

GID 1A: DESIGN THINKING

Foothill College Course Outline of Record

Heading	Value
Effective Term:	Fall 2021
Units:	4
Hours:	3 lecture, 3 laboratory per week (72 total per quarter)
Degree & Credit Status:	Degree-Applicable Credit Course
Foothill GE:	Non-GE
Transferable:	CSU/UC
Grade Type:	Letter Grade (Request for Pass/No Pass)
Repeatability:	Not Repeatable

Student Learning Outcomes

- A successful student knows how to approach innovation challenges from a human-centered perspective. They uncover the importance of approaching innovation projects with a prototyping mind set, where iterations, trial and error, and even failure are all part of a valuable, creative learning process while acknowledging that a multidisciplinary approach to innovation is a powerful way to incorporate many perspectives.
- A successful student will demonstrate how to approach design challenges with a prototyping mind set, where iterations, trial and error, and even failure are all part of a valuable, creative learning process while acknowledging that a multidisciplinary approach to innovation is a powerful way to incorporate many perspectives.

Description

Introduction to design thinking as a process for creative problem solving. Design thinking includes empathy, ideation, and experimentation: empathy is essential to understanding the needs of those being designed for; ideation enables designers to generate a lot of ideas through brainstorming; experimentation tests those ideas with prototyping.

Course Objectives

The student will be able to:

1. Understand and apply methodology that attempts to deeply understand and consider people directly impacted by whatever is being designed in addition to complex historical, social, and environmental context.
2. Identify underlying problems, collect and analyze qualitative data to deeply understand needs and contexts, design thoughtful co-creation processes with users, develop an iterative process.
3. Experience opportunities to apply learnings to real-world context and to gain a deeper understanding of the design thinking methodology.

Course Content

1. Overview of the design thinking process
 - a. Approach to complex issues
 - b. Mindset of design thinking
2. Ethnography/empathy

- a. User-centered methodology
 - b. Human-centered framework
 - c. Interviews
3. Synthesis
 - a. Analyze qualitative data
 - b. Understand deeply complex problems
 - c. Uncover latent human needs
 4. Prototype
 - a. Brainstorm strategy
 - b. Diagramming
 - c. Storyboarding
 - d. Rapid prototyping
 - e. User testing
 5. Iterating

Lab Content

1. Observation
2. Interviews
3. Brainstorming
4. Diagramming
5. Storyboarding
6. Rapid prototyping
7. User testing
8. Design specification

Special Facilities and/or Equipment

1. A lecture room equipped with an instructional computer, high-resolution color monitor, projection system, software, and network connectivity. Lighting suitable for projected images.
2. An integrated or separate facility with student workstation configurations to include hard drives; color monitors; mice; keyboards; software, and network connectivity.
3. When taught via Foothill Global Access: on-going access to computer with JavaScript-enabled internet browsing software, media plug-ins, and relevant computer applications.

Method(s) of Evaluation

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

Presented research findings
 Completed student projects
 Group discussion
 Final portfolio review

Method(s) of Instruction

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

Lectures on conceptual concepts and applications of design thinking
 Discussion of projects and representative techniques
 Group discussions that address the creative problem solving process
 Demonstration of design thinking techniques

Representative Text(s) and Other Materials

Lewrick, Michael. [The Design Thinking Playbook: Mindful Digital Transformation of Teams, Products, Services, Businesses and Ecosystems](#). 2018.

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

1. Example of required reading assignment: Lesson 5 - read pages 1-15 and 52-53 in textbook.
2. Example of required writing assignment: Lesson 5 - write 200-300 words explaining how empathy is used in design thinking.
3. Example of outside of class assignment: Lesson 5 - student will conduct a design thinking interview.

Discipline(s)

Graphic Arts