

USC Cinematic Arts

CTIN 481 Introduction to World Building for Games

Units: TBD

SPRING 2025 - Wed/Time: 17:00 - 18:50 (5pm - 6:50pm)

Location: TBD

Link to Course Brightspace: TBD

Instructor: Evan Gasper

Office: SCI - L105

Office Hours: 1600 –1700 (4:00pm – 6:00pm) ZOOM and In-person. Contact Professor Gasper to set an appointment.

Contact Info: egasper@usc.edu I'll reply to all emails within 24 Hours.

Student Assistant: Rae Chen

Office: N/A

Office Hours: 17:00 - 18:50 (5pm - 6:50pm)

Contact Info: raechen@usc.edu

Course Description

This is a **BFA GART** course introducing the student to World Building for Games in the UNREAL Engine. Students will develop skills in the assembly of worlds for games including environments, set dressing, atmosphere, using blueprint, materials and textures, environment, VFX and camera animation. This will prepare them for continued development of their Worldbuilding skills and a career as an Environment Artist and World Builder in Apps, Games, and related Industries using game engines for interactive visualization.

Learning Objectives

The course includes the following elements and deliverables:

- A “playable” in-engine “beautiful corner” using one of the preselected genres of video game styles.
- Final projects will be complete in engine (UE5) and can be either 3d or 2d.
- Portfolio Quality renders
- A video turnaround of the World with Camera and other animation.
- Concept development style guide, mood board, and asset list (to include fx).
- Use of premade asset packs, AI tools, and resources
- Final work integrated into the student’s website/online portfolio
 - Graded as a part of the course final.

By the end of this course, students will be able to:

- Use industry standard process, software, and tools to create 2D/3D Environments (Worlds) and integrate them into a game engine. (Unreal Engine 5).
- Create in engine beauty renders and movie fly throughs
- Use industry language to critique and improve their work.
- Communicate (verbal and written) in a Professional manner
- Create, update and maintain an online portfolio (Artstation or Similar website) for this course for semester by semester and yearly review by professional artists and USC Faculty.
- Present their work using professional documentation and presentation techniques.
- Use the learnings of the course as a basis for the student’s choice to follow a BFA GART Discipline Track.
- Be prepared to participate in USC’s Interactive Media and Games Division’s AGP capstone.

- Assignments in this course are used to develop the creative and technical tool skillset to produce the “*work products*” used by industry professionals and to build the students portfolio.

Prerequisite(s): ITP 215 Intro to 3D Modeling, Animation, and Visual Effects.

Recommended Preparation: Exploring and using the development tools in UNREAL, UEFN or UNITY will prepare you for this course. Links to useful tutorial videos (sourced from YouTube and official software User Manuals) will be provided in Brightspace to support completion of the assignments.

Course Notes

This course will be graded into two parts. Part one, weeks 2 –14, will be a points-based system grading the timely accurate receipt of assigned deliverables. Part two, weeks 15 and 16, will be a points-based system based on completion and quality of final presentation, participation, and the critique of fellow student’s projects. A check list rubric outlining the deliverable elements will be provided for each assignment on Brightspace.

Technological Proficiency and Hardware/Software Required

- [Unreal Engine 5](#) (Specific version will be covered in class and loaded on classroom workstations)
- **3D Software**
 - [Maya](#) (Recommended)
 - [3DS Max](#)
 - [Blender](#)
 - [Zbrush](#)
- **Image Manipulation Software**
 - [Photoshop](#) (Adobe Creative Cloud)
 - [Textures.com](#) (Texture library)
 - [After Effects](#) or Similar (7-day trial)
- [MS Office, Google Docs](#): (for written critique, style guides, and presentations)
- [USC Computing Center Laptop Loaner Program](#).
- **USC Technology Support Links:**
 - [Zoom information for students](#)
 - [USC Brightspace](#)
 - [Software available to USC Campus](#)
- **Creative Content Resources**
 - Artstation (pro level): <https://bit.ly/45zLgwT>
 - [Zoom information for students](#)
 - [Brightspace help for students](#)
 - [Software available to USC Campus](#)
 - [Autodesk Student Software](#)
 - [Unreal Engine 5](#)
 - [Adobe Creative Cloud for Students](#)
 - [Blender](#)
 - Digital Mood Board Reference Software: <https://www.pureref.com/>
 - [YouTube](#)

Required Readings and Supplementary Materials

Some course materials will be required. Description and links will be provided in Brightspace to support completion of your work. These required elements may include the following graded activities:

- Completion of online Tutorials
- Learning style surveys
- Literacy Research and Reports

Optional Readings and Supplementary Materials

Each week relevant optional course materials will be provided in Brightspace to support the completion of your work. These resources may include:

- Software website user manuals
- YouTube videos

Description and Assessment of Assignments

Each assignment will have the following elements and be graded according to a points-based system. Assignments will receive an instructor and/or peer critique providing useful direction for project improvement. Assignments include:

- Class overview and game genre selection (Reviewed in Class the following week)
- Asset pack selection, PureRef mood board and style guide set up and review.
- Unreal Engine review of UI, navigation, and asset integration. (Intergration Demo)
- Blockout and Composition of environments. (Review block outs the Following week)
- Continued block out and environment design lecture (Landscape painting demo).
- Set Dressing and first lighting pass lecture (3-point lighting technique demo).
- Materials and lighting lecture (Unreal Engine material editor demo).
- Post Process volume, Image effects and particle fx lecture (Post Process Demo)
- Beauty shot identifications and camera set up lecture (Camera set up demo)
- Camera animations and movie clip lecture (Flythrough Demo)
- Fly through and beauty shot review and feedback (Open Lab)
- Portfolio creation and setup (Artstation portfolio creator demo)
- Student project critique and feedback.

Participation

Your participation grade (5% of your Assignments grade) is the grade you receive for submitting your work and completing assigned critiques **on time**. Failure to submit on time or failure to submit at all will reduce the participation grade and receive a possible **No Credit** for that week's assignment.

Grading Breakdown

<i>Assessment Tool (assignments)</i>	<i>Points</i>	<i>% of Grade</i>
Weekly Project Review/Critique and Participation (Includes 25pts / 5% Participation Grade)	100	20
Weekly In-class lecture and lab assignments	100	20
Weekly Homework assignments	200	40
Final Portfolio presentation website	100	20
TOTAL	500	100

Basic Grading Rubric for Weekly assignments

<i>Graded Element</i>	<i>% of grade</i>
Proper naming convention	10
All required elements complete and present	60
Assignment posted on time in the location required (Brightspace, Website)	10
Provided written critique as assigned	10
Presentation (in-class, website, behance)	10

Grading Scale

<i>Letter Grade & Percentage Range</i>			
A	95-100	C	73-76
A-	90-94	C-	70-72
B+	87-89	D+	67-69
B	83-86	D	63-66
B-	80-82	D-	60-62
C+	77-79	F	59 and below

Assignment Submission Policy

All homework assignments are aligned with the learning objectives and due at the beginning of class. Homework assignments will be graded in a timely fashion after final submission, usually within 2 weeks. Assignments are delivered in a rough first pass: V1. After reviewing, a final pass, V2, is submitted. Feedback and critique for the improvement of quality will be given for select examples during class time. Based on critique you may revise and resubmit assignments for a better grade within two weeks of the original due date. Extra credit assignments may be available.

Grading Timeline

Assignments are submitted according to the due dates on Brightspace – usually the day of class before class begins. All assignments use a checklist rubric to guide the completion of your work. Assignments are graded on:

- Professional practice (naming conventions, delivery (format/posting location and date, etc.)
- Level of completion (according to the checklist)
- Collaboration and critique
- Iterative improvement (revise and resubmit)

Course Specific Policies

Use of social media in class

We will access the interwebs for in-class assignments. However, the in-class use of social media, including text and internet messaging are prohibited unless explicitly permitted by the instructor. Your participation grade (5% of your Assignments grade) is the grade you receive for submitting your work and completing assigned critiques *on time*. A 5-point reduction will result from each occurrence of a student using the social media noted above. Please see the chart: *Points Breakdown* for additional information.

Using Brightspace: Learning Content Management System

All course materials including grading, attendance, assignment descriptions and submission guidelines, lecture topics, lab activities, course announcements, updates, and so forth will be posted on Brightspace.

Attendance Policy

Timely attendance is mandatory and failure to attend all class sections from beginning to end may affect grades.

- Exemptions will be allowed on a case-by-case basis and must be supported by a written accommodation request from the USC Office of Student Accessibility Services (OSAS).
- Students who become ill and need to self-isolate will be supported in their efforts to stay current with classwork and assignments. We are no longer required to provide an option for students to zoom into class. However, depending on your circumstance, we may choose to use zoom to help students stay current in their coursework.

Attendance is not graded. However, punctual attendance at all classes is mandatory. Students arriving more than five minutes late to three classes, more than ten minutes late to a single class, or leaving early, will be marked as having an absence from class. *** If you must be absent or late, contact your professor or SA before class starts. Communication is key to professional practice and conduct.** For example – if you were working in a professional studio, you would call in to let them know you would be absent

Absences Affecting Grading*

- Two unexcused absences: lowers your grade one full letter grade (e.g., from A to B)
- Three unexcused absences: lowers your grade two full letter grades (e.g., from A to C)
- Four or more unexcused absences: request to withdraw from course (instructor’s discretion)
- *Avoid unexcused absences by communicating directly with the professor (see above).

Classroom norms

Be kind. Be polite. NO Profanity, demeaning behavior, harassment, or violence in any form. Respect your instructor and each other. Criticize in private, Praise in public. Make our classroom a safe and welcoming place.

Zoom etiquette

If, on rare occasions, we use ZOOM as a part of our course instruction experience, please see the Classroom Norms listed above. Use the ZOOM tools to raise your hand and the chat to ask questions. If you can’t use your camera, tell the instructor.

USC BFA Game Art Projects/Portfolio - Core Competencies – Important!

Game art courses are built around projects intended to unlock your creative potential, hone your ability for useful and actionable critique, advance your learning capacity, and build your “work-ready” professional portfolio and toolbox. These core competencies are embedded in all game art courses and include the following skills and abilities. Think of these as exercising your art muscles on a consistent and regular basis, developing creative literacy and “muscle-memory.”

- Presentation and Critique
 - Presenting your work - Understanding your audience.
 - Online Portfolio and deployment tools
 - Giving and Receiving Critique
- Environment Development
 - In Engine
- Critical thinking (see below)
- Research, Ideation, Integration, and Rendering
- Principles, Process, and Presentation.
- Art Literacy
 - Color Theory
 - Art Foundations
 - Sketching
 - Ideation
 - Perspective Theory
 - Standard software mastery
 - Emerging Technology

- 2D and 3D software mastery
- Tool agnostic foundation
 - Learning How to Learn
- Professional Principles, Process and Practice
 - Principles
 - First: KISS (Keep it simple and succinct)
 - First: Make it ugly and FUN
 - Game Art serves the design of the Game and Gameplay
 - Reducing Uncertainty through timely clear communication informed development
 - Data-informed guidance
 - E.g.: past AGP Projects – Student postmortems
- Critical Thinking
- Process - Stages of Development – Our focus in this specific course is the following Phases of development:
 - Discovery
 - Pre-production
 - Prototyping
 - Beautiful Corner
 - In Game Integration
 - X-SLICE Toll gate
- Professional Practice
 - Critique
 - Documentation
 - Presentation
 - Outsourcing

Use of Pre-made assets and Generative AI art.

This is our current BFA GART guidance on using generative Art tools and technology. We will explore the use of generative AI art and use premade assets for quick development of preliminary concepts and final artwork. Learning and using Pre-made assets and AI ART Tools are emerging and evolving skills, and we welcome the opportunity to explore, with you, how to use these tools. Keep in mind the following for the use of AI in your work:

- Be an Artist, not a Promptist!
- Much of the AI art generated looks similar. To avoid this issue, you will need to bend the tool to your artistic “WILL.” Do not allow the tool to bend you to its “WILL.”
- Using Generative AI ART tools is encouraged to help you brainstorm and inspire your visual development.
- Understanding how to speak “ART” is critical to developing your approach to your use of Generative AI. You will need to refine your prompts to achieve good outcomes. This will take work.
- AI is a tool, crayons are tools, all software are tools. AI is a tool you need to acknowledge using. Please include a paragraph at the end of any assignment that uses AI explaining how (and why) you used AI and indicate/specify the prompts you used to obtain the results and what prompts you used to get the results. Failure to do so is a violation of academic integrity policies.
- Be thoughtful and deliberate about when AI is useful. Consider its appropriateness for each element of your visual development. Be sensitive to your peers and how they may react to your content and use of AI Generative tools.
- AI Art is not a substitute for your foundational skills in art, design, and technical proficiency.
- And, most importantly, by experimenting with these tools we establish our “institutional,” creative, and cultural knowledge by sharing our use of AI tools at USC.
- Please ask me if you are unsure about what constitutes unauthorized assistance on an exam or assignment, or what information requires citation and/or attribution.
- Collaboration. In this class, you are expected to submit work that demonstrates your individual mastery of the course concepts.

- Group work. Unless specifically designated as a 'group project,' all assignments are expected to be completed individually.

Academic Integrity Violations

If you are found responsible for an academic violation, students may be assigned university outcomes, such as suspension or expulsion from the university, and grade penalties, such as an "F" grade on the assignment, exam, or in the course.]

Course Content Distribution and Synchronous Session Recordings Policies

USC has policies that prohibit recording and distribution of any synchronous and asynchronous course content outside of the learning environment.

Recording a university class without the instructor's permission and announcement, or unless conducted pursuant to an Office of Student Accessibility Services (OSAS) accommodation. Recording can inhibit free discussion in the future and thus infringe on the academic freedom of other students as well as the instructor. ([Living our Unifying Values: The USC Student Handbook](#), page 13).

Distribution or use of notes, recordings, exams, or other intellectual property, based on university classes or lectures without the express permission of the instructor for purposes other than individual or group study. This includes providing materials for distribution by services publishing course materials. This restriction on unauthorized use also applies to all information which had been distributed to students or in any way had been displayed for use in relation to the class, whether obtained in class, via email, on the internet, or via any other media. Distributing course material without the instructor's permission will be presumed to be an intentional act to facilitate or enable academic dishonesty and is prohibited. ([Living our Unifying Values: The USC Student Handbook](#), page 13)

Course Evaluations

Course evaluation occurs at the end of the semester university wide. It is an important review of students' experience in the class. The process and intent of the end-of-semester evaluation should be provided. In addition, a mid-semester evaluation is recommended practice for early course correction. [Contact CET](#) for support in creating a mid-semester evaluation.

Course Schedule

	Topics/Daily Activities	Readings/Preparation	Deliverables
Week 1	Course Overview + Confirmation EMAIL Brightspace Review Genre discussion and selection.	N/A	Genre selection document 2 paragraphs with supporting reference.
Week 2	PureRef set up and approved asset pack exploration	Download PureRef Download UE5	Mood board, references, selected asset packs
Week 3	Unreal Engine Project setup	UE5 project setup documentation	Screenshots of correct in engine project setup to include selected asset packs
Week 4	Unreal Engine custom 2D/3D asset importation and setup	Importing assets directly into UE5	Engine screenshots of Blockout and a list of proposed assets to be used from asset packs
Week 5	In engine scene development and initial layout of assets	Students must bring in their UE5 build on their laptops or on a drive for in class review and lab	Initial pass of environment with assets from asset packs and any custom 2d/3d assets.
Week 6	Set Dressing and initial lighting pass	Students must bring in their UE5 build on their laptops or on a drive for in class review and lab	Initial 3-point lit in engine scene

		Lighting Guide Reference	
Week 7	Materials editor and light baking techniques (lightmaps and UV pipelines)	Students must bring in their UE5 build on their laptops or on a drive for in class review and lab	A baked scene with appropriate materials and justified lights
Week 8	Post Process volumes, materials, and image effects	Students must bring in their UE5 build on their laptops or on a drive for in class review and lab Post Process in Unreal	A baked scene with appropriate materials, justified lights, and appropriate post process techniques applied
Week 9	Beauty shot identification, camera techniques, and render setup	Students must bring in their UE5 build on their laptops or on a drive for in class review and lab Camera use in Unreal	A baked scene with appropriate materials, justified lights, appropriate post process techniques applied, and at least three cameras set up appropriately
Week 10	Camera animations, particle effects and fly camera throughs	Students must bring in their UE5 build on their laptops or on a drive for in class review and lab Camera use in Unreal	Initial 3 16:9 1080p beauty renders and at least 1 camera flythrough path
Week 11	Beauty render feedback and initial movie clip review	Students must bring in their UE5 build on their laptops or on a drive for in class review and lab Recording Gameplay in UE5	3 updated 16:9 1080p beauty renders and initial 16:9 1080p movie clip flythrough
Week 12	Updated movie clip review	Movie clip edits and after effects	Updated edited movie clip flythrough
Week 13	Portfolio website creation and setup	Artstation or similar website selection and signup	Sign up for website or portfolio
Week 14	Presentation and critique techniques	Art critique terms	Check on learning quiz
Week 15	Portfolio presentation and peer critique	List of student portfolios	Final Portfolio website with presentation notes
FINAL	Updated Portfolio presentation	List of student portfolios	Initial Portfolio website with presentation notes

The School of Cinematic Arts Support Systems and Statements

Diversity and Inclusion are foundational to the SCA community. We are committed to fostering a welcoming and supportive environment where students of all identities and backgrounds can flourish. The classroom should be a space for open discussion of ideas and self-expression; however, SCA will not tolerate verbal or written abuse, threats, harassment, intimidation, or violence against persons or property. If students are concerned about these matters in the classroom setting, they are encouraged to contact their SCA Diversity and Inclusion Liaison, <http://cinema.usc.edu/about/diversity.cfm>; e-mail diversity@cinema.usc.edu or anonymously submit a report on SCA Community: <https://scacommunity.usc.edu/secure/diversityEquity/> You can also read more about how to report discrimination based on a protected class here: <https://eotix.usc.edu/get-help/what-are-my-choices-text/>

SCA Office of Student Services

213-740-8358 or StudentAffairs@cinema.usc.edu

SCA Embedded Therapists

Students enrolled in an SCA major program can schedule an appointment with an embedded therapist for the School of Cinematic Arts through the student health portal [MySHR](#).

SCA Community

For additional SCA resources please visit scacommunity.usc.edu

Creative Technology and Support

(213) 821-4571

creativetech@cinema.usc.edu

Location: SCA 128

Support Hours: Monday - Friday, 8:30 AM - 8:30 PM

<https://knowledgebase.sca.usc.edu/>

<https://workstations.sca.usc.edu/>

Physical Production Office

The Physical Production Office assists students and faculty with production-related matters including production numbers, locations, permits, insurance, gear and equipment vendors, safety issues, and crew and actor policies. More information can be found by visiting the online [Production Procedures and Safety Handbook](#). The Physical Production Office is at SCA 304 and is open every weekday from 9am-5pm (Fridays 9am-1pm). You can also reach the Office by calling 213-740-1298 or by email at spo@cinema.usc.edu.

Office of Industry Relations

School of Cinematic Arts - SCA 235

(213) 740-4432

ir@cinema.usc.edu

Cinematic Arts Library Research Guide

<https://libguides.usc.edu/cinema>

Statement on Academic Conduct and Support Systems

Academic Integrity

The University of Southern California is foremost a learning community committed to fostering successful scholars and researchers dedicated to the pursuit of knowledge and the transmission of ideas. Academic misconduct contrasts with the university's mission to educate students through a broad array of first-rank academic, professional, and extracurricular programs and includes any act of dishonesty in the submission of academic work (either in draft or final form).

This course will follow the expectations for academic integrity as stated in the [USC Student Handbook](#). All students must submit original work assignments and prepare specifically for the course/section in this academic term. You may not submit work written by others or "recycle" work prepared for other courses without obtaining written permission from the instructor(s). Students suspected of engaging in academic misconduct will be reported to the Office of Academic Integrity.

Other violations of academic misconduct include, but are not limited to, cheating, plagiarism, fabrication (e.g., falsifying data), knowingly assisting others in acts of academic dishonesty, and any act that gains or is intended to gain an unfair academic advantage.

Academic dishonesty has a far-reaching impact and is considered a serious offense against the university. Violations will result in a grade penalty, such as a failing grade on the assignment or in the course, and disciplinary action from the university itself, such as suspension or even expulsion.

For more information about academic integrity see the [student handbook](#) or the [Office of Academic Integrity's website](#), and university policies on [Research and Scholarship Misconduct](#).

Please ask your instructor if you are unsure what constitutes unauthorized assistance on an exam or assignment or what information requires citation and/or attribution.

Students and Disability Accommodations:

USC welcomes students with disabilities into all of the University's educational programs. [The Office of Student Accessibility Services](#) (OSAS) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodation is not retroactive. More information can be found at osas.usc.edu. You may contact OSAS at (213) 740-0776 or via email at osasfrontdesk@usc.edu.

Student Financial Aid and Satisfactory Academic Progress:

To be eligible for certain kinds of financial aid, students are required to maintain Satisfactory Academic Progress (SAP) toward their degree objectives. Visit the [Financial Aid Office webpage](#) for [undergraduate](#)- and [graduate-level](#) SAP eligibility requirements and the appeals process.

Support Systems:

[Counseling and Mental Health](#) - (213) 740-9355 – 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

[988 Suicide and Crisis Lifeline](#) - 988 for both calls and text messages – 24/7 on call

The 988 Suicide and Crisis Lifeline (formerly known as the National Suicide Prevention Lifeline) provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week, across the United States. The Lifeline consists of a national network of over 200 local crisis centers, combining custom local care and resources with national standards and best practices. The new, shorter phone number makes it easier for people to remember and access mental health crisis services (though the previous 1 (800) 273-8255 number will continue to function indefinitely) and represents a continued commitment to those in crisis.

[Relationship and Sexual Violence Prevention Services \(RSVP\)](#) - (213) 740-9355(WELL) – 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to gender- and power-based harm (including sexual assault, intimate partner violence, and stalking).

[Office for Equity, Equal Opportunity, and Title IX \(EEO-TIX\)](#) - (213) 740-5086

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

[Reporting Incidents of Bias or Harassment](#) - (213) 740-2500

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

[The Office of Student Accessibility Services \(OSAS\)](#) - (213) 740-0776

OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

[USC Campus Support and Intervention](#) - (213) 740-0411

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

[Diversity, Equity and Inclusion](#) - (213) 740-2101

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

[USC Emergency](#) - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

[USC Department of Public Safety](#) - UPC: (213) 740-6000, HSC: (323) 442-1200 – 24/7 on call

Non-emergency assistance or information.

[Office of the Ombuds](#) - (213) 821-9556 (UPC) / (323-442-0382 (HSC)

A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

[Occupational Therapy Faculty Practice](#) - (323) 442-2850 or otfp@med.usc.edu

Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.