international **summer** school **2018**

COURSE SYLLABUS DRAFT

INNOVATION, CREATIVITY AND *YOUR* BRAIN

Daniella Laureiro-Martínez
ETH Zurich (Switzerland)

June 18 – June 29
(6:00 pm – 9:00 pm)

ETH *zürich*

DESCRIPTION

Innovation relies on creativity, and creativity is composed by different abilities that rely on plastic brain circuits, and therefore that we can improve upon. Students will perform neuroscientific tests and will receive a detailed and confidential report on their abilities to get to know their own strengths and weaknesses.

We will discuss and use the latest scientific findings on the abilities that underlie creativity and innovation. Each student will bring to the class one real life problem, and we will use the newly acquired knowledge about their own abilities to test with real constraints and commitments.

This course will use highly interactive student-centered methods and the latest –and I mean really latest!- research to answer questions around how individuals can improve at solving problems creatively to foster their careers, and the performance of their organization.

OBJECTIVES

Key concepts and ideas
- Learn about latest scientific findings on the abilities that underlie creativity and innovation
- Become familiar with individual traits as temporal perspective, temperament and character and attention control abilities
- Learn about what abilities companies seek when making decisions related to personnel development, promotion and hiring methods
- Understand how cognitive flexibility and attention can be measured in a very fine-grained way, and why it matters
- Apply design thinking methods to creatively solve a daily life problem abilities
- Use the typology of problems to classify own problems and reflect on the approach one can take
- Connect knowledge on cognitive flexibility and attention to real life topics and examples (e.g. IDEO case, colleagues' discussion, your own work)
- Gain awareness about your own cognitive processes and traits, and the impact your strengths and weaknesses have on decision-making
- Understand how your own abilities could be better managed and improved change
- Create a new approach to an old problem by prototyping a solution to it
- Create an action plan that uses the knowledge gained throughout the course to tackle a daily job problem taking out the most of your unique personality traits

METHODOLOGY

The course methodology balances two complementary approaches. First, there will be emphasis on the concepts: an analytical approach will illustrate key individual concepts that have been recently associated with creativity and innovation outcomes in organizational settings. The course will particularly focus on three of these concepts: temporal perspective (also called time focus), personality, and attention control (also called cognitive control)

An applied approach will connect each of the concepts to the lives of the students with the hope that they can learn to apply the knowledge in their favor, using it to address, in innovative ways, current problems they face in their student lives, or in their organizational environments. A central part of the applied part of the course will use a novel tool based on the online lab I have developed (with the collaboration of colleagues in Bocconi and ETH Zurich) over the past 8 years. Through this tool, participants can actively assess and reflect on their own abilities. After the assessment, participants will receive a confidential report (about 30 pages) with a thorough description of their performance, the meaning of the different tests, and some hints on how to improve the different abilities. Together with other students, participants will reflect on their current problems, on their abilities, and will prototype a creative solution to an old problem that will allow them to take the most out of their unique personality traits.

The conceptual/analytical approach of the course will dominate the first part of the course, and will come again, vividly, to close the course in the tenth session. The applied aspect of the course will be present in the self-assessment –early in the course, second session-, and in the last sessions.

The method of this course has been tested, though in a shorter format, has been acclaimed in past courses with both master and executive students in different European countries. One of the suggestions received in the past, was to allow for more time to the discussion of the different topics, which is precisely what I could do having 10 sessions at disposal.

EVALUATION

1. 25% Contributions to the class discussions (instructor evaluates)
2. 20% Presentation of readings (instructor evaluates, at least one presentation)
3. 25% Reflection on challenges and opportunities presented by the self-assessment (instructor evaluates)
4. 20% Class activities' presentations (instructor evaluates twice)
5. 10% Design thinking exercise solution prototype (average of all participants' appreciation of the quality of the proposed solution)

PRE-REQUISITES

No course is needed as a pre-requirement but the willingness to read, reflect and participate in class. A mix of curiosity, respectful irreverence, rule-breaking, hard-working and thoughtful rule-following attitudes are not mandatory but appreciated.

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Reconocimiento como Universidad: Decreto 1297 del 30 de mayo de 1964.
Reconocimiento personería jurídica: Resolución 28 del 23 de febrero de 1949 Minjusticia.