Design thinking

PROF. WENDY ANGST

Course aims and intended learning outcomes

The objectives of the course "Design Thinking and Innovation" are to:
- Inspire a human-centered approach to innovation.
- Experience design thinking/human-centered-design methodologies including ethnography, ideation, synthesis, and prototyping.
- Investigate user-centered methods for uncovering and addressing business needs.
- Harness creativity in a mindful way to generate new-to-the world solutions.

At the end of the course students will be able to:
- Apply Design Thinking methodologies to identify innovation opportunities.
- Demonstrate operational knowledge of Design Thinking frameworks.
- Execute basic ethnographic research.
- Create physical manifestations of ideas using prototype methods.
- Present recommendations using personas and storytelling methods.

Course content

"Design thinking is a human-centered approach to innovations that draws from the designer's toolkit to integrate the needs of people, the possibilities of technology, and the requirements for business success." Tim Brown, former President and CEO of IDEO.

As the challenges and opportunities facing society and businesses grow more complex, and as stakeholders grow more diverse, organizations are increasingly seeking innovative ways to create and capture value. In this course we will explore organization-centered methods of innovation while gaining proficiency in human-centered methods of innovation through an approach known as "design thinking".

Design thinking is an iterative problem-solving process centered on understanding users and their unarticulated needs throughout the journey of product/service interactions. Systematic application of ethnographical research, ideation, prototyping, and customer co-creation lead to innovations grounded in human-centered design, applicable for both intrapreneurship (innovating within an organization) and entrepreneurship.

Reading list

   J. LIEDTKA-T. OGILVE, Designing for Groth, Columbia Business School Publishing, 2011.

Other readings provided by the instructor

Teaching method

This course will provide a foundational understanding of how the design, ethnography and experienced-based concepting can be applied to business challenges. The core component of this course is a real-world team project that will follow an accelerated approach to business innovation. This process spans consumer insight, design thinking and rationalization of breakthrough opportunities.

Independently, students will learn by doing through independent assignments to build proficiency in the tools and techniques.

Assessment method and criteria

Course grading will be based on both the journey and the destination. Students who exhibit thorough exploration of the design process, contribute strongly to the class, provide value as a team player, and commit to personal growth as a design thinker can expect to do very well. Grading components include:

Classroom participation is an important part of the course to keep up with the materials, work with your teams on projects, and add value to the learnings. Participation will be measured by:
- Attendance.
- Presence as an active listener.
- Positivity, specifically in building on others' thoughts.
- Participation in class exercises.
- Quizzes on readings and concepts.

*Laptops and cellphones are not to be used in class.

Assignments, both team and individual, are designed to build upon your aptitude with design thinking tools and techniques and to support the skills you need for your Design Projects. The bulk of your class preparation time will be spent utilizing design thinking tools. These assignments will be measured by:
- Quality and thoughtfulness of work.
- Effort in applying the methodology.

Project will provide a context for all class work, as you cannot learn to use innovation and design by hearing about it, but must be actively involved in doing it. Students will work in teams on a client project designed to facilitate learning the fundamentals of human-centered innovation and design. The project will be evaluated by:
- Following the Innovation and Design process, including timely submission of quality deliverables throughout.
- Final project presentation.
- Final project deliverable.
- Peer evaluations.