Intro to Virtual Production

FLM - 1095 001

Course Description

This course explores the new technology and techniques associated with Virtual Production. Students will learn how to film real actors and props in front of computer generated environments using Unreal Engine software. They will learn how to track camera movements, create virtual sets and film on a LED screen. Students will learn to utilize industry standard technology that is transforming the film industry.

Prerequisite(s): FLM 1045 Semester(s): Fall & Spring

Course Student Learning Outcomes

- Learn to use key features in Unreal Engine software such as camera tracking, nDisplay, and meshing.
- Demonstrate how to connect and track a real world camera in virtual software environment.
- Evaluate how to light and shoot high quality content in front of a large LED "Volume" screen.
- Create original and exciting artifacts that look photorealistic using Unreal Engine.

Course Prerequisites

FLM 1045 or Instructor Approval

Engagement Plan

I will respond to email within 48 hours, I will offer feedback on major assignments immediately, as most assignments will be done in class. The best way to contact me is via the Canvas Inbox, as I will prioritize this email over other modes of communication.

Keys for Success (how to succeed in the course)

The techniques, tools, and ideas we are using are cutting edge, with things advancing even as each semester advances. There are no textbooks or course materials that are able to keep pace with this advancement, so our learning is critically based in discussion, lecture, and practice of techniques and tools in the classroom.

Grades will be largely based on participation in-class assignments and it is especially difficult to provide opportunities for extra credit due to the highly technical nature and time requirements of virtual production, so it is highly recommended that students ensure that they can commit to being on time and present in every class possible.

Course Content Advisory

As a course that studies modern advancements in film, television, and media, we will often refer to the latest and most notable examples of virtual production techniques on various types of content. It is likely that this content will cover the full range of MPAA and TV Parental Guidelines Monitoring Board ratings. We will avoid nudity and intimate scenes. A major use case scenario of virtual production is in the creation of science fiction and action scenes that would otherwise be dangerous for actors, so we are likely to regularly view action scenes which are likely to also include violence.

The very nature of virtual production involves a giant LED wall that is likely to flicker or produce patterns that may trigger seizures or epileptic episodes in those who are sensitive to that kind of stimuli. Students diagnosed with, or with known issues with photosensitive epilepsy unfortunately should not participate in this class as the very nature of the subject matter and the equipment in the class may create an environment that is not possible to create accommodations. Such students should discuss options with the instructor for alternative learning opportunities such as independent study that can cover the material in an environment without risk of photosensitive epileptic triggers.

Additional Materials

No textbooks or materials are required, however digital documents will be provided via Canvas. Although not required, it is highly suggested that students have a fast portable drive, such as a 1-2TB SSD with at least USB 3.1 connectivity and speed. A Samsung T7 is a great minimum, a Samsung T9 is even better. Anything faster than that wouldn't hurt.

Brief Description of Assignments/Exams

Assignments will primarily consist of participation with in-class projects and discussions, as well as occasional individual study and research homework assignments. As an introductory discovery course, in lieu of exams, knowledge checks will happen during inclass discussions and projects, though grades will be based on participation, not proficiency.

Please note, the Assignment Schedule below likely does not reflect the actual assignments as things can change so rapidly, and assignments may not be decided upon until the day of class. The assignment schedule below was a snapshot of where things were at a point before class officially began, and has been locked, preventing me from modifying it.

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
	Introduce Yourself	Discussion	0
	Pre-Class Recommended Reading: The Virtual Production Field Guild Vol. 1 - Chapter 1	Assignment	
	Required Reading: The Virtual Production Field Guide Vol. 1 - Chapter 2	Assignment	

Due Date	Assignment Name	Assignment Type	Points
	Required Reading: The Virtual Production Field Guide Vol. 1 - Chapter 3	Assignment	
	Required Reading: The Virtual Production Field Guide Vol. 2 - Chapter 2 Selection	Assignment	
	Required Reading: The Virtual Production Field Guide Vol. 2 - Chapter 2 Selection	Assignment	
	Required Reading: The Virtual Production Field Guide Vol. 2 - Chapter 2 Selection	Assignment	
	Required Reading: The Virtual Production Field Guide Vol. 2 - Chapter 2 Selection	Assignment	
	Required Reading: The Virtual Production Field Guide Vol. 2 - Chapter 2 Selection	Assignment	

Due Date	Assignment Name	Assignment Type	Points	
	Required Reading: The Virtual Production Field Guide Vol. 2 - Chapter 2 Selection	Assignment		
	Required Reading: The Virtual Production Field Guide Vol. 2 - Chapter 2 Selection	Assignment		
	Required Reading: The Virtual Production Field Guide Vol. 2 - Chapter 2 Selection	Assignment		
	Roll Call Attendance	Assignment	100	
8/27/24	<u>UE5 Student Projects</u> <u>01</u>	Assignment	50	
9/2/25	Research: Examples of Virtual Production	Assignment	50	
9/9/25	ASSIGNMENT - Sourcing and Navigating UE5 Levels/Environments	Assignment	50	
9/16/25	ASSIGNMENT - UE5 Cine Camera Actor	Assignment	50	

Grading Scale

А	Α-	B+	В	B-	C+	С	C-	D+	D	D-	Е
100-	93-90	89-86	85-83	82-80	79-76	75-73	72-70	69-66	65-63	62-60	59-0

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How to Navigate to Canvas

Institutional Policies

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements. By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

For more information, navigate to the Institutional Policies tab on the <u>Institutional Syllabus</u> page.

Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, visit the <u>Institutional Syllabus</u> page under the Tutoring and Learning Support tab. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to

access them, visit the <u>Institutional Syllabus</u> page under the Advising and Counseling Support Services tab. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

SLCC Student Academic Calendar