



UCLA GAME LAB SUMMER INSTITUTE (Session A)

July 12 - July 23, 2021

The UCLA Game Lab is an internationally renowned, creative research center that approaches game development and design as a discipline that combines technology and the arts.

Founded in 2009 by artist and game designer Eddo Stern, a professor in the Department of Design Media Arts, the lab is sponsored by the School of the Arts and Architecture and the School of Theater, Film, and Television.

The lab's mission is to foster the production of various game forms and game-related research along three areas of focus:

- Game aesthetics - the experimentation with the look, sound, language and tactility of games
- Game context - development of games that involve the body, interface, physical space and/or performance in new ways
- Game genres - examination of the history and discourse of gaming and the development of game forms that explore new subject matter for games and push the boundaries of the medium

In the Game Lab's Summer Institute Program, students will have the opportunity to develop the fundamental skills required to create games and game art that express a personal and subjective approach to game making.

PROGRAM INFORMATION

Program schedule (all times PDT)

Monday, July 12 – Friday, July 23, 2021

During this two-week/four-course program, students will take two courses during week one (July 12-16), and two courses during week 2 (July 19-23). Students will be expected to attend two lectures every day (one for each class)--either via live-stream or recorded sessions provided each day of the program.

THE COURSES

Game design

This course will introduce students to the fundamentals of game design, such as creating playable characters, designing conflicts and choices, and giving players compelling motivations and goals. Students will work to create their own tabletop game with a focus on game systems, game flow, creativity, and aesthetics. It is the goal of this course for students not only to produce an original game, but also to develop an understanding of how game design really works, and to explore the potential of games for creative expression.

Character animation

Computer games give us avatars to control, and this course provides an introduction in how to create playable characters through modeling and animation. Students will develop a character or avatar, which

they will learn how to bring to life through stylized visualization and movement. This emphasis allows students to learn various aspects of modeling and animation as applied through After Effects, a state-of-the-art modeling and animation application.

World building

Videogames rely on world building to give game environments narrative potential and playful motivation. In this course, students will learn about the concept of world building, and then put this concept into practice by creating a game environment in the Unity game engine (a leading development platform for creating indie/professional games). Students will create multiple environmental elements, such as buildings, plants, terrain, and lighting to build the geography of a game world. The end result will be a navigable environment that expresses the creative decisions of each student.

Game programming

Videogames rely on programming or code to express movement and collision, provide spaces for interaction, and capture player input. This course introduces students to the fundamentals of game-related coding while developing a playable videogame. Using a creative graphics programming toolkit and library for creating games, students will finish building a videogame, playtest the results, and make refinements as part of an iterative design process (a common approach to game design in indie and professional game development).

SCHEDULE OVERVIEW

Week 1 - Monday - Thursday (July 12 - 15)

10 a.m. - 1 p.m. Course 1 - LIVE

Instructor-led lecture, examples, and hands-on studio time

2 p.m. - 5 p.m. Course 2 - LIVE

Instructor-led lecture, examples, and hands-on studio time

6 p.m. Course 1 and 2 - RECORDED

Daily classes recorded and made available for streaming online during the Summer Institute

6 p.m. - 7 p.m. Lab time - LIVE

Teaching assistant-led labs for student assistance

Friday (July 16)

10 a.m. - 1 p.m. Course 1 - LIVE

Wrap-up work session with instructor

2 p.m. - 5 p.m. Course 2 - LIVE

Wrap-up work session with instructor

(No evening Lab session or recordings on Fridays)

Week 2 - Monday-Thursday (July 19-22)

10 a.m. - 1 p.m. Course 3 - LIVE

Instructor-led lecture, examples, and hands-on studio time

2 p.m. - 5 p.m. Course 4 - LIVE

Instructor-led lecture, examples, and hands-on studio time

6 p.m. Course 3 and 4 - RECORDED

Daily classes recorded and made available for streaming online during the Summer Institute

6 p.m. - 7 p.m. Lab time - LIVE

Teaching assistant-led labs for student assistance

Friday (July 23)

10 a.m. - 1 p.m. Course 1 - LIVE

Wrap-up work session with instructor

2 p.m. - 5 p.m. Course 2 - LIVE

Wrap-up work session with instructor

(No evening Lab session or recordings on Fridays)

After the Summer Institute

- Students will be able to download all work saved to their account during the Summer Institute for ongoing personal development or for portfolio use.
- Completed student work from each of the four courses will be exhibited online as a virtual gallery for students and parents to enjoy!

Course syllabi and online resources

Students will receive complete syllabi with daily schedules and project goals as part of their welcome and orientation packet, which will be delivered via email to all students this summer. The packet will contain information students will need to login to their digital classroom, to access their online/streaming courses, and to upload their project work each day.

Faculty and Staff

All faculty and teaching assistants are practicing game design artists and educators affiliated with the UCLA Game Lab, with extensive experience and expertise in their respective course subjects. Each course will be led by a faculty instructor and teaching assistant, with additional staff to provide support.

Additional Information

As an online/distance-learning institute for 2020, all class instruction and student work will need to be facilitated through student-acquired hardware and software. The exact specifications are listed below. In most cases, these requirements are already met by most desktop or laptop computers students already have. Extra software may have to be purchased by students (specifically, Adobe Creative Cloud) through a

cloud-based subscription for a nominal fee. Please email the UCLA Game Lab Summer Institute if you have any technical questions at summer.institute@games.ucla.edu.

Desktop/laptop recommended specifications:

- CPU: Multicore Intel/AMD processor with 64-bit support
- GPU: 2GB of GPU VRAM
- Microsoft Windows 10 / macOS v10.13
- RAM 16GB recommended
- 20GB of available hard-disk space; Additional disk space for disk cache (10GB recommended)

Other required hardware:

- Keyboard and mouse
- Web camera (built into computer is fine)
- Microphone (built into computer is fine)

Software:

- Adobe Creative Cloud - All Apps subscription for one month
<https://www.adobe.com/creativecloud/buy/students.html>
- Unity (free): <https://unity.com/>

Also recommended (but not required--workarounds will be possible in all classes for students without access to the following):

- Mobile phone with a scanner application (such as Scannable); a flatbed scanner may also be useful
- Drawing paper and pens (Micron-brand pens are particularly recommended for use with scanning art)
- Tablet for digital drawing and illustrating (stylus, Wacom tablet)
- Secondary monitor/display (if you are working on a Mac you can use an iPad as a secondary monitor/display with Sidecar)

Commitment to diversity and inclusivity

UCLA Game Lab Summer Institute is committed to the values of diversity and to fostering an environment of inclusivity for all students and staff, regardless of race, gender, sexual orientation, disability, physical appearance, body size, age, political affiliation, or religion. We expect students and staff to respect these values and to help ensure that the Summer Institute is a safe and supportive environment for everyone.

Contacts

Questions, please contact:

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