



RESEARCH & PROJECT SEMINAR

PHD PROGRAM IN CLIMATE CHANGE AND SUSTAINABLE DEVELOPMENT POLICIES

25TH SEPTEMBER 2026

Faculty

João Pedro Gouveia

- ▶ **BA and MSc** in Environmental Engineering
- ▶ **PhD** in Climate Change and Sustainable Development Policies (2017)
- ▶ **Principal Researcher at NOVA FCT.**
- ▶ **Coordinator of the Energy and Climate area** at the Center for Environmental and Sustainability Research (CENSE, NOVA FCT)
- ▶ **Areas of interest:** Energy welfare, energy poverty, renewable energy communities, buildings energy efficiency, just energy transition, and climate change mitigation and adaptation solutions.
- ▶ <https://fireflyenergylab.com/>
- ▶ jplg@fct.unl.pt

Jussara Rowland

- ▶ BA in Sociology
- ▶ PhD in Sociology (2021)
- ▶ **Research fellow at ICS-ULisboa**
- ▶ **Areas of interest:** Science and Technology Studies, with a focus on the environmental and social implications of digital technologies and AI, science communication, and participatory and creative research methods.
- ▶ jussara.rowland@ics.ulisboa.pt

Why this Seminar?

A PhD is not just about producing a thesis... It's about becoming a researcher.

This seminar exists to support that process: to help you navigate the complexity of designing rigorous research, making defensible choices, and communicating your work with confidence.

Every session is designed around the challenges you will most likely face.

CLIMATE CHANGE
RESEARCH SITS AT THE
INTERSECTION OF THE
NATURAL AND SOCIAL
SCIENCES.

LEARNING TO THINK
ACROSS DISCIPLINARY
BOUNDARIES IS ITSELF A
CORE RESEARCH
COMPETENCY YOU WILL
NEED THROUGHOUT YOUR
RESEARCH WORK.



Course Objectives

Designed to support doctoral students across all stages of a research plan and thesis development: from design and implementation to its defense

- Cultivate a comprehensive research culture encompassing:
 - Problem/issue formulation
 - Critical bibliography review and reference management
 - Methodology definition (across natural and social sciences)
 - Data analysis and presentation
 - Scientific writing (articles and monographs)
 - Promotion of scientific collaboration
 - Application of results and societal engagement
- Provides a space for students to present their thesis topic and challenges, with collective problem-solving support from the group

Your Research Roadmap



From day one, the work in this seminar is anchored to a real output: a research project structured around the FCT Doctoral Studentship application format.

This includes your state-of-the-art, objectives, methodology, ethical challenges, timeline and scientific CV development.

The final evaluation is not an exam; it is a draft of something you will actually need.

Programme

Date	Lecturer	Title	Topics
25th September 2026	João Pedro Gouveia (NOVA FCT) and Jussara Rowland (ICS-UL)	Programme presentation and Evaluation	• Objectives, Expected results, Evaluation
2 nd October 2026	Jussara Rowland (ICS-UL)	Research methodologies in social sciences: potential and limitations	• Qualitative and quantitative methodologies: characteristics and procedures • Interviews and fieldwork. Surveys (construction, application, and data analysis) • Participatory Science and Citizen Science methodologies • Research examples

Programme

Date	Lecturer	Title	Topics
9 th October	Júlia Seixas (NOVA FCT)	Research methodologies in environmental sciences	• Environmental systems: components, relationships and boundaries. Spatial and temporal scope of research. • The scientific process in environmental sciences: basic sciences vs applied sciences. • Scientific method: from observation to hypothesis; from hypothesis to its confirmation or refutation. • Limits of application to environmental sciences. Methodologies and methods in environmental sciences: descriptive and normative. Numerical observations and quantitative analysis tools. The interface with social sciences. • Prospective methods: extrapolation vs. envisioning. • The role of non-scientists in environmental science research. • The normative value of sustainability in environmental science research.
16 th October 2026		Autonomous Work	Reading of #2 research articles
23 rd October 2026	Jussara Rowland (ICS-UL)	Generative AI in Doctoral Research: Practices, Challenges, and Implications	What is Generative AI? GenAI in Higher Education GenAI in Scientific Research A reflexive approach to the use of GenAI

Programme

Date	Lecturer	Title	Topics
30th October 2026	João Pedro Gouveia (NOVA FCT)	How to develop a Research Plan	• State of the art, objectives and research questions, methodology, ethical challenges, Gantt charts • Development of a Scientific CV. • Supervising team and research groups • Funding opportunities, Applying to Funding and Funding Sources • Interaction with other Research activities.
6th November 2026	João Pedro Gouveia (NOVA FCT)	Scientific approach, Outputs and Impact	• Publication typologies and Peer Review Process • Impact Metrics, Open Access • Scientific Integrity: Plagiarism, authorship, conflicts of interests • Research Communication Activities, Scientific Profiles
13th November 2026	Ana Delicado (ICS-UL)	Scientific writing	• Scientific writing in social sciences • What to publish • Where to publish • How to publish • Science communication in social sciences • Communicate to whom, what and how

Programme

Date	Lecturer	Title	Topics
20 th November 2026		Autonomous Work	Scientific CV development
27 th November 2026	Maria José Roxo (FCSH- NOVA)	Fieldwork methodologies	Fieldwork methodology • Basic elements Landscape description and analysis Cartography • Graphic semiology basics Map analysis
4 th December 2026	João Pedro Gouveia, Jussara Rowland	PhD Plans Examples	Practical example of a doctoral project application – doctoral candidate(s) or recent PhDs to be invited

Evaluation Dates

Date	Lecturer	Title	Topics
11th December	João Pedro Gouveia, Jussara Rowland, tutors	Presentation of projects, discussion and evaluation I	Students present their research projects This classe will start at 9h30.
18th December	João Pedro Gouveia, Jussara Rowland, tutors	Presentation of projects, discussion and evaluation II	Students present their research projects This classe will start at 9h30.

Evaluation Rules

- ▶ Presentation and discussion of research projects through PowerPoint, following the FCT Studentships for Doctoral Studies structure.
- ▶ Presentation files are to be emailed to us by the **11th December**, **before the first round of presentations.**
- ▶ Submission of the revised version of the PowerPoint: **15th January 2027**

FCT Studentships for Doctoral Studies

Two types of scholarships – university and companies

- ▶ Abstract and keywords
- ▶ SDGs
- ▶ State of the art
- ▶ Objectives
- ▶ Detailed Methodological description
- ▶ Risks and Ethical Challenges
- ▶ Timeline
- ▶ Bibliographic references

Autonomous Work 1 (16th November)

#Read Your Institution's Generative AI Guidelines

- ▶ Instituto Superior Técnico: <https://tecnico.ulisboa.pt/files/2025/12/guia-ia2025.pdf>
- ▶ NOVA University of Lisbon: https://www.unl.pt/wp-content/uploads/2026/09/NOVA_GenAI_use_Policy_30July2026.pdf
- ▶ ICS-ULisboa: <https://www.ics.ulisboa.pt/sites/ics.ulisboa.pt/files/basicpage/ficheiros/principios-e-recomendacoes-sobre-o-uso-de-ia-generativa-20250704-pt.pdf>

Autonomous Work 2 (20th November)

- ▶ **Scientific CV Development**

- ▶ CIÊNCIA VITAE - <https://www.cienciavitae.pt/>

- ▶ Register (Ciência ID)



More information -

<https://myfct.fct.pt/LibDocument/FileDisplay.aspx?EcrypDoctId=ocSoN5+Wv24gEni vBgQPZvuTYe03rdiK6rF1/FT2sUh/CMYUINSfuz4v+Gxtc32FwM4ulQMvGTTwORTgEVJjFP bDmj2Gucqt6rbd+Plxg0d3kl4UpImWg2ia4drZwUsEz+1NG8P1dPJz1Am4TbIcle8Xspg CV3T8aR6YOplpOC0=>

Practical matters

- ▶ All PowerPoint presentations will be made available in Moodle (NOVA FCT), together with other support material
- ▶ You can reach us at any time by email
- ▶ If necessary, we'll create Zoom sessions for participation online (exceptional cases)
- ▶ AI Declaration

AI Use Declaration: Curricular Unit Research Project

This seminar is designed to help you develop the ability to formulate a research question, build a theoretical framework, and design a methodology, skills that are developed by doing this work yourself. For this reason, AI may only be used for instrumental support (language editing, slide formatting/design, or brainstorming) and should not be used to generate the substantive content of your research proposal, including the formulation of the research question, theoretical argumentation and methodological design.

An AI use declaration is mandatory and must appear on the final slide of the presentation. It should identify the tool(s) used, the purpose for which they were used, and how any AI-generated outputs were checked or edited. Any AI-generated images or graphics must be clearly identified next to the relevant visual element.



Let's now hear from you!

BACKGROUND, PRELIMINARY IDEAS FOR THE RESEARCH PROJECT,
METHODOLOGIES YOU INTEND TO USE

Guiding Questions:

- What do you aim with your PhD?

- What is the core question your research is trying to answer, and why does it matter *now*?

- How did you arrive at your topic, was it curiosity, a gap in the literature, a real-world problem, or something else?

- What do you already know about your methodology, and what still feels uncertain?

- Where do you feel most confident in your project, and where do you feel most lost?

- What does "success" look like for you at the end of this PhD?

- Is there a tension between what you *want* to study and what is feasible given your resources and timeline?

- Have you identified who else is working on similar questions, collaborators or competitors?

- What is the biggest risk to your project right now?

Suggested reading for next class:

- ▶ Bryman, A. (2016). The nature and process of social research. In *Social research methods* (5th ed., pp. 3–15). Oxford University Press.

<https://lib.mdpu.org.ua/wp-content/uploads/2024/03/Alan-Bryman-Social-Research-Methods2016.pdf>