COURSE DESCRIPTION – ACADEMIC YEAR 2023/2024

Course title	**User Research for AI**
Course code	**71079**
Scientific sector	INF-01
Degree	PhD in Computer Science
Semester	1
Year	2024/2025
Credits	**4 credits**
Modular	

Total lecturing hours	40 hours Introduction: 3 hours, Seminar 1: Epistemology and Theory 8 hours Seminar 2: Qualitative Research 12 hours Seminar 3: Quantitative Research 11 hours Seminar 4 Ethics 6 hours
Attendance	The course will be delivered in presence, with no remote connection available. Attendance of at least 75% of the lecture hours is a compulsory.
Prerequisites	This course is open to all PhD students at the University of Bolzano upon selection of the lecturers based on an expression of interest. Students are expected to have a general knowledge of Human Computer Interaction, as provided by an introductory MSc module or a handbook. Recommended reading: Interaction Design: Beyond Human-Computer Interaction by Rogers, Sharp and Preece (2023) 6th Edition.
Specific educational objectives	The course introduces the foundations of user research from a Human-Computer Interaction (HCI) perspective when the object of study is Artificial Intelligence. The learning objectives includes academics knowledge and practical skills. After attending the course, reading related work, and engaging in the formative exercises proposed in the seminars, students will learn how to plan and conduct valid and rigorous research when interactive systems are agents who directly affect user's behavior, decision making, and experiences alongside societal politics. The course provides an **overview** of 1. Epistemology and Theories in user research (seminar 1) 2. Qualitative research methods (seminar 2) 3. Quantitative research methods (seminar 3) 4. Integrity and ethics in user research (seminar 4) and **operational guidelines** on 1. How to conduct valid, trustworthy, and ethical research? 2. How to translate this knowledge in design choices? 3. How to evaluate design quality?

Lecturer(s)	*Prof. Antonella De Angeli and Dr. Maria Menendez-Blanco*
Contact	*Antonella.deangeli@unibz.it maria.menendezblanco@unibz.it*

Scientific sector of lecturer(s)	INF01
Teaching language	English
Office hours	*Arrange beforehand by email.*
Lecturing Assistant (if any)	
Contact LA	
List of topics	- Epistemology and Theories in user research (seminar 1) - Qualitative research methods (seminar 2) - Quantitative research methods (seminar 3) - Integrity and ethics in user research (seminar 4)
Teaching format	Frontal lectures, interactive workshops, project-based learning, students presentations and peer review. Students are expected to participate actively by providing examples from their research topics, including theories and data.

Learning outcomes	Knowledge and understanding: - Understanding of the skills, tools and techniques required for effective user research. - Knowledge of the challenges in the field of user research and of the methods and techniques for overcoming these challenges. Applying knowledge and understanding: - Design, execution and evaluation of a user research protocol relevant to the student topic. Making judgments: - Ability to autonomously select the documentation (in the form of books, web, magazines, etc.) needed to keep up to date in each sector. - Ability to understand validity and reliability of user research. Communication skills: - Ability to present one's work in a clear and comprehensible way in front of an audience, including non-specialists. - Ability to structure and draft scientific and technical documentation. Learning skills: - Ability to autonomously keep oneself up to date with the developments of the most important areas of data science
Learning outcomes	

Assessment	The students will write a proposal for a user study including literature, procedure and expected results (4 page ACM format).
Assessment language	English
Assessment Typology	Monocratic and peer review
Evaluation criteria and criteria for awarding marks	The course is Pass or Fail.

Required readings	*Required reading will be communicated to the students before each seminar according to their research interests.* Further reading will be identified based on
Supplementary readings	will be provided during the course
Software used	N/A