

DISCOVERING DESIGN HONORS PROGRAMS MAY, 2020

Instructor	
Email	
Schedule	Monday – Friday (2,30 hrs)
Classroom	TBA
Office hours	by request
Credits	3
Language of Instruction	English

1. COURSE DESCRIPTION

Some people believe that innovation spring from spontaneous insights that miraculously stricken the inventor, maybe a mysterious visit from the muses. Unfortunately, in real life there is no such a thing. Innovation is a mixture of creativity and imagination with a lot of careful and methodological process of study followed by painstaking exploration of ideal solutions for observed needs.

This course will introduce students to the world of applied design and innovation, or in other words, how to transform an idea into a tangible project. It is designed for students who are active thinkers, creative and feel inclined to “make things”. Students learn to develop new skills of observation, problem finding and problem solving, ideation, designing, making and prototyping using a human centered process. At the same time, they will work on empowering their personal and professional competences; creativity, flexibility, leadership, teamwork and negotiation.

The *design thinking elements* of the course offer a critical understanding of methods for researching interactions between humans and the social and built environment, whereas the *design doing elements* teach them how to develop purposeful interventions that result in a more meaningful and effective interactions. Students will do a design project using a *human-centered process* while at the same time they will learn to design as they examine *what* and *how* people learn while engaged in the design process. The prime vehicle for student learning will be their participation in team-based projects in the domains of business, education, arts and technology.

2. GOALS & COMPETENCES

Upon completion of the course students will be able to identify

Competence 1.	Develop an understanding and appreciation of design as a fundamental human activity.
Competence 2.	Develop foundational literacy (e.g. key concepts, basic terminology, historical periods) in the major subfields of design.
Competence 3.	Gain experience using a toolkit of methods, principles and tactics for doing design through hands-on, studio-based activities and projects.
Competence 4.	Cultivate a designedly sensibility: learn to feel, think, and act as a designer.
Competence 5.	Develop a critical eye for judging and evaluating design.

3. UNITS

Day 1	Foundations of Human Centered Design Design as Inquiry	Design Thinking
Day 2	Barriers to Innovation and Adoption Learning by Doing	Design Doing
Day 3	A History of Needs Service Design 101 Understanding Needs in Context	
Day 4	Wicked Problems in Design The Ethics of Design Interventions Design Needs in Education, Health & Society	
Day 5	<i>Design Review 1</i> Discovering Explicit and Latent Needs Qualitative Research: Watching and Listening	Phase 1: Empathy
Day 6	Point of View & Problem Reframing Developing Grounded Theory	Phase 2: Interpretation
Day 7	<i>Design Review 2</i> Conveying a Design Theory Observations and Qualitative Research	
Day 8	Generating and Developing Ideas Creativity as Teaching and Learning	Phase 3: Ideation
Day 9	Prototyping 101: Showing Not Telling Learning Through Things & Interactions	Phase 4: Experimentation
Day 10	<i>Design Review 3</i> Prototype Presentations Learning From People	
Day 11	Express, Test, Cycle: Iterate Without Starting Over	Phase 5: Evolution
Day 12	Cycles of Design Learning Documenting Design, Story Telling 101; Representing Design Knowledge	

Day 13	<i>Design Review 4</i> Visiting Referred Situations The Diffusion of Innovation	
Day 14	Enacting Creative Confidence Design as Research	Phase 6: Reflection
Day 16	Project presentation (Open Pitch)	
Day 17	Project Presentation (Open Pitch)	

NOTE: Except for changes that substantially affect the methodology of the course, this syllabus is a guide for the course and is subject to change with advance notice.

4. METHODOLOGY

Classroom sessions.

This is a four-week hybrid virtual program where students cover the content of the course online through synchronous meeting with the professor and classmates in real time. Students will do individual as well as collaborative work on specific topics and projects.

The primary vehicle for student learning is participation in team-based projects in the domains of business, education, arts and technology. The learning is supported through lectures, discussions, readings, in-class exercises, and through a series of formal design reviews that encourage reflection on student's process and their insights. Students in the course will spend significant time observing, listening to, analyzing, storytelling and otherwise engaging users (and fellow students) as they develop and implement meaningful and transformative design.

The course includes a full program of visits and meetings with designers of different fields where they can share their experiences and stories as well as the challenges and ethics of the world of design.

We use three different platforms for the class; **Zoom and Google Class** for teaching support and **Miro** for the Virtual Collaborative project.

Note: this is intended to be a four hybrid programs with two weeks of virtual classes and two weeks of an immersion experience in Spain. The immersion portion of the course will take place when health and safety conditions allow.

Virtual collaborative project.

The goal of this course is to engage students into the critical thinking and learning of a time of the Spanish history so they can design a project of their own that will make accessible and exciting the content of the course to a general audience. The aim for the group digital project is to learn to make connections between the different cultural, visual, historical or literary sources and the cultural, social and historical topics studied during the course.

Students in the course will be encouraged to implement the different design strategies in order to develop their projects, including observations, visualization, listening to, analyzing, storytelling and otherwise engaging users (and fellow students) as they develop their own digital project.

5. CLASS PROJECT

Human-centered design methodologies, including Design Thinking, arrive at optimal solutions to problems by gathering thoughts and ideas from a diverse set of individuals using stabilized tools and methods. After students have familiarize themselves with the tools and methods of Design Thinking, groups will be created each containing four to six diverse students. The Design Challenges will be wide-ranging and varied, students are welcome to provide with their ideas. The Challenge will be different for each group over the duration of the class.

Students will work together in groups, during class time and outside of the class, progressing through the stages of Design Thinking to develop what they feel is the best human-centered Design Solution for their assigned Challenge.

They will then present/pitch their Design Solution through an online video working to tell the story of their challenge and selling the audience on their solution.

Upon conclusion, each student will independently submit a paper detailing the process of the team's work, the resulting Design Solution, their unique contribution towards the solution development, and the lessons they have learned along the way.

6. EVALUATION

This course integrates four components for the final evaluation: the physical presence in class, participation in class discussions & activities, participation in the group activities outside of class and the final project.

1. In -class participation preparation & participation	10%
2. Out -class activity preparation & participation	10 %
3. Group activity & Design Review Report	40%
4. Final Project	10%
5. Presentation	30%

7. BIBLIOGRAPHY

There is no required textbook for this course. Every session there will have assigned readings, videos or presentations that will be made available to students through Google Class. Most readings will be directly tied to the weekly assignments and include a combination of practical guides and theoretical/historical perspectives.

We will be using these guides as a reference

- Field Guide to Human Centered Design (IDEO.org)
- Design for Social Impact: A How-To Guide (IDEO.org & The Rockefeller Foundation)
- Design Thinking for Educators, 2nd Edition (IDEO.org)
- Design Thinking Tool Kit (IDEO.org)