RESEARCH DESIGN WITH THE IDEA PUZZLE SOFTWARE

Key info:

- **Number of contact hours:** 8 (four sessions of two hours each)
- **Recommended number of participants:** 15 (to ensure that everyone has an equal opportunity to present)
- **Dates:**
  Second academic term: 9th, 12th, 16th and 19th of May 2023, from 11:00 to 13:00 (CET)
- **Mandatory or elective course:** elective
- **Language:** English
- **Course coordinator:** Ricardo Morais

Description:

- **Justification of the course:** 'PhD' means Doctor of Philosophy. Yet, many PhD candidates have never attended a course on Philosophy of Science or find it too abstract to guide their research design. On the other hand, new generations of PhD candidates appreciate the learning of transferable skills with digital, visual, and gamified tools. The aim of the course is, therefore, to help PhD candidates coherently align a research proposal, article, or thesis in the light of Philosophy of Science. The course adopts a digital, visual, and gamified approach to the design and diagnosis of an empirical research project with the Idea Puzzle software.
- **Preferable year of doctoral studies:** The course is primarily directed to first- and second-year PhD candidates, although it welcomes participants from any year of doctoral studies.
- **Admission criteria:** The course accepts PhD candidates from any field of knowledge because Philosophy of Science is transferable to all fields, who are enrolled at the host university or at a partner university.
- **Skills and learning outcomes:** In the terminology of the Eurodoc Report (2018) "Identifying Transferable Skills and Competences to Enhance Early-Career Researchers' Employability and Competitiveness", the course develops cognitive skills of abstraction and creativity, analysis and synthesis, critical thinking, organisation and optimisation, and problem-solving, as well as digital skills of information presentation and visualisation, and software usage and development. After the course, the participants will be able to: a) acknowledge the relation between epistemology, methodology, ontology, and axiology; b) coherently align the theory, method, data, rhetoric, and authorship of a research proposal, article, or thesis with the Idea Puzzle software; and c) review the strengths and weaknesses of an empirical research project in any field of knowledge.
- **Contents:** The course covers the following contents: a) relation between epistemology, methodology, ontology, and axiology; b) coherence between theory, method, data, rhetoric, and authorship; and c) empirical research as a system of 21 dilemmatic decisions.

- **Methodology (including participation):** Sessions of theoretical presentation of the contents and of practical application of the contents in the creation of a research design with the Idea Puzzle software. Each participant will create a research design for a research proposal, article, or thesis, and will receive 21 comments of feedback (one per each of the 21 decisions of the Idea Puzzle software). Each participant's effort will be equivalent to 1 ECTS (European Credit Transfer and Accumulation System).

- **Evaluation system:** Task 1) Five business days before the course, participants will deliver the first version of their individual research design created with the Idea Puzzle software in PDF. Attendance and participation) Participants are required to attend all sessions and actively engage with the lecturer and peers during teamwork and individual presentations. Task 2) Five business days after the course, participants will deliver the final version of their individual research design created with the Idea Puzzle software in Word format. Ricardo Morais will provide each participant with 21 comments of personalised feedback (one per each of the 21 decisions of the Idea Puzzle software) on the same document. The final grade of the participants will be 'approved' or 'not approved'. To be 'approved', each participant needs to deliver the two tasks, present her/his research design during the four sessions, and receive a grade of at least 50% in her/his final research design created with the Idea Puzzle software.

Control procedures:

- **Please indicate how the participants' attendance and evaluation will be performed:**

  - **Attendance:** The participants' attendance will be controlled via Zoom (automatic list of registrations and attendance).

  - **Evaluation criteria:** To deliver the two tasks, to present her/his research design during the four sessions, and to receive a grade of at least 50% in her/his final research design created with the Idea Puzzle software.

Study plan:

Session 1) Theoretical decisions of your research: keywords, streams of thought, research gap, research question or hypothesis, and state of the science.

Session 2) Methodological decisions of your research: philosophical stance, research strategy, data collection, data analysis, and quality criteria.

Session 3) Empirical decisions of your research: unit of analysis, level of analysis, nature of data, origin of data, and sample.

Session 4) Rhetorical decisions of your research: pathos, logos, and ethos. Authorial decisions of your research: wisdom, trust, and time.

Bibliography:

Morais, R. (2010). Scientific method. In A. Mills, G. Durepos, & E. Wiebe (Eds.) *Encyclopedia of case study research* (Vol. 2, pp. 840-842), Thousand Oaks, CA: Sage Publications.

Morais, R., & Brailsford, I. (2019). Knowledge visualisation for research design: The case of the Idea Puzzle software at the University of Auckland. In K.N. Sim (Ed.) *Enhancing the role of ICT in doctoral research processes* (pp. 46-66). Hershey, PA: IGI Global.

Parente, C. & Ferro, L. (2016). Idea Puzzle (www.ideapuzzle.com), created by Ricardo Morais. *Academy of Management Learning & Education*, 15(3), 643-645.

Mobility (course access, affiliation, and certification):

The course will be lectured via Zoom with a single link for the four sessions of two hours each. The recommended number of participants is 15 to ensure that everyone has an equal opportunity to present her/his research design with the Idea Puzzle software.

Before the course, participants will receive one-year free access to the Idea Puzzle software. During the course, participants will need Internet connection with video and microphone to participate in the four sessions via Zoom. After the course, participants will receive a certificate of course completion issued by the host university, a partner university, or Idea Puzzle.

Lecturer:

Ricardo Morais, married and father of three daughters, is Assistant Professor of Management at Católica Porto Business School and Director of Idea Puzzle. Since 2013, he coordinates the seminar 'How to design your PhD' at the European Institute for Advanced Studies in Management (EIASM) in Brussels. He holds a PhD in Strategic Management from the University of Jyväskylä, Finland, having graduated in Management from the Faculty of Economics of the University of Porto. He is also an alumnus of HPI School of Design Thinking in Germany. His research interests are interdisciplinary, including Philosophy of Science, Strategic Management, Design Thinking, and Spirituality in Management. Since 2002, he has published more than 30 academic articles, chapters, and papers about these topics and lectured in 99 universities from 26 countries.

Preferred contact method: ricardo.morais@ideapuzzle.com

Testimonials:

Hasok Chang, Hans Rausing Professor of History and Philosophy of Science, University of Cambridge, United Kingdom
Your course certainly constitutes an innovation in the teaching of Philosophy of Science.

Patrícia Anzini, Program Assistant at Católica Doctoral School, Universidade Católica Portuguesa, Portugal
Your course was very enriching, and it brought me another perspective on my research.

Davide Gotti, PhD candidate, Electrical Engineering, Universidad Carlos III de Madrid, Spain
Your course was very enlightening, and I am using your tips to plan my research project and more generally my PhD thesis with deeper consciousness.

Jhon Tobón, PhD candidate, Hospitality and Tourism Management, Universitat Autònoma de Barcelona, Spain
Thank you very much for the course. Your help has been invaluable. I now see the weaknesses of my research project. I will correct them according to your suggestions. You have an extraordinary software.