FILM A231: IMMERSIVE MEDIA DEVELOPMENT LAB 1

Item	Value
Curriculum Committee Approval Date	02/08/2023
Top Code	061410 - Multimedia
Units	2 Total Units
Hours	108 Total Hours (Lab Hours 108)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	No
Grading Policy	Standard Letter (S)

Course Description

An auxiliary lab class for Intermediate to Advanced-level students in the Immersive Media (VR/AR) program. This lab-only course is designed to give additional access to VR/AR equipment and the development lab, under the guidance of an instructor, to allow students to work on their own self-guided Immersive Media project of a larger scope and/or higher level of difficulty than class exercises in previous or concurrent courses. Projects will be pitched and agreed on in the first 2 weeks of class, and turned in for a grade based on the pitch. This is NOT an "open lab" for students outside the program. Special training in our Immersive Media courses is necessary prior to signing up for this course. PREREQUISITE: FILM A220 and FILM A223. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. Demonstrate proficiency in using specialized equipment and software applications to develop Immersive Media projects in a lab environment.
2. Demonstrate the ability to both work independently at a self-mananged pace, and to collaborate with others using shared resources, while completing a project on schedule.

Course Objectives

- 1. Demonstrate proficiency in operating VR and/or AR equipment applicable to individually-assigned project(s) in a lab environment
- 2. Demonstrate proficiency in using VR and/or AR related software applicable to individually-assigned project(s) in a lab environment
- 3. Diagnose and correct errors through continuous in-lab testing, and trial and error experimentation
- 4. Apply problem-solving skills in the creation process of Immersive Media
- 5. Demonstrate ability to work and collaborate with other developers in a shared-lab environment
- 6. Demonstrate effective communication skills related to Immersive Media (VR/AR) technology in conveying ideas and concepts
- 7. Demonstrate proficiency in managing an Immersive Media project, using all applicable workflows, from the initial idea conception to final completion and delivery

Lecture Content

This is a "Lab Only" class.

Lab Content

I. Assistance, guidance, and critique in any or all of the following: A. 360-degree video camera operation, image capture, and post-production B. 360-degree spatial audio recording, processing, and post-production C. 3D computer graphics modeling and integration into game engines D. Immersive game and VR experience development using game engines E. Operation of VR hardware and software F. Operation of AR hardware and software G. Operation of Performance-Capture hardware and software H. Integration of VR/AR hardware and software from multiple platforms I. Auxilliary VR/AR hardware, software, development kits, haptics, simulators, and sensors (based on availability and level of experience)

Method(s) of Instruction

- Lab (04)

Instructional Techniques

1. Demonstration 2. Video examples 3. Individual assignments 4. Group assignments 5. Assignment critique

Reading Assignments

(LAB ONLY)

Writing Assignments

(LAB ONLY)

Out-of-class Assignments

While this is a LAB ONLY class, out-of-class viewing of freely-available, hardware and/or software tutorials may be assigned to facilitate individual students needs or expectations with regard to their specific project, or to bring students up to a certain level of proficiency with a given piece of equipment or software package.

Demonstration of Critical Thinking

A. Assigned individual projects B. Assigned group projects C. Demonstration of proficiency with various technologies

Required Writing, Problem Solving, Skills Demonstration

Students will spend 4-5 hours per week working on self-paced, Immersive Media projects (the contents of which will be mutually agreed upon at the beginning of the term), with the ongoing guidance of the lab instructor. These projects will be of larger scope and higher technical skill than those assigned within the other lecture/lab classes in this program. These projects are designed to be "portfolio pieces" toward future career seeking and entrepreneurship.

Eligible Disciplines

Broadcasting technology (film making/video, media production, radio/TV): Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience. Commercial art (sign making, lettering, packaging, rendering): Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience. Multimedia: Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience.

Other Resources

1. Product Manuals and online research.