DESIGN METHODOLOGY

GRADO EN DISEÑO
Professor: VALENTÍN GARCÍA ALCOCER
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Academic year: 19-20
Degree course: SECOND
Semester: 1º
Category: COMPULSORY
Number of credits: 3.0
Language: English

PREREQUISITES
SUBJECT DESCRIPTION
This Design Methodology course provides the student with the basic knowledge to introduce her/himself to the project culture of the design discipline. During the different sessions some methodological approaches and creative techniques will be explored. The main goal of the course is to provide future designers with the necessary resources and tools to approach all kind of projects in an organized, structured and creative way.
OBJECTIVES AND SKILLS

Objectives:
- To acquire basic notions of design methodology, both theoretical and practical.
- To understand the processes behind the design practice.
- To be able to structure design projects, selecting the methodology, methods and techniques.
- To develop a sensibility that goes beyond the design of the solution, also reflecting on the process to achieve it.

Skills:
- Development of a structured way to tackle projects.
- Development of design strategies for problem solving.
- The use of the most common design methodologies, methods and techniques.
- The ability to setup a framework for team collaboration and/or user co-creation.
METHODOLOGY

The course consists of a blend of discussion and lecture based seminars and the engagement with weekly readings through written assignments, group work and in class discussions and tasks.

Students will be expected to have read the pertinent texts before each session and to write a small assignment or prepare a specific task in response to them. Interactivity and engagement is critical to the learning process and therefore students will be encouraged to share their thoughts and ideas in relation to issues presented in each seminar.

Based on the above competencies, the Professor will for his class sessions rely on a combination of the below course formats: Lectures, Discussion Sessions, Student Presentations and Student Debates. Based on the above competencies, students will dedicate their individual study hours to: individual study, preparation of assignments, tasks and group work.

CLASS ELECTRONIC REQUIREMENTS: This subject does not require the use of a laptop in class; nevertheless, if you want to bring your laptop, please contact your professor.
<table>
<thead>
<tr>
<th>Teaching methodology</th>
<th>Weighting</th>
<th>Estimated time a student should dedicate to prepare for and participate in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lectures</td>
<td>24.0 %</td>
<td>18 hours</td>
</tr>
<tr>
<td>Discussions</td>
<td>16.0 %</td>
<td>12 hours</td>
</tr>
<tr>
<td>Exercises</td>
<td>21.33 %</td>
<td>16 hours</td>
</tr>
<tr>
<td>Group work</td>
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<td>17 hours</td>
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<tr>
<td>Other individual studying</td>
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<td>12 hours</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100.0 %</td>
<td>75 hours</td>
</tr>
</tbody>
</table>
PART 1: AN INTRODUCTION TO METHODOLOGIES

SESSION 1

Fundamental parameters

Methodology, tasks and process Presentation and Lecture.

This module is an introduction to the basics elements on the possible ways on how designers tackle their work. During the session, it’s going to be explained how this curse will work and how when you need to connect design work with other activities it is necessary to establish an order in the required actions to complete a job, reflecting on the differences between methodology, tasks, processes, and tools. Different systematic approaches are going to be covered for solving problems, which could be standardized and repeated when necessary as well as fundamentals parameters for a project.

Reading Assignment


Recommended movies:

The fountainhead, King Vidor, 1949 URL: https://www.imdb.com/title/tt0041386/
American look, W.F. Banes, John Thiele, 1958 URL: https://www.youtube.com/watch?v=mAeDARsdYyc
The founder, John Lee Hancock, 2016 URL: https://www.imdb.com/title/tt4276820/

SESSION 2

Origin of methodologies

Arts & Crafts, Taylorism (Scientific management), Fordism, Ulm School, Bauhaus, Mc Donalds “speedee” system and Lean manufacturing.

In this session we will revisit the history of industrial methodologies and processes from Arts and crafts to Lean manufacturing which are the bases to creative methodologies.

Writing Assignment

Writing an essay of?200 - 250 words summarizing what methodologies are, why do you think they are important (Or not) and what pros / cons can contribute to the design process

SESSION 3

Assignment discussion

During the session the students will expose their essays and we will discuss the most interesting and dynamic points of view, as well as the movies and readings assigned the previous session. This discussion will lead to those methodologies that will be explained in session 4, specially discussing about human-centered design.

Reading Assignment

The Field Guide to Human-Centered Design , IDEO, 2015 (P 9-14), URL: http://www.designkit.org/resources/1
Gaggero Westaway, Clara “Design Methodology” Special Projects, 2016, URL: http://specialprojects.studio/article/design-methodology
SESSION 4

Basic processes for a designer mind-set

Design is not just about manufacturing. Previous phases, that set up a designer mind-set are just as important as the technical ones. During this session we will find out what design is supposed to be, what’s the goal of designing something and how should we face the first steps to design it.

Three technics will be explained:
The Problem Solving Approach. Creating in order to solve a problem or a challenge
The Human Centered Design. Deeply analyzing society in order to find out what people’s looking for
The Double Diamond Design Process. Expanding and focusing our vision alternately in order to generate the most appropriate response to each need

Compulsory watch
IDEO: Shopping Cart Design Process, 1999 URL: https://www.youtube.com/watch?v=M66ZU2PCLcM&t=6

PART 2: DESIGN THINKING

SESSION 5

An introduction to Design Thinking

This session will serve to introduce the Design Thinking methodology. We’ll start learning the history of Design thinking and the phases of the methodology: Empathize, define, ideate, test and measure.

A briefing with the case to be explored in this module will be presented to students and discussed deeply.

We will review some business cases too.

SESSION 6

Design thinking: Empathize

This session is the first of the Design Thinking phases series. All phases classes will follow the same pattern. We will explain the goals of the phase and the importance of following the defined steps. Some tools and examples.

Empathize phase will help us to understand the challenge we are facing and the target we are approaching to.

During this session we will learn some investigation tools that help us to accomplish the empathize phase, such as the safari, interviews, 6 thinking hats, shadowing, customer journey or persona.

We will prepare a safari exercise using the briefing exposed during the previous session. This will be the base for the session’s assignment.

Assignment
Using the Safari tool, you must visit a place were the target usually concentrates to perform some activity related with the briefing. After taking exhaustive notes, you will fill the persona tool and expose some key inputs acquired during the excercise.

Define precisely the target and fill the Persona tool

SESSION 7
Design thinking: Define
Understanding the problem is not always as easy as it seems. The Define phase helps us to explore and specify the challenges and problems we are facing.
We can’t start to ideate without defining the problem or challenge to accomplish, other way our solution will never be accurate enough.
The main goal is to arrive to a proper synthesis of our challenges and generate a problem statement that’s clear to understand for everyone and resumes the main aspects of the project.
We will learn some different tools such as an Empathy map or the Manifesto canvas.

SESSIONS 8 - 9
Design thinking: Ideate
Ideation phase is the most popular one. It can and should be fun, but a proper order and focus should never be lost. Since this phase is the most popular one, lots of bad habits are already acquired. We will explain the goals of the phase, break up the bad habits and learn some new tools to accomplish and evaluate our ideation phase.
The ideas generation main tools to learn will be Brainstorming, Brainwriting, Opposite thinking…
The ideas evaluation main tools to learn will be the Desirability/feasibility/viability chart, Value Vs Effort…
During the sessions we will do a Brainwriting in-class exercise, related to our practical case. These ideas will be reviewed and we will select one, specifying the tasks that need to be done in order to accomplish that idea. The MoSCoW tool and the Tasks backlog will help to prepare those tasks for starting the action.
Assignment
Use the Desirability/feasibility/viability chart to select your final idea.
Justify your selection and make a list of the main tasks that you will need to accomplish in order to make it possible

Reading Assignment
The lean startup : how today’s entrepreneurs use continuous innovation to create radically successful businesses, Eric Ries, 2011 (Pages to be defined)

SESSION 10
Design thinking: Test and measure
Accountancy of design and innovation may be an abstract concept but it’s an essential one. All the impact we create by a new design or project has to be measured, even when it seems to be impossible. Nowadays the success or failure of a project has to be shown with data and there are many ways in order to obtain that information in an objective and precise way.
During this session we will understand the goals of test and measure phases and will watch some of the most useful tools that will help us to accomplish successfully these phases. We will explain what an MVP is (Minimum Viable Product) and different kinds of MVPs: Frankenstein, Landing page, Concierge…
MVPs will lead us to the final part of the course, agile methodologies.

PART 3: AGILE METHODOLOGIES
SESSION 11
An introduction to Agile Methodologies
Last decades, the Waterfall methodology has been the main way to manage projects. But after the emergence of Agile Methodologies during the 00’s this has started to change.
During this session we will compare the agile VS waterfall system and show how to choose the most appropriate one for each project.

We will also get an introduction to Agile methodologies history, as well as the Agile Manifesto. SCRUM may be the most popular agile methodology but before going deeply into it, we will also know other agile methodologies and where are usually applied.

SESSION 12
Excursion
In this session we will leave the classrooms to visit the innovation center of a large company and find out the methodology they use to manage their projects.
Assignment
Describe the company’s methodology.
Explore and explain the discovered pros/cons in their methodology.
- Use examples of learned methodologies

SESSIONS 13 - 14
Lean Startup and SCRUM
Using Lean Startup and/or SCRUM methodologies allow us to accelerate the time to market of a product and test it before launching it. Both are very useful ways to reduce costs and validate our ideas, minimizing risks.
During these two sessions we will learn where do these methodologies come from and when should we use them.
We will have a special emphasis in SCRUM, discovering a whole new structure to organize our work that includes new roles, new tools and new steps.

SESSION 15
Final exam
All acquired knowledge will be tested during this session.
Final test: 20 Questions, test format
Final Essay: Short essay (150-200 words)
BIBLIOGRAPHY

COMPULSORY
Title: The Field Guide to Human-Centered Design Author: IDEO.org Publisher / Edition / Year: IDEO.org Design Kit / 1st / 2015 Medium: PRINT and ELECTRONIC ISBN / ISSN: 978-0991406319 URL: http://www.designkit.org/resources/1

Title: Design Methodology Author: Gaggero Westaway, Clara Publisher / Year: Special Projects / 2016 Medium: ELECTRONIC URL: http://specialprojects.studio/article/design-methodology


Title: Shopping Cart Design Process, Author: IDEO, Publisher/Year: ABC 1999, URL: https://www.youtube.com/watch?v=M66ZU2PClcM&t=6s

Title: The lean startup : how today’s entrepreneurs use continuous innovation to create radically successful businesses. (Pages, to be defined) Author: Eric Ries, Year: 2011, URL: https://ie.on.worldcat.org/oclc/842875232

RECOMMENDED

The fountainhead, King Vidor, 1949, URL: https://www.imdb.com/title/tt0041386/

American look, W.F. Banes, John Thiele, 1958, URL: https://www.youtube.com/watch?v=mAeDArSdXYp

The founder, John Lee Hancock, 2016, URL: https://www.imdb.com/title/tt4276820/
EVALUATION CRITERIA

Your final grade in the course will be based on both individual and group work of different characteristics that will be weighted in the following way:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Percentage</th>
<th>Comments</th>
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</thead>
<tbody>
<tr>
<td>Class Participation</td>
<td>22 %</td>
<td></td>
</tr>
<tr>
<td>Assignment 1: ESSAY</td>
<td>12 %</td>
<td></td>
</tr>
<tr>
<td>Assignment 2: SAFARI</td>
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<tr>
<td>Assignment 3: IDEATION</td>
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<tr>
<td>Assignment 4: INNOVATION LAB</td>
<td>12 %</td>
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<tr>
<td>Final test</td>
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<tr>
<td>Final Essay</td>
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</tbody>
</table>

Class attendance and participation

It is expected from students to participate in class discussions. There are two ways for individual participation: In the discussions that each seminar will hold and in the group project presentation that students will have to give based on their readings and project results.

Key criteria to consider class participation will be the constructive engagement with class discussions and activities. It is expected that participation should be oriented to enrich the intellectual climate of the class, participating in debates, carefully listening to peers and engaging in dialogues with them.

Assignments

All submitted works must show rigor, creativity and information of the acquired knowledge. Both in the group and in the individual works, the expression of a well-founded opinion will be valued.

References and citations must be quoted.

In groupworks, everyone will be responsible for the final grade, so the active participation of all members is strongly recommended. Professor reserves the right to specific modifications, individually, in the note of the groupwork if he considers that the participation in said works has been unequal and inadequate.

Final exam

The final exam will be composed by a final test that reviews the whole course in 20 questions. Also will include a final short essay. Essay should be a theoretical exploration based on the combine of contents from different course modules. Quotes, data and all objective information included will be highly valued.

PROFESSOR BIO

13th June 2019
Valentín García is an entrepreneur from Madrid, expert in strategy, innovation and design. He has developed a large part of his career in France and Mexico, mainly collaborating with Domaine de Boisbuchet in the first three years and as Creative Director of the Mexican Design Gallery later. In the American country he began his consulting work, combined with his own design studio. As a designer, his work has been exhibited in prestigious media and press (The New York Times, AD Russia, Elle Shanghai, Designboom, etc.)

Has been awarded Áccesit INJUVE for best young Spanish designer and Quórum award for best Mexican design. He has also participated in exhibitions at the Museum of Contemporary Art in Mexico, Franz Mayer Museum and Madrid City Council.

As a consultant, he has carried out product development and innovation management projects for brands such as Endesa, MAPFRE or SEAT. Likewise, he has participated in the development strategy of the creative industries of PROMEXICO, trust of the Government of Mexico and La Nave, innovation center of Madrid City Council, where he has directed the programs and activities during the start-up of said center. Currently he continues his design work and teaches innovation at IE University and UNIR (International University of La Rioja).

OTHER INFORMATION
- **Office hours:** After seminars. It is necessary to set the date in advance.
- **Contact details:** vgarciaa@faculty.ie.edu
CODE OF CONDUCT IN CLASS

1. **Be on time:** Students arriving more than 5 minutes late will be marked as “Absent”. Only students that notify in advance in writing that they will be late for a specific session may be granted an exception (at the discretion of the professor).

2. **If applicable, bring your name card and strictly follow the seating chart.** It helps faculty members and fellow students learn your names.

3. **Do not leave the room during the lecture:** Students are not allowed to leave the room during lectures. If a student leaves the room during lectures, he/she will not be allowed to re-enter and, therefore, will be marked as “Absent”. Only students that notify that they have a special reason to leave the session early will be granted an exception (at the discretion of the professor).

4. **Do not engage in side conversation.** As a sign of respect toward the person presenting the lecture (the teacher as well as fellow students), side conversations are not allowed. If you have a question, raise your hand and ask it. If you do not want to ask it during the lecture, feel free to approach your teacher after class.

5. **Use your laptop for course-related purposes only.** The use of laptops during lectures must be authorized by the professor. The use of Social Media or accessing any type of content not related to the lecture is penalized. The student will be asked to leave the room and, consequently, will be marked as “Absent”.

6. **No cellular phones:** IE University implements a “Phone-free Classroom” policy and, therefore, the use of phones, tablets, etc. is forbidden inside the classroom. Failing to abide by this rule entails expulsion from the room and will be counted as one absence.

7. **Escalation policy: 1/3/5.** Items 4, 5, and 6 above entail expulsion from the classroom and the consequent marking of the student as “Absent.” IE University implements an “escalation policy”: The first time a student is asked to leave the room for disciplinary reasons (as per items 4, 5, and 6 above), the student will incur one absence, the second time it will count as three absences, and from the third time onward, any expulsion from the classroom due to disciplinary issues will entail 5 absences.