

# STRING THEORY

S C H O O L O F D E S I G N

## Des 120.11 Design Thinking

Fall 2024

Total Hours: 20

Quarter Credits: 2

<b>Faculty Name:</b> [add name]	<b>Office Hours:</b> [Day(s)] [Times](or by appointment)
<b>Email:</b> [add email]	<b>Class Hours:</b> [Day(s)]
<b>Phone:</b> [add phone]	[Times](or by appointment)

**Course Description:** Design thinking is an approach to finding and engaging complex challenges, often called ‘wicked problems’, with spatial thinking and through empathetic practices. Wicked problems are questions that have no clear answer yet require a response. Design thinking mindsets are robust practices in both creative and business domains to address wicked problems. A foundational course to the IDeATE program, this course will introduce design thinking strategies and tactics through a survey of case study examples and practical applications.

**Prerequisites:** None

**IDeATE Program Educational Objectives Alignment:** This course is designed to help students achieve the following IDeATE Program Educational Objectives:

- Think critically and creatively
- Apply knowledge to design challenges
- Navigate diverse landscapes

Completion of this course will yield the following student learning outcomes:

- Dive deep in design
- Work wicked problems
- Innovate solutions

**Course Learning Goals:** The course is designed around the following learning goals. Upon completion of this course, students should be able to:

- Fluently engage in the Design Thinking process
- Practice and reflect on Design Thinking mindsets
- Explain and evaluate the benefits and limitations of Design Thinking as a tool for working wicked problems and innovating solutions

**IDeATE Competencies and Mastery Credits:**

Competencies	Course Specific Mastery Credits
Inquiry	<b>Hypotheses:</b> Developing hypotheses and predictions
Design	<b>Empathy:</b> Self-assessment through curated and annotated artifacts and reflections of the ability to understand and share the feelings of others. <b>Ideation:</b> Generating ideas to solve a problem or create something new. <b>Prototyping:</b> Implement an idea in a tangible form.
Critical Thinking	<b>Problem Solving:</b> Perceive, define, and create multiple solutions to authentic problems.
Core Knowledge	Innovation Core Knowledge
Collaboration	<b>Discussion:</b> Communicating ideas and contributing to discussion through questioning, connecting, and probing
Communication	<b>Precision:</b> Expressing ideas and information with exactness, specificity, correct use of terminology, and refinement
Engagement	<b>Curiosity:</b> Self-assessment through curated and annotated artifacts and reflections of the strong desire to know or learn something and the ability to act or take charge to learn it.

### Course Materials:

### Required Texts and Materials:

1. [Stanford dschool Bootcamp Bootleg Toolkit](#)

### Mastery Grading System:

<b>3.6 - 4.0</b> Exceeds Mastery	<b>3.0 - 3.5</b> Mastery	<b>2.0 - 2.9</b> Developing	<b>1.0 - 1.9</b> Insufficient Evidence
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Whole number mastery grades (1 - 4) are recorded for each mastery credit aligned to each product, performance, or assessment, with points used to compute a synthesized mastery course grade for each student at the end of each quarter. Students must earn a mastery course grade of 2.0 or higher to receive credit for a course and evidence readiness for any future learning for which this course serves as a prerequisite in the IDEATE program.

### Course Schedule (subject to change, with notice):

Week #	Topics/Experiences	Content	Products/Performances/ Assessments
Week 1	What is Design Thinking?	Design Mindsets and Overview	Socratic Seminar 1: What is Design Thinking?

Week #	Topics/Experiences	Content	Products/Performances/ Assessments
Week 2	Start with Empathy	Empathy Mode Card and Empathy Mapping	Design Project: Empathy Map
Week 3	Deepening Empathy	Interview for Empathy Method Card	Design Project: Empathetic Interview
Week 4	Defining a Problem	Define Mode card and related articles	Design Project: Problem Definition
Week 5	Techniques for Creative Thinking	Fluency, Flexibility, Originality, Creative Thinking tools	Socratic Seminar 2: Where do creative ideas come from?
Week 6	Ideation	Ideate Mode Card and various aligned Method Cards	Design Project: Brainstorm
Week 7	Prototyping	Prototype Mode Card and various aligned Method Cards	Design Project: Prototype
Week 8	Testing	Test Mode Card and various aligned Method Cards	Design Project: Test
Week 9	Iteration and Implementation	Cohort Prototypes and Method Cards aligned to feedback	Design Project: Iteration or Implementation Plan
Week 10	Synthesis and Applications	All course texts	Socratic Seminar 2: Why use Design Thinking?

### Submission Dates:

SUBMISSION DATE	PRODUCT/PERFORMANCE/ASSESSMENT DUE
TBD Week 1	Socratic Seminar 1: What is Design Thinking?
TBD Week 2	Design Project: Empathy Map
TBD Week 3	Design Project: Empathetic Interview
TBD Week 4	Design Project: Problem Definition
TBD Week 5	Socratic Seminar 2: Where do creative ideas come from?
TBD Week 6	Design Project: Brainstorm
TBD Week 7	Design Project: Prototype
TBD Week 8	Design Project: Test
TBD Week 9	Design Project: Iteration or Implementation Plan
TBD Week 10	Socratic Seminar 2: Why use Design Thinking?

### IDEATE PROGRAM POLICIES:

**Academic Integrity:** IDEATE students and professors uphold academic integrity as one of our highest priorities, and the String Theory School of Design investigates any allegation of violations of academic integrity. Violations include, but are not limited to: plagiarism, cheating, fabrication, and other forms of academic misconduct. Students who believe they have been wrongly accused or sanctioned have a right to an appeals process.

### Attendance Requirements:

Students are expected to attend all classes, and must notify professors if they are not able to attend class for any reason. It is the student's responsibility to inquire about experiences, content, and work missed due to that absence. For further information on the attendance policy, please consult the IDeATE Program catalog.

**Course Change Policy:** IDeATE program faculty reserve the right to make changes to the course during the quarter to best actualize course learning goals. Changes will be announced to individual classes and conveyed in writing in advance of the change.

**Accessibility and Disability Accommodations:** Students with disabilities requesting accommodations and services need to complete an Accessibility Form, along with documentation from a licensed medical professional with a diagnosis of disability (defined as an impairment and/or condition that substantially limits a major life activity for 6+ months). Temporary adjustments are available for individuals with short-term impairments, i.e., those due to accident or injury. Please see the String Theory School of Design IDeATE Program course catalog for more details.

**Course Drops and Withdrawals:** Enrolled students may drop a course through the end of Week 1, and may withdraw from a course through Week 7. Please be aware of the potential financial and academic implications of course drops and withdrawals. Please see the String Theory School of Design course catalog for more details. Once registered, it is your obligation to attend, drop, or withdraw. Dropping will remove the course from your transcript. Withdrawing will result in a "W" on a student's transcript.

**Commitment to Inclusive Practices:** The String Theory School of Design welcomes individuals from diverse backgrounds and perspectives, and promotes an inclusive and respectful environment that enriches the school community and the educational and employment experience of its members. To report an incident, sexual misconduct, discrimination or harassment based on race, color, national origin, religion, sex, sexual orientation, disability, gender identity or expression, age, veteran status, or any other protected category or identity, please follow current guidance in the String Theory School of Design IDeATE Program course catalog.

**Professor's Welcome:**

[add a note of welcome that creates a sense of belonging]

**Course Specific Expectations:**

[add a narrative paragraph or bulleted expectations no more than a half page in length]