

# 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:

- 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.
- 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.
- Experience opportunities to apply learnings to real-world context and to gain a deeper understanding of the design thinking methodology.

## Course Content

- Overview of the design thinking process
  - Approach to complex issues
  - Mindset of design thinking
- Ethnography/empathy

- User-centered methodology
  - Human-centered framework
  - Interviews
- Synthesis
    - Analyze qualitative data
    - Understand deeply complex problems
    - Uncover latent human needs
  - Prototype
    - Brainstorm strategy
    - Diagramming
    - Storyboarding
    - Rapid prototyping
    - User testing
  - Iterating

## Lab Content

- Observation
- Interviews
- Brainstorming
- Diagramming
- Storyboarding
- Rapid prototyping
- User testing
- Design specification

## Special Facilities and/or Equipment

- A lecture room equipped with an instructional computer, high-resolution color monitor, projection system, software, and network connectivity. Lighting suitable for projected images.
- An integrated or separate facility with student workstation configurations to include hard drives; color monitors; mice; keyboards; software, and network connectivity.
- 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**

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

## **Discipline(s)**

Graphic Arts