

# Intro to Virtual Reality

Art & Design: Games and Playable Media (AGPM) 141

Summer Session 2, 2021

Tuesdays and Thursdays, 9:00AM – 12:30PM, on Zoom

University of California, Santa Cruz

Professor Dr. micha cárdenas

[michacardenas@ucsc.edu](mailto:michacardenas@ucsc.edu)

“The Matrix is a world pulled over your eyes to blind you from the truth.”

“What truth?”

“That you are a slave, Neo. Like everyone else, you were born into bondage.”

- The Matrix, Lana Wachowski and Lilly Wachowski

“Whose interests are being served in the world of the Internet? Must there be a Master, a One, or can the notion of heroic and lone leadership be replaced by community and consensus instead? What is the place of the Real and the place of race in the world of the virtual?”

- Lisa Nakamura, “Race in the Construct, or the Construction of Race: New Media and Old Identities in ‘The Matrix’”

“The dialogue we start now will shape the future of this industry for everyone.”

- A.M. Darke, “An Open Letter to Oculus Founder, Palmer Lucky”

## Program Values Statement

“As a community we are committed to equity, inclusion, social & environmental justice. As an intersectional feminist program we recognize this is a process that must be grounded in shared leadership & radical gentleness.

In our work as students, faculty and staff we embody the values of honesty, kindness and critical thinking while maintaining a nurturing environment with a specific focus on health and wellbeing, critical consciousness and growth.

We are committed to sustaining a program that is pro-LGBTQ+, anti-racist and anti-oppression. This work requires a proactive approach to sustainability and accountability, and ultimately relies on our shared experience and solidarity.”

- Art and Design: Games and Playable Media Program Values Statement, <https://games.arts.ucsc.edu/>

## Course Information

This course is a theory/practice studio course in virtual reality. We will read texts about how to design for virtual reality, as well as critical theory about virtual reality, and create original virtual

reality art projects that respond to these texts. In this course, students will learn basics of the Unity software development platform, as well as basics of Oculus development. We will also learn ways of generating ideas for VR by studying artwork and other VR projects.

## **Learning Outcomes**

Students in this course will:

- Become familiar with academic debates concerning virtual reality, as well as the history of the medium.
- Learn the basics of the Unity development environment
- Learn the basics of Oculus development in Unity
- Practice creating original virtual reality artworks that engage with the ideas we are reading about in this course.

## **These objectives extend the AGPM Program Objectives**

- Demonstrate understanding of the connections between technical commitments and game system design, on one hand, and player experience and cultural communication goals, on the other.
- Define, develop, and communicate artistically innovative game ideas—situated historically and employing the methods of multiple art practices.
- Use knowledge of game history and interpretation sufficient to do independent research on a topic, identify relevant games and secondary literature, think critically about a particular games-related topic, and make a convincing, research-based argument about games.

## **Community Guidelines**

- To be generated collectively

## **Grading**

This course is graded by self-evaluation, according to a rubric that we will collectively write together as a class. Self-evaluation is a test of your honesty and integrity. I am asking you to honestly evaluate the amount and the quality of work you put into this class. You should expect the class to be just as difficult as any other advanced undergraduate course in Feminist Studies, Computer Science, Critical Race and Ethnic Studies or Art, as this class blends all of those disciplines together, which is its own additional challenge! Your self-evaluation paper must be well written, referring to the rubric that we create as a class, and requesting a specific letter grade. I will adjust the grade based on my evaluation of your performance in the class, but only in extreme circumstances will it change more than a letter grade.

## **Assignments**

- 2 page critical reflection on VR games chosen by you
- Mid-Term self-evaluation of your performance in class
- Slides of your presentation of your VR project proposal including mechanics, story, characters, emotional goals and unique aspects.

## Calendar

### Week 1

**Tuesday, July 27**

Course introduction on Zoom and Intro to Unity

Watch/Play: Osmose, Neurospeculative Afrofeminism, Notes on Blindness

**Thursday, July 29**

Post in discussion forum about:

“VR: *After the Hype*”, *Computers as Theater*, Brenda Laurel,

[https://ucsc.primo.exlibrisgroup.com/permalink/01CDL\\_SCR\\_INST/vrl1tf/alma991025390075104876](https://ucsc.primo.exlibrisgroup.com/permalink/01CDL_SCR_INST/vrl1tf/alma991025390075104876)

“An Open Letter of Oculus Founder, Palmer Luckey,” A.M. Darke

<https://medium.com/@prettydarke/an-open-letter-to-oculus-founder-palmer-luckey-c3ac9486582d>

Watch/play: Traveling while Black

### Week 2

**Tuesday, August 3**

Oculus VR Rig in Unity and hand simulation in Unity

Due: 2 page critical reflection of two Oculus Quest games, discussing the game mechanics and aesthetics, and the social dimensions of the game (race, gender, ability, environment, etc.).

**Thursday, August 5**

*Hamlet on the Holodeck*, Janet Murray (pdf will be in Canvas)

“Virtual Reality and the Oculus Rift”, in *Game Design Workshop, Chapter 14*, by Tracy Fullerton

[https://learning.oreilly.com/library/view/game-design-workshop/9781482217179/K22093\\_C014.xhtml#sec1-5](https://learning.oreilly.com/library/view/game-design-workshop/9781482217179/K22093_C014.xhtml#sec1-5)

### Week 3

**Tuesday, August 10**

Designing characters in games

Oculus locomotion and object interaction in Unity

Due: 2 page self-reflection mid-term evaluation.

## **Thursday, August 12**

Post on the discussion forum:

"Race in the Construct, or the Construction of Race: New Media and Old Identities in 'The Matrix'", Lisa Nakamura  
[http://www.refugia.net/domainerrors/DE1d\\_matrix.pdf](http://www.refugia.net/domainerrors/DE1d_matrix.pdf)

"A Conversation with Spirits Inside the Simulation of a Coast Salish Longhouse," Jackson 2Bears,  
<https://journals.uvic.ca/index.php/ctheory/article/view/14679>

## **Week 4**

### **Tuesday, August 17**

Project proposals in small groups on zoom, include slides with visuals and text descriptions of mechanics, characters, story, emotional goals, and unique aspects of your project

### **Thursday, August 19**

Work on your projects

## **Week 5**

### **Tuesday, August 23**

Playtesting on Zoom

### **Thursday, August 26**

Submit final project video on Canvas  
Due: 3 page self-evaluation paper.

## **Policies**

### **ACADEMIC INTEGRITY**

All members of the UCSC community benefit from an environment of trust, honesty, fairness, respect, and responsibility. You are expected to present your own work and acknowledge the work of others in order to preserve the integrity of scholarship.

Academic integrity includes:

- Following exam rules
- Using only permitted materials during an exam
- Viewing exam materials only when permitted by your instructor
- Keeping what you know about an exam to yourself
- Incorporating proper citation of all sources of information
- Submitting your own original work

Academic misconduct includes, but is not limited to, the following:

- Disclosing exam content during or after you have taken an exam
- Accessing exam materials without permission
- Copying/purchasing any material from another student, or from another source, that is submitted for grading as your own
- Plagiarism, including use of Internet material without proper citation
- Using cell phones or other electronics to obtain outside information during an exam without explicit permission from the instructor
- Submitting your own work in one class that was completed for another class (self-plagiarism) without prior permission from the instructor.

Violations of the Academic Integrity policy can result in dismissal from the university and a permanent notation on a student's transcript. For the full policy and disciplinary procedures on academic dishonesty, students and instructors should refer to the [Academic Misconduct page](#) at the [Division of Undergraduate Education](#).

## ACCESSIBILITY

UC Santa Cruz is committed to creating an academic environment that supports its diverse student body. If you are a student with a disability who requires accommodations to achieve equal access in this course, please submit your Accommodation Authorization Letter from the Disability Resource Center (DRC) to me privately during my office hours or by email, preferably within the first two weeks of the quarter. At this time, I would like us to discuss ways we can ensure your full participation in the course. I encourage all students who may benefit from learning more about DRC services to contact the DRC by phone at 831-459-2089 or by email at [drc@ucsc.edu](mailto:drc@ucsc.edu).

You can find further examples of accessibility and inclusivity statements in [CITL's Sample Syllabus Language](#).

## INTELLECTUAL PROPERTY

The materials in this course are the intellectual property of their creators. As a student, you have access to many of the materials in the course for the purpose of learning, engaging with your peers in the course, completing assignments, and so on. You have a moral and legal obligation to respect the rights of others by only using course materials for purposes associated with the course. For instance, you are not permitted to share, upload, stream, sell, republish, share the login information for, or otherwise disseminate any of the course materials, such as: video and audio files, assignment prompts, slides, notes, syllabus, simulations, datasets, discussion threads. Conversely, any materials created solely by you (for example, your videos, essays, images, audio files, annotations, notes) are your intellectual property and you may use them as you wish.

## RELIGIOUS ACCOMMODATION

UC Santa Cruz welcomes diversity of religious beliefs and practices, recognizing the contributions differing experiences and viewpoints can bring to the community. There may be times when an academic requirement conflicts with religious observances and practices. If that happens, students may request the reasonable accommodation for religious practices. The instructor will review the situation in an effort to provide a reasonable accommodation without penalty. You should first discuss the conflict and your requested accommodation with your instructor early in the term. You or your instructor may also seek assistance from the [Dean of Students office](#).

## TITLE IX/CARE ADVISORY

*Instructors are encouraged to include a Title IX and CARE (Campus Advocacy, Resources & Education) statement in their syllabi to address their reporting responsibilities and to provide students with information on resources and support services. You are welcome to use the text below or may prefer to alter this statement to suit your own needs; however, at a minimum, it is suggested that you inform students of the following: (1) University policy requires you to report Title IX misconduct, and (2) the CARE office offers confidential support. This sample statement was created in collaboration with the UC Santa Cruz Title IX Office and leadership at CARE.*

UC Santa Cruz is committed to providing a safe learning environment that is free of all forms of gender discrimination and sexual harassment, which are explicitly prohibited under Title IX. If you have experienced any form of sexual harassment, sexual assault, domestic violence, dating violence, or stalking, know that you are not alone. The Title IX Office, the Campus Advocacy, Resources & Education (CARE) office, and Counseling & Psychological Services (CAPS) are all resources that you can rely on for support.

Please be aware that if you tell me about a situation involving Title IX misconduct, I am required to share this information with the Title IX Coordinator. This reporting responsibility also applies to course TAs and tutors (as well to all UCSC employees who are not designated as “confidential” employees, which is a special designation granted to counselors and CARE advocates). Although I have to make that notification, you will control how your case will be handled, including whether or not you wish to pursue a formal complaint. The goal is to make sure that you are aware of the range of options available to you and that you have access to the resources you need.

Confidential resources are available through [CARE](#). Confidentiality means CARE advocates will not share any information with Title IX, the police, parents, or anyone else without explicit permission. CARE advocates are trained to support you in understanding your rights and options, accessing health and counseling services, providing academic and housing accommodations, helping with legal protective orders, and more. You can contact CARE at (831) 502-2273 or [care@ucsc.edu](mailto:care@ucsc.edu).

In addition to CARE, these resources are available to you:

- If you need help figuring out what resources you or someone else might need, visit the [Sexual Violence Prevention & Response \(SAFE\) website](#), which provides information and resources for different situations.
- [Counseling & Psychological Services \(CAPS\)](#) can provide confidential counseling support. Call them at (831) 459-2628.
- You can also report gender discrimination and sexual harassment and violence directly to the University’s [Title IX Office](#), by calling (831) 459-2462 or by using their [online reporting tool](#).
- Reports to law enforcement can be made to the UC Police Department, (831) 459-2231 ext. 1.
- For emergencies, call 911.

## REPORT AN INCIDENT OF HATE OR BIAS

The University of California, Santa Cruz is committed to maintaining an objective, civil, diverse and supportive community, free of coercion, bias, hate, intimidation, dehumanization or exploitation. The Hate/Bias Response Team is a group of administrators who support and guide students seeking assistance in determining how to handle a bias incident involving another student, a staff member, or a

faculty member. To report an incident of hate or bias, please use the following form: [Hate/Bias Report Form](#).

## STUDENT SERVICES

### [Counseling and Psychological Services](#)

Many students at UCSC face personal challenges or have psychological needs that may interfere with their academic progress, social development, or emotional wellbeing. The university offers a variety of confidential services to help you through difficult times, including individual and group counseling, crisis intervention, consultations, online chats, and mental health screenings. These services are provided by staff who welcome all students and embrace a philosophy respectful of clients' cultural and religious backgrounds, and sensitive to differences in race, ability, gender identity and sexual orientation.

### [Student Success and Engagement Hub](#)

The Division of Student Success provides campus-wide coordination and leadership for student success programs and activities across departments, divisions, the colleges, and administrative units.

### [Tutoring](#) and Learning Support

At Learning Support Services (LSS), undergraduate students build a strong foundation for success and cultivate a sense of belonging in our Community of Learners. LSS partners with faculty and staff to advance educational equity by designing inclusive learning environments in Modified Supplemental Instruction, Small Group Tutoring, and Writing Support. When students fully engage in our programs, they gain transformative experiences that empower them at the university and beyond.

### [Slug Support Program](#)

College can be a challenging time for students and during times of stress it is not always easy to find the help you need. Slug Support can give help with everything from basic needs (housing, food, or financial insecurity) to getting the technology you need during remote instruction.

To get started with SLUG Support, please contact the [Dean of Students](#) Office at 831-459-4446 or you may send us an email at [deanofstudents@ucsc.edu](mailto:deanofstudents@ucsc.edu).

### Slug Help/[Technology](#)

The ITS Support Center is your single point of contact for all issues, problems or questions related to technology services and computing at UC Santa Cruz. To get technological help, simply email [help@ucsc.edu](mailto:help@ucsc.edu).

### On-Campus Emergency Contacts

Slug Help/[Emergency Services](#). For all other help and support, including the health center and emergency services, start [here](#). Always dial 9-1-1 in the case of an emergency.

## Resources

All Gender Restrooms at UCSC:

<https://maps.ucsc.edu/sites/default/files/GIF-Master-List-Final-091916.pdf>

Lactation Rooms: [https://maps.ucsc.edu/sites/default/files/lactation\\_room\\_map\\_6-18.pdf](https://maps.ucsc.edu/sites/default/files/lactation_room_map_6-18.pdf)

Childcare: <https://childcare.ucsc.edu/>

Prayer Rooms: ISB-475, <http://ucscmsa.wixsite.com/home>

For Veterans: <https://stars.ucsc.edu/veteran/>

Undocumented Student Services:

[https://eop.ucsc.edu/undocumented\\_student\\_services/index.html](https://eop.ucsc.edu/undocumented_student_services/index.html)

Support for Survivors of Assault: <https://care.ucsc.edu/resources/support-survivors.html>

Slug Support, including Food Support

<https://basicneeds.ucsc.edu/crisis-resolution/Slug%20Support%20Program.html>

Writing Centers: <https://lss.ucsc.edu/programs/writing-support/index.html>

Counseling & Psychological Services: <https://caps.ucsc.edu/index.html>