (2011): 488–498.
- Schultze, Ulrike & Leahy, Matthew Michael, "The Avatar-Self Relationship: Enacting Presence in Second Life." *Thirtieth International Conference on Information Systems* (2009): 1-17.
- Sipe, Lawrence R. "How Picture Books Work: A Semiotically Framed Theory of the Text Picture Relationships." Children's Literature in Education 29.2 (1998): 97-108.
- Weyeneth, Robert R. "The Architecture of Racial Segregation: The Challenges of Preserving the Problematic Past." The Public Historian, Vol. 27, No. 4, (2005): 11–44.
- Wilson, Brent. "Art, Visual Culture, and Child/Adult Collaborative Images: Recognizing the Other-Than." Visual Arts Research, 2007, Vol. 33, No. 2, Child Art After Modernism (2007): 6-20.
- Zimmerman, Eric & Salen, Katie. "Defining Play." *Rules of play: Game design fundamentals*. The MIT Press, 2004: 299-310.

# Technology

To participate in learning activities and complete assignments, you will need:

- Access to a working computer, your own of the university's, that has a current operating system with updates installed and the recommended minimum system requirements to use Lens Studio, listed here
- <u>Lens Studio</u> (also free) as the program to create AR for Snapchat.
- A Snapchat account to create and view the projects created in and for this class.
- Microsoft Word (<u>free</u>) or compatible word processing program
- Reliable data storage for your work, such as a USB drive or Office365 OneDrive cloud storage.

Instruction in the basic use of Lens Studio will be demonstrated in class and is designed to introduce you to the software. It will be up to you to become proficient with Lens Studio outside of class through practice, trial and error.

Please note that you will encounter limitless, free customizable templates for Lens Studio. I am generally OK with you using these resources after you learn the basics and you are capable of fully understanding, interpreting, and customizing the work that you use.

# **Useful Web Resources**

https://lensstudio.snapchat.com/ https://www.reddit.com/r/SnapLenses/ https://www.the11thsecond.com/ https://arvrjourney.com/ https://arinsider.co/

#### Grading Breakdown

Your final grade is based on the number of points you earn based on individually assigned rubrics that will be distributed with each project and assignment.

• Slack (5 points)

Each student will join the class Slack channel and follow the first prompt within the Slack channel by the deadline to receive these points.

### • Reading Responses (25 total points)

Reading responses should be submitted through the weekly response form posted within the corresponding weekly module on Blackboard. Each reading response will consist of three open ended questions that will be used as prompts for the weekly reading discussions. They will be graded on their completeness, thoughtfulness, and demonstration in the understanding and consideration of the weekly reading.

#### • Reading Discussion Leader // Final Presentation (30 points)

Each student will lead a discussion for one reading of their choosing or present their final project to the class at the end of the semester. Reading discussions/final presentation will be held via zoom with the reading discussion leaders/final presenter, myself, and two discussion participants in an effort to eliminate the ineffectiveness of a 30+ person zoom call. They will be graded on the insight, thoughtfulness, and thoroughness of the topic being presented. The discussions will be recorded and posted for the rest of the class to watch.

• Discussion Participation (20 points)

Each student will participate in one weekly reading discussion or final presentation, which will be held via zoom. They will be graded on the insight, thoughtfulness and quality of discussion and interaction with the other discussion group members.

#### • Practical Projects (60 total points)

There will be six individual projects focusing on different lens types within Lens Studio; the First Lens, Object Markers, 2D Markers, Face Lens, World Lens, & Interactive Lens. Projects specifics will be assigned in advance of their deadlines and will take time to complete properly. They will be graded on their completeness, adherence to the assignment and creative skill.

• Final Project (30 points)

Each student will build an interactive world lens experience which re-contextualizes. Specifics of the final project will be assigned in advance of the deadline and take time to complete properly. The experience will be graded on its completeness, thoughtfulness, technical expertise, and conceptual originality.

#### • Final Paper (30 points)

The final project will be accompanied by a 1500-word research paper examining concepts discussed during class reading discussions and additional independent sources directly related to your final interactive AR experience. Specifics of the final paper will be given in advance of the deadline. The final paper will be graded on its conceptual thoughtfulness, relation to source materials, presentation of ideas, grammar and word choice, style, and overall paper organization.

# **Grading Evaluation**

All grades will be posted on Blackboard. You are strongly encouraged to check your scores in Blackboard regularly. A final letter grade will be assigned based on following percentages.

ltem	Points	Percent
Slack	5	2.5%
Reading Responses	25	12.5%
Discussion Leader // Final Presentation	30	15%
Discussion Participation	20	10%
Practical Projects	60	30%
Final Project	30	15%
Final Paper	30	15%
TOTAL	200	100%

I am unable to discuss grades or other personal academic matters via email; this is what office hours are for, so please schedule a zoom chat with me for any questions. If you wish to dispute the grade of a specific assignment, you may do so during the week following the return of the grade. After 5 days, your ability to dispute ends.

Grade	Percent Range	Standards
А	100 - 90	Excellent work
B+	89.9 - 85	Exceeds standards
В	84.9 - 80	Average work
C+	79.9 - 75	Slightly below standards
С	74.9 - 70	Below standards
D+	69.9 - 65	Unsatisfactory work
D	64.9 - 60	Very unsatisfactory work
F	59.9 - below	Fails to meet standards

#### Late Work

You will lose 1/3 of your grade for each day your assignment is late. That means that after 3 days late, the assignment is worth zero.

# Attendance

This course is asynchronous and online; therefore, I will not take any form of attendance. You are responsible for your own progress through the course.

# **Counseling Services**

The University offers <u>counseling</u> and <u>crisis services</u> as well as outreach services, self-help, and frequently asked questions.

# Class Schedule

The class schedule is subject to change.

Date		Торіс	What's Due Each Week
24 - Aug	Week 01	Removing Learning Structures, History of AR	Slack
31 - Aug	Week 02	Innovation, Reconfiguration & Culture Creation	
07 - Sept	Week 03	Defining Play	Your First Lens
14 - Sept	Week 04	Procedural Rhetoric	
21 - Sept	Week 05	Text-Picture Relationships	2D Markers
28 - Sept	Week 06	Interdependent Storytelling	
05 - Oct	Week 07	Children's Media Culture in the Digital Age	Object Marker
12 - Oct	Week 08	Storytelling in the Viewer's Mind	
19 - Oct	Week 09	Connecting in a Pixelated World	Face Lens
26 - Oct	Week 10	Social Interactions in AR	
02 - Nov	Week 11	Psychological Ownership in AR	World Lens
09 - Nov	Week 12	The Avatar-Self Relationship	
16 - Nov	Week 13	Re-Contextualizing the Past	Interactive Lens
23 - Nov	Week 14	Empathy in Immersion	
30 - Nov	Week 15	Work Week	
07 - Dec	Week 16	FINALS	Final Project & Paper

Additional policies specific to course instruction for the University of South Carolina are posted on Blackboard.