

Course title	Research Methods in Green Transition				
Course code	GTS1707				
Course type	Specific Background/Specialisation of General Knowledge/Skills Development/Core				
Level	Master (Level 7)				
Year / Semester	2 nd / 3 rd				
ECTS	10	Lectures / week	6 in total (distance learning)	Laboratories / week	-
Course purpose and objectives	<p>The course will serve as a basis for students seeking to acquire expertise in research methods used in the social sciences. Specifically, the course will introduce students to all stages of developing a scientific research project or thesis: research design, research questions, ethics, methods and tools for data collection and analysis. The course will delve into quantitative and qualitative research. Students will have the opportunity to learn about tools and techniques used in both approaches.</p> <p>Specifically, the objectives of the course are the following:</p> <p>Objective 1: To understand the philosophical assumptions of a research project Objective 2: To examine literature review critically Objective 3: To describe the phases of a research design Objective 4: To understand the basic research strategies in qualitative and quantitative research Objective 5: To discuss different sampling methods in qualitative and quantitative research Objective 6: To discuss different types of interviews in qualitative Objective 7: To learn about observation as a data collection method in qualitative and quantitative research Objective 8: To interpret results in qualitative and quantitative research</p>				
Learning outcomes	<p>After completing this module, the student should be able to:</p> <ol style="list-style-type: none"> 1. Recognise the importance of empirical research in the acquisition of knowledge and to discuss its key philosophical assumptions 2. Conduct a thorough review of scientific literature in various databases and read the literature in a critical manner 3. Develop effective qualitative and quantitative research designs, formulate appropriate research questions and select appropriate methodologies 4. Discuss ethical and moral issues in different types of research 5. Understand the principles of qualitative data analysis and apply various analytical techniques with coding as the central process 6. Analyse quantitative data, define the right variables and choose the right descriptive and inferential statistical analysis techniques 				

Prerequisites	None	Required	-
Course content	<p>The course covers the following topics:</p> <ul style="list-style-type: none"> • Introduction to research and its philosophical foundations • Literature Review Evaluation and Analysis • Research design and research questions • Sampling in qualitative and quantitative research • Research design and strategies in qualitative research • Data collection methods in qualitative research: Interviews and observations • Data analysis in qualitative research (Thematic analysis, coding, Grounded Theory) • Research design in quantitative research • Data collection in quantitative research (questionnaires) • Variables and measurement scales • Data analysis in quantitative research (descriptive and inferential statistics) • Ethics in research 		
Teaching methodology	<p>The integration of Microsoft Teams and Moodle in our distance learning programs ensures a robust and interactive learning environment that meets the needs of modern learners. Microsoft Teams facilitates real-time communication through live sessions, screen sharing, and collaborative tools such as whiteboards and breakout rooms, enhancing student engagement and fostering dynamic discussions. Meanwhile, Moodle serves as a comprehensive Learning Management System, offering structured access to course materials, assessments, and discussion forums. This combination of synchronous and asynchronous tools supports effective teaching and learning, enabling flexibility, accessibility, and high-quality education delivery. Our approach aligns with global standards for online learning, emphasizing both technological innovation and pedagogical excellence.</p>		
Language	English		