

LINC 77: DESIGN THINKING OVERVIEW

Foothill College Course Outline of Record

Heading	Value
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

- Definite and explain the design thinking process.
- Research the opportunities available to implement the design thinking process.

Description

Students learn an overview of the design thinking methodology and its applications in education, business, industry and government. Focus is on introducing all aspects of the design cycle through inquiry-based facilitation and engaging immersive activities to develop understanding of the design thinking process.

Course Objectives

The student will be able to:

- Define and explain the design thinking process
- Analyze the design thinking process for its best case uses in education, business, industry and government
- Research the opportunities available to implement design thinking process
- Communicate the benefits and drawbacks of the design thinking process
- Apply the design thinking process
- Develop strategies for effective design thinking activities, based on audience
- Create case uses for education, business, industry and/or government audiences

Course Content

- Design Thinking Process Definition and Explanation
 - Empathize, define the problem, ideate, prototype, test
 - Stanford d.school and IDEO connections
- Design Thinking Process and Its Best Case Uses
 - In education
 - In business
 - In industry
 - In government

- Opportunities Available to Implement Design Thinking Process
 - Locally/contextually
 - Community-based
 - World-based
- Benefits and Drawbacks of the Design Thinking Process
 - Benefits
 - Drawbacks
- Design Thinking Process Applications
 - In education
 - In business
 - In industry
 - In government
- Strategies for Effective Design Thinking Activities
 - Partnering/small group
 - Building community
 - Contextual and empathetic facilitation of activities
- Create Case Uses for Education, Business, Industry and/or Government Audiences
 - Use case #1 creation for education, business, industry and/or government
 - Use case #2 creation for education, business, industry and/or government

Lab Content

Not applicable.

Special Facilities and/or Equipment

- When offered on/off campus: Lecture room equipped with LCD projector, whiteboard, and a demonstration computer connected online. Computer laboratories equipped with online PCs and/or Macintosh computers, network server access, and printers.
- When taught via the Internet: Students must have current email accounts and/or ongoing access to computers with email software, web browsing capability, and access to the World Wide Web.

Method(s) of Evaluation

The student will demonstrate proficiency by:

- Developing a project utilizing design thinking for the participant's specific purposes, whether educational, business-related or personal.
- Presentation of their web-based project to peers.
- Making constructive contributions to class discussions.

Method(s) of Instruction

During periods of instruction the student will be:

- Listening actively to lecture presentations delivered in student-centered learning style by taking notes, following demonstrations, or completing an activity
- Participating in facilitated discussions of live presentations, readings or video presentations
- Presenting in small group and whole class situations

Representative Text(s) and Other Materials

Martinez, Sylvia Libow, and Gary S. Stager. [Invent to Learn: Making, Tinkering, and Engineering in the Classroom](#). Constructing Modern Knowledge, 2016.

Instructor-assigned notes and materials.

When course is taught online: Additional information, notes, handouts, syllabus, assignments, tests, and other relevant course material will be delivered by email and on the World Wide Web, and discussion may be handled with internet communication tools.

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

A. Each week requires the student to read and analyze selected websites or student projects related to that week's topic.

B. Each week's topic requires a written response to a prompt that is turned in to the instructor for review. Each prompt is designed to be a draft of a section of the student's completed project. Instructor feedback should be reflected in the final product.

C. Each week's topic requires the student to participate in a weekly discussion prompt based on that week's readings and assignment. Students are to respond to other students' responses offering support, suggestions, alternative ideas, and resources.

Discipline(s)

Instructional Design/Technology