

DESIGN THINKING BOOTCAMP SYLLABUS

Rationale:

Companies are increasingly looking for employees with training in Design Thinking and innovation. For example, companies like Procter and Gamble and GE have incorporated Design Thinking into their strategy and marketing. Innovation is also central to the mission of Leeds. While the Leeds curriculum has a number of opportunities for students to develop entrepreneurial skills that aid the innovation process, there is still opportunity for more focus on innovation-specific skills and strategies such as Design Thinking. This course will offer an immersive experience in Design Thinking as a tool for innovative idea and strategy development. Additionally, Leeds is always seeking to develop stronger relationships with the external Boulder community. In this class, students work with local businesses and develop continuing relationships with local community members.

As mentioned, the world and its challenges demand a new breed of professional—those who are trained to drive innovation, no matter the situation, industry, or problem. Design Thinking is a process pioneered at the IDEO and the Stanford d.school. This process draws on methods from engineering and design, and combines them with ideas from the arts, tools from the social sciences, and insights from the business world

Course Description:

Students start in the field, where they discover the needs of the target audience. They then iterate ideas on teams to develop a range of promising possible solutions, create rough prototypes to take back out into the field, and test with real people in the target audience.

Throughout the course students will work on three different challenges; one focused on product design, one focused on service design and one focused on systems or business design. By starting with a very tangible challenge around product design, students will be able to hone their skills in the process before moving into more complex challenges around business and systems level design. All challenges will be addressed in partnership with a local business that poses a problem they are currently facing. In pilot programs for this class, businesses have implemented a number of ideas developed by students.

The course will be teamwork-oriented, but students will also complete readings and independent activities that support the group work and ensure individual depth of knowledge.

Course Objectives

- Expose students to the design process as a tool for innovation.
- Develop students' professional skills in client management and communication.
- Demonstrate the value of developing a local network and assist students in making lasting connections with the business community.
- Students develop a portfolio of work to set them apart in the job market.
- Provide an authentic opportunity for students to develop teamwork and leadership skills.

Learning Outcomes

Design Process

1. Students develop a strong understanding of the Design Process and how it can be applied in a variety of business settings
2. Students learn to research and understand the unique needs of a company around specific challenges
3. Students learn to build empathy for target audiences from different "cultures"
4. Students learn to develop and test innovative ideas through a rapid iteration cycle

5. Students learn how to create physical prototypes / a visual representation of an idea
6. Students develop the willingness to take a risk and the ability to deal with failure

Professionalism

1. Students develop professional interpersonal and presentation skills
2. Students develop professional communication skills such as interviewing and crafting professional emails
3. Students learn to take ownership of the quality of their work and final products
4. Students understand their duty to maintain ethical standards in product and strategy design
 - a. Students understand the long term impact of design decisions
5. Students understand the value of and have tools to develop a strong network

Leadership and teamwork

1. Students develop self awareness of personal leadership style and how to effectively work as a member of a team
2. Students collaborate on a variety of projects
3. Students develop communication skills necessary to facilitate high performance team formation and maintenance (e.g., leveraging the skills and abilities of all team members, valuing cross-disciplinary/cultural contributions, engaging in difficult conversations and resolving conflict)

Course Organization:

Module 1: Intro to Design Thinking and Product Design

- Day 1: **Introduction to Design Thinking**
Assignment: Creative Confidence, Ch 1 “Flip”
Exercise: Car Maintenance Introductory Challenge
- Day 2: **Introduction to Design Research Strategies**
Assignment: Complete Design Research plan
Exercise: 1st client presentation and Plan Design Research
- Day 3: **Introduction to Synthesis**
Assignment: Creative Confidence: Ch 4 “Leap”
Exercise: Synthesis (Identifying insights and opportunities) of Product Challenge findings
- Day 4: **Introduction to Ideation and Prototyping Strategies**
Assignment: Target Audience Testing – Tim Chi Video on rapid iteration
Exercise: Ideation and prototype for Product Challenge
- Day 5: **User Testing**
Assignment: Read: The Hard Science of Teamwork + self and peer assessment of team participation
Exercise: Test Final ideas with product client

Module 2: Team Work and Service Design

- Day 6: **Team work discussion + Launch of Service challenge**
Assignment: Read “Mapping the lives of users” by Jan Chipchase
Exercise: Peer feedback and group discussion on teamwork reading
Exercise: Presentation from new challenge client
- Day 7: **Design Research - tools for observation + immersion**
Assignment: Complete Design research for service client

Exercise: Plan and begin to implement research phase

- Day 8: **Journey mapping and ideation**
Assignment: Rapid iteration cycles
Exercise: Journey mapping and idea generation
Storytelling: clear communication of top concepts
- Day 9: **Develop Final Presentations**
Assignment: Prepare Final presentations
Exercise: Develop Presentations in small groups
Exercise: Practice presentations with Peer Feedback
- Day 10: **Final Presentations and Leadership Styles discussion**
Assignment: Read: Leadership that Gets Results, Daniel Goleman + Complete Peer and self evaluation and leadership styles worksheet
Exercise: Final Presentations to Clients
Exercise: Leadership styles activity

Module 3: Business or Systems Design

- Day 11: **Launch final challenge – system or student challenge**
Assignment: Read Business Model Canvas CH 1 and complete draft of Business Model Canvas for project.
Exercise: Leadership Styles reflection and peer feedback
Exercise: New Challenge presentations
- Day 12: **Business Model Canvas and Design Research**
Assignment: Complete Design Research
Exercise: Develop Group Business Model Canvas
Exercise: Plan additional Research phase
- Day 13: **Visualizing ideas**
Assignment: Test ideas + Storytelling reading (Made to Stick, Chip and Dan Heath, Introduction pp 3-24) prepare one minute storytelling video.
Exercise: Group Synthesis – Using tools of choice
Exercise: Develop visual representation of ideas
- Day 14: **Communicating ideas and effective storytelling**
Assignment: Finalize final presentations
Exercise: Guest speaker on effective presentations
Exercise: Share drafts of final presentations for feedback
- Day 15: **Final Presentations and class celebration**