LINC 77D: DESIGN THINKING CHALLENGES

Foothill College Course Outline of Record

Heading	Value
Effective Term:	Summer 2025
Units:	2
Hours:	2 lecture per week (24 total per quarter)
Advisory:	Experience with internet software tools, browsers, hyperlinks, online media resources, and basic skills using a computer.
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

- Define and explain the role of design challenges in reinforcing aspects of the design thinking process.

Description

This course introduces students to the development and implementation of design challenges in educational contexts. Students will engage in hands-on project development, comprehensive planning, and reflective practices. Course activities include framing problems, setting success criteria, managing resources, and gathering feedback to improve projects. By participating in and evaluating various design challenges, students will gain practical experience and insights into applying design thinking in different educational settings.

Course Objectives

The student will be able to:

1. Define and explain the design thinking process as it relates to educational design challenges.
2. Collaborate in groups to develop and run design challenges for educational purposes.
3. Develop comprehensive plans, descriptions, and resources for design challenges, incorporating feedback to refine projects.
4. Participate in design challenges as a learner and evaluate their effectiveness from an educational perspective.

Course Content

1. Design challenges in education
   a. Overview of the design thinking process and its relevance to educational design challenges
   b. Benefits of using design thinking in education
   c. Standards-based learning and design challenges
2. Developing and running design challenges
   a. Development of design challenges for educational purposes
      i. Challenge framing
      ii. Problem statements
      iii. Success criteria
      iv. Constraints
      v. Testing
      vi. Collaboration
   b. Planning and organizing design challenges
      i. Materials management
      ii. Resource organization
      iii. Timing
      iv. Activity plan
      v. Differentiation
      vi. Assessment
3. Presenting and debriefing design challenges
   a. Running design challenges with peers/learners
   b. Evaluating outcomes
   c. Gathering feedback
   d. Refining projects based on feedback
4. Participating in design challenges
   a. Engaging in design challenges as a learner
   b. Evaluating design challenges from an educational perspective
   c. Reflecting on the effectiveness and implementation of design challenges in different contexts and learning environments

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. Computer laboratories equipped with computers or laptops with internet access.
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 documentation of a design challenge project for educational purposes
Presentation and running of the design challenge project with peers or learners
Active participation in class discussions, peer review sessions, and debriefing activities
Ongoing reflections on the design thinking process, project development, and the effectiveness of design challenges

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

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 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