# Design thinking and start-up launch

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***COURSE AIMS AND INTENDED LEARNING OUTCOMES***

The aim of the course is to provide students with knowledge and understanding of design methods that are specific to the so-called Design Thinking (DT) approach, and of methods and instruments for writing a business plan.

“Module 1 - Design Thinking” will introduce to the theoretical framework of the DT approach, illustrating “school of thoughts” on this topic to distinguish scopes and perspectives of DT. As diversified approach to innovation, the teaching of the DT will train students in the capacity of breaking-down the process for framing, defining, developing, implementing, and assessing a design opportunity, in order to develop the ability to conduct a foresight process and to manage a value-creating process.

In “Module 2 –Developing a business plan for a new venture” students will go through the process of developing and evaluating a new entrepreneurial project. Throughout the module, students will be required to follow the start-up process till the development of a business plan.

At the end of Module 1, students will be able to:

* dive into a different mind-set, trying to merge DT methods in their research and innovation activities for elaborating an iterative and explorative process.
* to acquire a know-how on the reflection between creative process and operational method, which is a necessary skill in multidisciplinary working environments.
* to articulate project research roads with a critical thinking capability.
* to work in multidisciplinary teams.

At the end of Module 2, students will be able to:

* analyze and assess the potential of a new business opportunity.
* develop a concise and compelling value proposition.
* design the basic characteristics of the new venture structure.
* engage in basic financial modeling and financial assessment for the new venture.
* write and present a business plan.

***COURSE CONTENT***

The aim of the course is to provide students the basic knowledge of:

* basic design methodologies and history of design thinking (overview).
* tools and methods used within the DT approach (perspectives).
* future thinking (overview).
* new venture development issues.
* business planning.
* financial structuring and fluency related to assessment and launch of a new project.

Module 1 will guide teams of students towards a foresight and creative process to frame and develop a design project opportunity through the development of scenarios in teamwork; Module 2 will guide the same teams of students towards the development of a business plan on the selected project.

Module 1: the phases of the process will be:

* diving into the topic (critical research). Imagining the *Cultural and creative industries (CCIs) as a driver for change and innovation*: which future scenarios might open new foresight perspectives?
* diving into Explorative Research (creative thinking): Shifting from *ideating* to *criticizing*, interpreting things towards a novel vision that redefines the problems worth addressing and proposing a new value proposition.
* diving into Concept Ideation: converging to the focus on what might be defined as *foresight scenarios through building metaphors.*
* diving into Development: assessing ideas working on a double level scenario.
* refining and final presentation, also with possible further directions

Module 2: the module will be based on training students for the development of a business plan for a new business project, with a focus on technology-based projects. Classes are articulated in lectures and exercises (teamwork sessions and tutorials, project work and open discussions).

Specifically, this part will deal with the following topics:

* role, relevance, and content of a business plan.
* value proposition design.
* market opportunity sizing.
* business structure development.
* evaluation of venture profitability and financial viability.
* project communication.

***READING LIST[[1]](#footnote-1)***

Here follows a list of the compulsory readings for the exam preparation and of the recommended readings about the course’s contents.

**Module 1**

***Compulsory readings for the individual exam of attending students:***

*Books:*

Cross, N. (2011). Design thinking: Understanding how designers think and work. Berg Publishers (Bloomsbury).

Dunne, A., & Raby, F. (2013). Speculative everything: Design, fiction, and social dreaming. MIT press.

*Papers:*

Voros, J. (2003). A generic foresight process framework. Foresight.

***Compulsory readings for the individual exam of not attending students:***

*Books:*

Cross, N. (2011). Design thinking: Understanding how designers think and work. Berg Publishers (Bloomsbury).

Martin, R., & Martin, R. L. (2009). The design of business: Why design thinking is the next competitive advantage. Harvard Business Press.

*Papers:*

Buchanan, R. (1992). Wicked problems in design thinking. Design issues, 8(2), 5–21.

Dorst, K. (2011). The core of ‘design thinking’and its application. Design studies, 32(6), 521–532.

Kolko, J. (2010). Abductive thinking and sensemaking: The drivers of design synthesis. Design issues, 26(1), 15–28.

**Module 2**

***Compulsory readings for the individual exam of attending students:***

*Books:*

Parolini C., Business Planning, 2021, KDP

*Papers:*

Blank S. (2013). Why the Lean Start-up Changes Everthing, Harvard Business Review.

Braun M., Scott L. and Cannatelli B. (2019). Strategy and business models: why winning companies need both, Journal of Business Strategy.

Kim C.W. and Mauborgne R. (2005). Blue Ocean Strategy: From Theory to Practice, California Management Review.

***Compulsory readings for the individual exam of not attending students:***

*Books:*

Parolini C., Business Planning, 2021, KDP

*Papers:*

Adner R. and Kapoor R. (2016) Innovation ecosystems and the pace of substitution: re-examining technology S-curves, Strategic Management Journal, 37.Blank S. (2013). Why the Lean Start-up Changes Everthing, Harvard Business Review.

Braun M., Scott L. and Cannatelli B. (2019). Strategy and business models: why winning companies need both, Journal of Business Strategy.

Hinterhuber A. (2005). Customer value‐based pricing strategies: why companies resist, Journal of Business Strategy

Kim C.W. and Mauborgne R. (2005). Blue Ocean Strategy: From Theory to Practice, California Management Review.

Sawhney M., Wolcott R.C., and Arroniz I. (2006). The 12 different ways for companies to innovate, MIT Sloan Management Review.

***TEACHING METHOD***

The course embraces the studio format and it wants to sustain students capabilities in applying their competences and expertise to foster the investigation of how to learn and develop a foresight and creative process.

The course will be based on class-related activities: frontal lectures (also guests lectures), class discussions, teamwork, oral presentations.

Students are expected to come to each class having read the required material (articles and/or cases) and prepared to present and defend their analysis of the material. Students are also expected to generate discussion by questioning both the professor and presentations by their peers.

Course content will be delivered in the four following methods:

* Lecture/Introduction of the central theme for each session;
* Required readings and class discussion;
* Case analyses;
* Student presentations and peer feedback.

Professors will use visual presentations to introduce the subject matter for each session and stimulate class discussion. Copies of each session presentations will be made available on Blackboard immediately after the session.

***ASSESSMENT METHOD AND CRITERIA***

For Module 1, the assessment method is structured as follows.

*For attending students, who participate to group works:*

* 40% based on the course activities: team project, class discussions, project presentation
* 60% based on the individual oral exam: open questions based on the bibliography.

*For students not attending the course lectures; for students rejecting the final grade:*

* 100% based on an individual oral exam: open questions based on the bibliography.

For Module 2, the assessment method is structured as follows:

*For attending students, who participate to group works:*

* 40% based on the course activities: team written project, class discussions, project presentation
* 60% based on weekly individual tests that include open and close questions and are scheduled during the classes. Each test has a weight of 20% on the final grade.

*For students not attending the course lectures; for students rejecting the final grade:*

* 100% based on an individual written exam: open and close questions based on the bibliography.

The final grade will result from: 50% final evaluation Module 1 + 50% final evaluation Module 2

***NOTES AND PREREQUISITES***

There are no prerequisites for attendance of Module 1.

Module 2: students should have a basic knowledge of business finance including but not limited to:

* Fixed versus Variable Costs;
* Profit Margins;
* Breakeven Analysis

Students who are unfamiliar with these concepts should notify the professor who will provide additional readings prior to the beginning of Module 2.

It is also required a basic knowledge of Excel.

1. I testi indicati nella bibliografia sono acquistabili presso le librerie di Ateneo; è possibile acquistarli anche presso altri rivenditori. [↑](#footnote-ref-1)