RESEARCH DESIGN

INTRODUCTION
This course aims to lay a foundation for your empirical research. The goal is to help you to design and develop your future research projects.

OBJECTIVES
The main objective of this course is to improve the design of your research projects. To this end, we will focus on the importance of careful theoretical thinking and on the conceptual difficulties associated with establishing causality in empirical work. Although this is not an econometrics course, econometric concepts, problems, and analyses will be considered, making explicit connections with what you have seen and will see in econometrics courses as well as in other methods courses.

LEARNING OUTCOMES
When you have completed this course, you will be (better) able to:
- Identify the best (feasible) research design for your research questions;
- Understand, apply, and criticize the main research methods that are typically applied in management studies;
- Develop and practice the skills necessary to conduct, review, and publish management research;
- Present and defend your research ideas.

COMPETENCIES
GENERAL COMPETENCIES
CG6: Use appropriate tools and techniques for problem solving, correction contrasting and decision validation.

SPECIFIC COMPETENCIES
CE1: Understand the concepts of social and human sciences relevant and necessary to carry out research projects of international level in the area of management.
CE3: Organization, planning and implementation of a research project related to social sciences.
CE4: Distinguishing of the different fields of management sciences and acknowledgement of the research methodologies related to them.
CE5: Ability to understand state-of-the-art research in organization theory published in the top academic journals and compare and contrast the arguments developed in the papers from a logical and empirical point of view.
CE7: Ability to articulate research questions that could extend our understanding of the field, and design a research program to answer them.
CE9: Analyze and relate the main contributions of the economy to the study of organizations and contrast them with statistical, econometric or qualitative methods.
CE17: Ability to critically establish, the relevance and significance of the results obtained with respect to the proposed objectives, and prepare conclusions within the framework of current scientific knowledge on the topic in question.
CE18: Develop a scientific / technical report or research work with the objective to inform the scientific community on the contribution of the research conducted, making use of adequate information technology for both acquisition and dissemination of research results.

EVALUATION
There are three main requirements for successfully completing this course, each of them having equal weight towards your final grade:

1. **Class participation, including in-class or at-home exercises (20%)**
   You are expected to come to class prepared to discuss all the material assigned and to contribute to class discussion.

2. **Research project (40%)**
   You will have to develop a research project. This does not need to be a full-blown research proposal that will necessarily lead to your thesis, but rather an opportunity for you to choose an issue that is of interest to you, and spend some time thinking about what you need to do in order to accomplish it (with particular emphasis on the methodological issues and empirical strategy) – see Assignments 1 and 2 below.

3. **Final exam (40%)**
   There is also a final exam, which will cover the entire content of the course and test your ability to apply it.

RESEARCH PROJECT – ASSIGNMENTS
1. Write a brief statement (max 1 page of a Word/PDF document, single space, font size 11) on a research question you are interested in. **Due on January 20, 5:00 pm** (please upload the document on virtual campus).
2. Present and discuss an “ideal” research design and empirical strategy to test your research question. I expect to see a description of your data (clearly, you do not need to have the data you would like to use, but it should be feasible to collect them), a specification for the regression(s) / empirical analyses you will perform, and a discussion
of the assumptions that are necessary in order to believe that your analyses provide a valid answer to your research question. This document should be a Power Point. Due on March 21, 11:59 pm (please upload the document on virtual campus).

Please notice that late submissions will not be considered.

COURSE OUTLINE AND REQUIRED READINGS

Sessions 1 and 2. Introduction to the course.
- Website: [https://www.buzzfeednews.com/article/stephiemielee/dan-ariely-honesty-study-retraction](https://www.buzzfeednews.com/article/stephiemielee/dan-ariely-honesty-study-retraction)

Sessions 3 and 4. Research design.

Discussion of students’ research questions. See assignment 1.

Sessions 5 and 6. Philosophy of science (guest lecturer: Prof. Vaccaro).
- Kuhn, T.S. 1970. The structure of scientific revolutions, 2nd Ed. We will discuss Chapters 1 to 7. [https://www.lri.fr/~mbl/Stanford/CS477/papers/Kuhn-SSR-2ndEd.pdf](https://www.lri.fr/~mbl/Stanford/CS477/papers/Kuhn-SSR-2ndEd.pdf)
Preparation questions:
- What is the epistemological basis and approach used by Kuhn to develop his theory? And its limitations?
- What is a paradigm? To which construct adopted in the organizational literature is it similar to?

Assignment:
Each student will be requested to deliver a 20 minute-presentation about one or more chapters of the book. Each presentation (ppt file, at least 10 slides), for all chapters, should be sent on February 3 (before 5:00 pm) to Rosario Magre (assistant of Prof. Vaccaro): rmagre@iese.edu

- JunHyung Byun: Chapter 1 and 2 (20 minutes for 2 chapters)
- Ming Ding: Chapter 3
- Yang En: Chapter 4
- Ann-Sophie Kowaleswski: Chapter 5
- Stefano Lazzeri: Chapter 6
- Rocio Moraleda: Chapter 7 and 8 (20 minutes for 2 chapters)
- Felipe Moreno Chapter 9
- Guillermo Ramirez Chiang: Chapter 10
- Alim Yimaz Chapter 11 and 12
- Jiamin Zhao Chapter 13 and postscript

Sessions 7 and 8. Philosophy of science (cont’d) (guest lecturer: Prof. Vaccaro).
- Kuhn, T.S. 1970. The structure of scientific revolutions, 2nd Ed. We will discuss Chapters 8 to 13.

Preparation questions:
- Why does Kuhn speak about "invisibility of revolutions?"
- Can we apply Kuhn theories to social sciences? Why?

Sessions 9 and 10. What is ‘theory’ and why do we need it?
1st Year MRM 2021-2022 2nd Term

Research Design

COURSE OUTLINE

EMAIL: GValentini@iese.edu


Sessions 11 and 12. Identification.

Sessions 13 and 14. Randomized trials and field experiments.

Sessions 15 and 16. Quasi-natural experiments and DiD.

**Sessions 17 and 18. Inferring causality from non-experimental data.**


**Sessions 19-20. Case studies, qualitative research, and scientific inference.**

PROFESSOR’S BIOGRAPHY

Giovanni Valentini (Ph.D., IESE Business School) is professor of Strategic Management at IESE Business School, where he is also the Director of the PhD Program. Prior to joining IESE, he was an Associate Professor of Strategy at Bocconi University, Milan. He has held visiting positions at Harvard University, KU Leuven, LUISS University, SKEMA Business School, and University of Toronto. Most of his research has tried to contribute to a better understanding of how firms can combine internal and external knowledge to gain competitive advantage through technological innovation and growth. His academic work has been published in journals such as Global Strategy Journal, Industrial and Corporate Change, Journal of International Business Studies, Long Range Planning, Management Science, Organization Science, Research Policy, Strategic Organization, and Strategic Management Journal. He has served on the Research Committee, Executive Committee, and Award Committee of the Strategy Division of the Academy of Management, and as Representative-at-Large for the Technology and Innovation Management Division of the Academy of Management. Currently, he is the Chair of the Knowledge and Innovation Interest Group of the Strategic Management Society. He is co-editor of Industrial and Corporate Change, Associate Editor at Management Science, and a member of the editorial board of the Strategic Management Journal.