

LINC 79C: EDUCATIONAL EXPLORATION THROUGH IMMERSIVE MEDIA

Foothill College Course Outline of Record

Heading	Value
Effective Term:	Summer 2024
Units:	2
Hours:	2 lecture per week (24 total per quarter)
Advisory:	Basic computer skills and knowledge of Macintosh or Windows operating systems; basic skills and knowledge using web browsers, email, bookmarking, searching, and downloading; this course uses VR headsets and hand controllers as part of instruction.
Degree & Credit Status:	Degree-Applicable Credit Course
Foothill GE:	Non-GE
Transferable:	CSU
Grade Type:	Letter Grade (Request for Pass/No Pass)
Repeatability:	Not Repeatable

Student Learning Outcomes

- Research opportunities for educational exploration provided by immersive media technologies.
- Design and develop standards-based educational tours using immersive media technologies.

Description

Intended for educators at all levels, this course examines the ways in which immersive media (virtual reality, augmented reality, and mixed reality) provides unique opportunities for educational exploration. With an emphasis on historical, geographical, and scientific topics, students explore and evaluate a variety of educational applications and experiences, and design and develop their own educational tours using immersive media.

Course Objectives

The student will be able to:

1. Identify opportunities for educational exploration provided by immersive media technologies
2. Evaluate and analyze a variety of educational applications and experiences that use immersive media to explore historical, geographical, and scientific topics
3. Demonstrate and explain the potential of immersive media technologies to enhance the educational experience
4. Design and develop standards-based educational tours using immersive media technologies
5. Share immersive media projects with others for feedback and revision

Course Content

1. Immersive media for educational exploration
 - a. Definition of immersive media and its various types
 - b. Overview of immersive media technologies that support educational exploration
 - c. Examples of educational applications and experiences that use immersive media for exploration
2. Analysis of applications
 - a. Exploration of applications by subject
 - i. Geographical
 - ii. Historical
 - iii. Scientific
 - b. Evaluation and analysis using pedagogical frameworks and curricular standards
 - c. Educational project examples and case studies
 - d. Assessing the educational impact of immersive media experiences
 - e. Potential benefits and limitations of applications and technologies
3. Standards-based educational tours
 - a. Tour building software and hardware
 - b. 360 photography and curation
 - c. Best practices for interactivity and educational content integration
 - d. Sharing and formatting for different interfaces and technologies
 - i. Virtual reality
 - ii. Augmented reality
 - iii. Web browser
 - iv. Mobile device
4. Evaluation and revision
 - a. Project sharing and iterative testing for feedback and revision
 - b. Revision of immersive media projects based on feedback
 - c. Plans for integration of projects into educational curriculum

Lab Content

Not applicable.

Special Facilities and/or Equipment

1. When offered on/off campus: Lecture room equipped with projector, whiteboard, and a demonstration computer connected online. VR laboratories equipped with computers or laptops with internet access and VR headsets.
2. When taught via the internet: Students must have current email accounts and ongoing access to computers with web browsing capability and internet access. Students will need VR headsets for this course. Headsets can be borrowed at no cost if needed.

Method(s) of Evaluation

Methods of Evaluation may include but are not limited to the following:

Developing a standards-based immersive media educational tour project

Presenting the project to peers for feedback
Making constructive contributions to class discussions

Providing peer reviews to other class members showing their own understanding of the class content

Method(s) of Instruction

Methods of Instruction may include but are not limited to the following:

Lecture presentations delivered in student-centered learning style, during which students take notes, follow demonstrations, or complete an activity

Facilitated discussions of live presentations, readings, or collaborative activities in virtual learning environments

Student presentations in small group and whole class situations

Representative Text(s) and Other Materials

Bernardou, Agiatis, and Anna Maria Droumpouki. [Difficult Heritage and Immersive Experiences](#). 2022.

Instructor-assigned notes, materials, and resources, including instructional materials, open education resources, multimedia, and websites.

Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

1. Reading assignments include analysis of texts, selected examples, and student projects
2. Writing assignments include a course project and multiple developmental projects, reflections, discussion responses, and peer feedback on projects
3. Outside assignments include project planning and development, participation in online peer collaboration activities, and project development through an iterative process

When taught online, these methods may take the form of multimedia and web-based presentations. Assignments will be submitted online as well.

Discipline(s)

Instructional Design/Technology