

# LINC 75B: INSTRUCTIONAL TECHNOLOGY STRATEGIES

## Foothill College Course Outline of Record

Heading	Value
<b>Effective Term:</b>	Summer 2021
<b>Units:</b>	3
<b>Hours:</b>	3 lecture per week (36 total per quarter)
<b>Advisory:</b>	It is advised, but not required, that students have the background knowledge and skill taught in LINC 75A; basic skills using standard computer systems and internet-based technologies.
<b>Degree &amp; Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade (Request for Pass/No Pass)
<b>Repeatability:</b>	Not Repeatable

## Student Learning Outcomes

- Design and develop a technology plan that includes the effective use and management of technology in a classroom setting.
- Understand how ISD models are used to create instructional delivery and content that is differentiated for a wide range of learners
- Understand the role of technology in supporting student learning in the classroom

## Description

This instructional design and technology course builds on the coursework of LINC 75A and focuses on the specific strategies for using technology in the education or training environment. Students develop instructional plans that use technology to meet the needs of a variety of learners; plan for effective use and management of technology for teaching and learning (e.g., laptop carts, mobile devices, bring your own device [BYOD], classroom audio-visual, online technologies and learning systems); and learn to manage instructional design projects. This course is part of the Instructional Design and Technology program sequence.

## Course Objectives

The student will be able to:

- Examine the relationship between Instructional Systems Design [ISD] models and effective classroom instruction
- Identify the instructional methods and strategies used to create effective learning environments with technology-based instruction
- Understand how ISD models are used to create instructional delivery and content that is differentiated for a wide range of learners
- Compare instructor-centered learning methods to student-centered learning methods
- Examine instructional systems design within non-traditional and emerging instructional methods
- Understand the role of technology in supporting student learning in the classroom

- Apply models of ISD to analyze an instructional problem in order to create a more effective learning environment
- Utilize models of ISD to design an instructional plan that will effectively meet the needs of a diverse range of learners
- Develop the instructional plan to include a component that is project-based, inquiry-based, or problem-based
- Manage the instructional plan that will work with a blended or personalized learning environment
- Design and develop a technology plan that includes the effective use and management of technology in a classroom setting

## Course Content

- ISD models and effective classroom instruction
  - Merrill's First Principles of Instruction
  - Dick and Carey Model
  - Gagne's Nine Events of Instruction
  - Bloom's Taxonomy
  - Webb's Depth of Knowledge
- Effective learning environments
  - Application of learning models
  - Instructional strategies
  - Problem-solving and application of learning
  - Authentic assessment
- Differentiated instruction and content
  - Content
  - Process
  - Product
  - Diverse learning needs and styles
  - English learners
- Instructor-centered and student-centered learning methods
  - Traditional instructional approaches
  - Non-traditional, student-centered approaches
  - Instructor's role in both approaches
  - Students' roles in both approaches
- Non-traditional and emerging instructional methods
  - Project-based learning
  - Inquiry-based learning
  - Problem-based learning
  - Blended learning models
- Role of technology
  - Instructional shifts using technology
  - Differentiating with technology
  - Personalized learning
- Analyze an instructional problem
  - Instructional problem related to learning environment
  - Application of ISD models to understand and define problem
- Design an instructional plan
  - Synthesize ISD models to plan instruction
  - Outcomes and objectives
  - Instructional sequence
  - Application of learning
- Assessment
  - Develop the instructional plan
    - Application of learning
    - Opportunities for complex problem-solving
  - Develop an alternate instructional plan
    - Apply technology to blend learning
    - Design plan within hybrid, blended, or personalized learning environment
- Manage a technology plan
  - Effective use of web-based technology

2. Effective use of equipment
3. Cost, technology constraints, technical considerations
4. Effective management at classroom, school, organizational levels

## Lab Content

Not applicable.

## Special Facilities and/or Equipment

- A. When offered on/off campus: Lecture room equipped with computer projector system, whiteboard, and internet connectivity. Computer laboratories with internet connectivity and computers or internet enabled devices running standard operating systems (e.g., iOS, MacOS, Windows, Android, Linux)
- B. When taught online via Canvas students must have current email accounts and/or ongoing access to computers with email and web browsing capability

## Method(s) of Evaluation

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

- Designing, developing and managing an instructional plan and product or project
- Presenting the product or project to peers, capturing feedback, and using it to revise the product or project
- Making constructive contributions to class discussions and peer review feedback

## Method(s) of Instruction

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

- Writing notes, listening, and participating in lecture presentation
- Observing an instructor-led demonstration and/or actively practicing the demonstrated skills
- Presenting and communicating their ideas in discussion and/or participating in peer reviews

## Representative Text(s) and Other Materials

Neelen, Mirjam, and Paul A. Kirschner. [Evidence Informed Learning Design](#). 2020.

Fisher, Michael, and Elizabeth Fisher. [Hacking Instructional Design](#). 2018.

Reigeluth, Charles M., and Yunjo An. [Merging the Instructional Design Process with Learner-Centered Theory](#). 2020.

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

- A. Writing assignments include a major course project and multiple developmental projects, online discussion response, and critical analysis of peer's educational projects.
- B. Outside assignments include conducting project development, writing the instructional plan, reading, and developing the project through an iterative process.

- C. When taught online these methods may take the form of video, audio, animation and webpage presentations. Writing assignments are completed online.

## Discipline(s)

Instructional Design/Technology