RTV 4930 (29003) Interactive and Immersive Media

Course Info

 When: Tuesday Period 6-8 (12:50 PM – 3:50 PM)

 Where: MAT 0004

Instructor: Dr. Yu-Hao Lee

E-mail: <u>leeyuhao@ufl.edu</u> (my preferred method)

Phone: (352) 392-3951

Office hours: Tuesday 10 am-12 pm or by email appointment

Office: 3051 Weimer Hall

Course Objectives

Humans use multiple senses to engage others and our surroundings, but traditional media has been limiting. A key development in media technology has been to bring back these senses and extend our capability to perceive and interact with our physical and virtual environments. How does interactivity change our relationships with media and society? How can we design interactions in our storytelling, interface, and communication practices?

In addition to interactivity, we're also witnessing the growth of immersive media such as video games, virtual reality, and mixed reality. These immersive media create a sense of "being there" and afford new ways of interacting with the world and ourselves.

In this class, we will learn about:

- 1) Some of the newest VR and XR applications in communication.
- 2) Ways that interactive and immersive media engage our senses and their effects.
- 3) How interactivity and immersion can change our perceptions and behaviors.
- 4) How can we design interactive and immersive experiences to engage with other users and potentially persuade them for various purposes?

Readings

There are no required textbooks for this class, but you are required to read or watch the materials on Canvas. All the readings will be posted on the Canvas course site (<u>https://elearning.ufl.edu/</u>) select "e-Learning in Canvas," and log in using your Gatorlink ID.

Recommended books to help you learn more about immersive media:

Bailenson, J. (2018). *Experience on demand: What virtual reality is, how it works, and what it can do*. WW Norton & Company.

Lanier, J. (2017). *Dawn of the new everything: Encounters with reality and virtual reality*. Henry Holt and Company.

Requirements

1) Weekly assignment (Due each Sunday at 11:59 pm)

You are expected to read or watch the required readings/videos each week and post your thoughts and questions on Canvas. DO NOT summarize the materials. You should write about what you have learned from the readings, how it relates (or does not relate) to your own experiences, and the questions that you have when reading/watching the materials. Feel free to talk about potential applications or implications, too.

In short, the weekly assignments must include 1) what you have learned from the materials and 2) questions that you would like to discuss in class.

2) Interactive narrative project (Due Oct. 8th 11:59pm)

We will use Twine (<u>https://twinery.org/</u>) to design an interactive story. The story can be about anything, but make sure to include the principles that motivate engagement through interactivity, including meaningful choices (agency), mastery (competence), feedback, and relatedness.

For the assignment, you will submit a) a link to your interactive narrative. b) A 1-2 page document that explains how you incorporated the interactivity design into your narrative, and the issues that you encountered during the process and how you resolved them

3) VR/XR Application Design Project (Due Dec. 3th)

The goal of this project is for you to apply what you have learned to propose an immersive media experience that tackles an important social issue. You will work in teams to design an immersive media experience that can communicate and reach an identified outcome of your choice. Your design document will need to address several questions:

- 1. What issue are you going to address with this immersive experience?
 - a) Conduct formative research with potential users/stakeholders to identify the problem that your experience seeks to address
 - b) Make an argument for why this issue is important (use studies, statistics, and other credible evidence to support your argument).

- 2. Identify a tangible goal for the immersive experience (e.g., raise awareness, increase knowledge, change attitudes or behaviors. Be specific).
 - a) How will you assess the outcome of the game to determine its effectiveness?
 - b) Based on its affordances, why is immersive media suitable for this goal?
- 3. Describe the design in detail, with graphics, narratives, and video examples.
 - a) What key affordances and features are used to communicate your intended messages?
 - b) What theories are used to support the design choices? Explain why and how the theories inform your design.
- 4. What skills and technology do you have to achieve this design? And what do you need to learn to make it better?

Extra Credits

3 extra credits will be offered for research participation through CJC's SONA research management system (https://ufl-cjc.sona-systems.com). Please register a SONA account and choose studies to participate in to receive extra credits for this class. Check SONA regularly to see what studies have become available. Typically, it is not until around maybe the third week of the semester that studies will become available. You should NOT wait until the last minute to sign up for participation because people tend to procrastinate, and research opportunities will be limited by the end of the semester. In fact, it is probably wise to participate early in the semester when your course loads are the lightest. Please see this video below for how to set up your SONA account: https://youtu.be/_10nT2ZU6QQ *If you have any questions, please contact the CJC SONA administrator through this email: uf-cjc-sonasystems@jou.ufl.edu*

Grading

Weekly thoughts	30%
Game analysis	20%
Final project	40%
Class participation	10%

А	93%-100%	C+	75%-79.99%
A-	90% -92.99%	С	70%-74.99%
B+	85%-89.99%	D+	65%-69.99%
В	80%-84.99%	D	60%-64.99%
		E	Under 60%

Class Policy

Attendance: The class will start promptly. If you come in late or have to leave early, please do so quietly without disturbing others.

Electronic devices: Please turn your phone off or to silent mode during class and keep it tucked away unless we are using it to examine mobile games.

Honor Code: As a student at this university, you have accepted a commitment to the Honor Code, and the principles of academic integrity, personal honesty, and responsible citizenship on which it was founded. As an instructor at this university, I am also charged with its enforcement and take that responsibility very seriously.

You can find the complete honor code via this link: https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/

Among the activities that could result in Honor Code violations are <u>plagiarism</u>, <u>cheating</u>, <u>misrepresenting sources</u>, <u>the unauthorized use of others' work</u>, <u>etc</u>. Consult the APA manual for definitions of plagiarism. Consult me if you are uncertain about your Honor Code responsibilities within this course.

Special Needs: According to University policy, students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide appropriate documentation to you, and you should provide this documentation to me when requesting specific accommodation. It is your responsibility to initiate this conversation early in the semester, and you should plan to meet with me during office hours to discuss this.

Teaching Evaluation: Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. <u>Click here for guidance on how to give feedback in a professional and respectful</u> <u>manner</u>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <u>ufl.bluera.com/ufl/</u>. <u>Summaries of course evaluation results are</u> <u>available to students here</u>.

Date	Торіс	Required Materials
Week 1 Aug 27	Welcome & Introduction	1.
Week 2 Sep 3	Virtual Reality & Mixed Reality demo	

Week 3		
Sep 10	What is Interactivity?	1. Kiousis, S. (2002). Interactivity: a concept explication. <i>New media & society</i> , <i>4</i> (3), 355-383.
		2. Stromer-Galley, J. (2004). Interactivity-as- product and interactivity-as-process. <i>The</i> <i>Information Society</i> , <i>20</i> (5), 391-394.
		3. <u>Affordances in design (YouTube video)</u>
Week 4 Sep 17	Competence and Effectance	 Harter, S. (1978). Effectance motivation reconsidered. Toward a developmental model. <i>Human development</i>, 21(1), 34-64.
		 Klimmt, C., Hartmann, T., & Frey, A. (2007). Effectance and control as determinants of video game enjoyment. <i>Cyberpsychology & behavior</i>, 10(6), 845-848.
Week 5 Sep 24	Autonomy and Choice	 Graham, T., & Henman, P. (2019). Affording choice: how website designs create and constrain 'choice'. <i>Information, Communication &</i> <i>Society</i>, 22(13), 2007-2023.
		 Miron, A. M., & Brehm, J. W. (2006). Reactance theory-40 years later. <i>Zeitschrift für</i> <i>Sozialpsychologie</i>, 37(1), 9-18.
Week 6 Oct 1	Interactivity & Persuasion	 Oh, J., & Sundar, S. S. (2015). How does interactivity persuade? An experimental test of interactivity on cognitive absorption, elaboration, and attitudes. <i>Journal of Communication</i>, 65(2), 213-236.
		 Green, M. C., & Jenkins, K. M. (2014). Interactive narratives: Processes and outcomes in user-directed stories. <i>Journal of</i> <i>Communication</i>, 64(3), 479-500.
Week 7 Oct 8	Customization	 Kalyanaraman, S. S., & Wojdynski, B. W. (2015). Affording control: How customization,

		 interactivity, and navigability affect psychological responses to technology. <i>The</i> <i>handbook of the psychology of communication</i> <i>technology</i>, 425-444. 2. Wang, J., & Sundar, S. S. (2022). Are we more reactive to persuasive health messages when they appear in our customized interfaces? The role of sense of identity and sense of control. <i>Health</i> <i>communication</i>, <i>37</i>(8), 1022-1030.
Week 8 Oct 15	Immersion & Presence	 Lee, K. M. (2004). Presence, explicated. <i>Communication theory</i>, 14(1), 27-50. Lombard, M., & Jones, M. T. (2015). Defining
		presence. Immersed in media: Telepresence theory, measurement & technology, 13-34.
Week 9 Oct 22	Embodiment	 Biocca, F. (1997). The cyborg's dilemma: Progressive embodiment in virtual environments. <i>Journal of Computer-Mediated Communication</i>, 3(2). <u>https://doi.org/10.1111/j.1083-6101.1997.tb00070.x</u>
		 Foglia, L., & Wilson, R. A. (2013). Embodied cognition. <i>Wiley Interdisciplinary Reviews:</i> <i>Cognitive Science</i>, 4(3), 319-325.
		 Won, A. S., Bailenson, J., Lee, J., & Lanier, J. (2015). Homuncular flexibility in virtual reality. <i>Journal of Computer-Mediated Communication</i>, 20(3), 241-259.
Week 10 Oct 29	Perspective Taking & Empathy	 Ahn, S. J., Bostick, J., Ogle, E., Nowak, K. L., McGillicuddy, K. T., & Bailenson, J. N. (2016). Experiencing nature: Embodying animals in immersive virtual environments increases inclusion of nature in self and involvement with nature. <i>Journal of Computer-Mediated Communication</i>, 21(6), 399-419.
		 Peck, T. C., Seinfeld, S., Aglioti, S. M., & Slater, M. (2013). Putting yourself in the skin of a black

		avatar reduces implicit racial bias. <i>Consciousness and cognition</i> , 22(3), 779- 787.
Week 11 Nov 5	Virtual Reality Applications	 Ryan, W. S., Cornick, J., Blascovich, J., & Bailenson, J. N. (2019). Virtual reality: Whence, how and what for. <i>Virtual reality for</i> <i>psychological and neurocognitive interventions</i>, 15-46.
		2. Oleksy, T., & Wnuk, A. (2017). Catch them all and increase your place attachment! The role of location-based augmented reality games in changing people-place relations. <i>Computers in</i> <i>Human Behavior</i> , <i>76</i> , 3-8.
Week 12 Nov 12	Augmented Reality Applications	 Dargan, S., Bansal, S., Kumar, M. <i>et</i> al. Augmented Reality: A Comprehensive Review. Arch Computat Methods Eng 30, 1057– 1080 (2023). <u>https://doi.org/10.1007/s11831- 022-09831-7</u> Miller, M. R., Jun, H., Herrera, F., Yu Villa, J., Welch, G., & Bailenson, J. N. (2019). Social interaction in augmented reality. <i>PloS one</i>, 14(5), e0216290.
Week 13 Nov 19	The Metaverse!	 Dwivedi, Y. K., Hughes, L., Wang, Y., Alalwan, A. A., Ahn, S. J., Balakrishnan, J., & Wirtz, J. (2023). Metaverse marketing: How the metaverse will shape the future of consumer research and practice. <i>Psychology & Marketing</i>, 40(4), 750-776. Hadi, R., Melumad, S., & Park, E. S. (2024). The Metaverse: A new digital frontier for consumer behavior. <i>Journal of Consumer</i> <i>Psychology</i>, 34, 142– 166. <u>https://doi.org/10.1002/jcpy.1356</u>
Week 14 Nov 26	Thanksgiving Holiday	(No class)

Week 15 Dec 3
