

LINC 51D: ARTIFICIAL INTELLIGENCE INTEGRATION IN EDUCATIONAL PRACTICES

Foothill College Course Outline of Record

Heading	Value
Effective Term:	Winter 2025
Units:	3
Hours:	3 lecture per week (36 total per quarter)
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

Description

This course focuses on practical applications of artificial intelligence (AI) in education, providing educators with the skills needed to select, implement, and evaluate AI tools within the classroom. Students will analyze and evaluate various AI technologies, including machine learning and natural language processing, and engage in hands-on practice to enhance real-world understanding. Topics covered include designing AI-enhanced curricula that improves teaching effectiveness and student learning experiences, troubleshooting AI technologies, and overcoming institutional barriers to technology integration.

Course Objectives

The student will be able to:

1. Analyze and evaluate artificial intelligence (AI) tools available for educational purposes.
2. Develop strategies for integrating AI into existing curricula and designing AI-enhanced lessons.
3. Implement AI technologies in the classroom.
4. Utilize AI for personalized learning experiences and adaptive learning paths.
5. Use AI tools for feedback and evaluation.
6. Evaluate the impact of AI on learning outcomes.

Course Content

1. Artificial intelligence (AI) technologies in education
 - a. Overview of AI technologies: machine learning, natural language processing, computer vision
 - b. Current trends and applications of AI in education
 - c. Evaluating the strengths and limitations of AI tools for educational purposes
2. Designing AI-enhanced curricula
 - a. Principles of integrating AI into curricula
 - b. Developing lesson plans that incorporate AI tools
 - c. Case studies of successful AI-enhanced curricula
3. Effective use of educational AI tools

- a. Practical steps for setting up AI tools in educational environments
 - b. Best practices for integrating AI into daily teaching activities
4. Developing AI-driven personalized learning experiences
 - a. Understanding personalized learning and its benefits
 - b. Using AI to analyze student data and tailor learning experiences
 - c. Designing activities and lessons that adapt to individual student needs
 5. Using AI for feedback and evaluation
 - a. Overview of AI-driven feedback mechanisms
 - b. Techniques for evaluating student progress with AI
 - c. Ethical considerations in using AI for student assessment
 6. Evaluating the impact of AI on learning outcomes
 - a. Methods for assessing the effectiveness of AI-enhanced teaching practices
 - b. Data collection and analysis techniques
 - c. Reporting and interpreting evaluation results
 - d. Continuous improvement based on feedback and data insights

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.
2. When taught via the internet: Students must have current email accounts and ongoing access to computers with web browsing capability and internet access.

Method(s) of Evaluation

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

Development and presentation of AI-enhanced lesson plans and curricula focused on personalized learning
 Practical implementation of AI tools in a simulated or real classroom environment
 Sharing projects with peers to gather feedback and make improvements
 Making constructive contributions to class discussions and peer reviews

Assignments will be evaluated based on a detailed rubric, and students will have the opportunity to revise and resubmit their work to demonstrate improvement based on feedback

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 video presentations

Student presentations in small group and whole class situations
 Structured peer review sessions to provide and receive constructive feedback

Ongoing reflection and self-assessment to connect course content to real-world applications and experiences

Representative Text(s) and Other Materials

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 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