

LINC 79A: INTRODUCTION TO IMMERSIVE MEDIA IN EDUCATION

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 educational applications for immersive media.
- Develop plans for using immersive media as an instructional tool.

Description

Intended for educators at all levels, this course provides an overview of the emerging field of immersive media (virtual reality, augmented reality, and mixed reality) and examines its current and potential future impact on education. Students explore and evaluate a variety of educational applications and experiences in both virtual and augmented reality, and develop plans for using immersive media as an instructional tool.

Course Objectives

The student will be able to:

1. Understand the basic concepts and technologies of immersive media, including virtual reality, augmented reality, and mixed reality, and their applications in education
2. Critically evaluate and analyze a variety of educational applications and experiences in immersive media
3. Develop plans for using immersive media as an instructional tool
4. Create and implement immersive media projects in an educational setting

Course Content

1. Concepts and technologies
 - a. Definition of immersive media and its various types
 - b. Overview of immersive media technologies, such as virtual reality, augmented reality, and mixed reality
 - c. The role of immersive media in education
 - d. Software and hardware specifications and set-up
2. Educational applications
 - a. Exploration of educational applications and experiences
 - b. Educational technology evaluation methods: SAMR, TPACK
 - c. Evaluation of immersive media applications
 - d. Benefits and limitations for instruction
3. Immersive media project design
 - a. Planning immersive media projects for educational purposes
 - b. Best practices in immersive media project design
 - c. Implementation strategies in an educational setting
4. Immersive media project development
 - a. Immersive media curation tools and techniques
 - b. Hands-on experience creating immersive media projects
 - c. Strategies for incorporating immersive media projects into instructional practice
5. Evaluation and reflection
 - a. Assessment methods for project impact on student learning outcomes
 - b. Peer review and evaluation of project effectiveness
 - c. Project revisions and updated implementation plans

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 an educational immersive media 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 activities

Facilitated discussions of live presentations, readings, or video presentations
Student presentations in small group and whole class situations

Representative Text(s) and Other Materials

Daniela, Linda. New Perspectives on Virtual and Augmented Reality (Perspectives on Education in the Digital Age). 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