

Social Interaction

Code: 106579
ECTS Credits: 6

2025/2026

Degree	Type	Year
Artificial Intelligence	OB	4

Contact

Name: Miquel Domenech Argemí

Email: miquel.domenech@uab.cat

Teachers

Nuria Valles Peris

Teaching groups languages

You can view this information at the [end](#) of this document.

Prerequisites

None

Objectives and Contextualisation

The main objective of the course is to provide basic and transversal training in the fundamental knowledge of psychology and social psychology, essential for a specialist in artificial intelligence. The content of the subject focuses on the fundamentals of social interaction. Specifically, the objectives are:

- To provide tools and methodologies to design and implement autonomous cyber-physical agents and systems that interact effectively with people and other agents in open environments.
- To introduce solid conceptual frameworks that allow the identification and understanding of the psychosocial concepts and processes that explain social interaction between people.
- To provide resources to recognize and apply key factors in human-machine interaction, such as usability, cognitive ergonomics, and accessibility.
- To introduce and promote the application of evaluation techniques for devices to ensure their usability, accessibility, and effectiveness in social interaction.

Competences

- Act with ethical responsibility and respect for fundamental rights and duties, diversity and democratic values.

- Act within the field of knowledge by evaluating sex/gender inequalities.
- Act within the field of knowledge by evaluating the social, economic and environmental impact beforehand.
- Communicate effectively, both orally and in writing, adequately using the necessary communicative resources and adapting to the characteristics of the situation and the audience.
- Conceive, design, analyse and implement autonomous cyber-physical agents and systems capable of interacting with other agents and/or people in open environments, taking into account collective demands and needs.
- Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.
- Students must have and understand knowledge of an area of study built on the basis of general secondary education, and while it relies on some advanced textbooks it also includes some aspects coming from the forefront of its field of study.
- Work independently, with responsibility and initiative, planning and managing time and available resources, and adapting to unforeseen situations.

Learning Outcomes

1. Apply concepts and identify psychosocial processes in the analysis of people's behaviour in technological contexts.
2. Apply knowledge of social interaction to the design of artificial intelligence devices.
3. Communicate effectively, both orally and in writing, adequately using the necessary communicative resources and adapting to the characteristics of the situation and the audience.
4. Identify psychosocial concepts and processes that help to understand and explain social interaction between people.
5. Identify the main factors in human-machine interaction.
6. Identify the social, economic and environmental implications of academic and professional activities for the field of knowledge.
7. Propose projects and actions that conform to the principles of ethical responsibility and respect for fundamental rights and responsibilities, diversity and democratic values.
8. Propose projects and actions that incorporate the gender perspective.
9. Propose viable projects and actions that enhance social, economic and environmental benefits.
10. Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.
11. Students must have and understand knowledge of an area of study built on the basis of general secondary education, and while it relies on some advanced textbooks it also includes some aspects coming from the forefront of its field of study.
12. Understand device evaluation techniques.
13. Understand the basics of universal design.
14. Understand the forms of interaction related to users' disability.
15. Work independently, with responsibility and initiative, planning and managing time and available resources, and adapting to unforeseen situations.

Content

- Introduction to Human-Machine Interaction and Social Psychology
- Social Perception and Usability in Human-Machine Interaction
- Attribution Processes in Human-Machine Interaction
- Culture and Social Cognition in Human-Machine Interaction
- Prejudices and Stereotypes in Human-Machine Interaction
- Social Influence and Technology
- Disability and Accessibility in Human-Machine Interaction
- Cognitive Ergonomics in Human-Machine Interaction
- Social Robotics and Caregiving
- Human-Centered Design

- Evaluation of Technologies from a Human-Machine Interaction Perspective

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Case Study Analysis	15	0.6	11
Project Development	18	0.72	11
Theoretical Context	20	0.8	11
Type: Supervised			
Interaction Process Analysis	32	1.28	11
Type: Autonomous			
Case development	37	1.48	11
Individual work	20	0.8	11

1. Problem-solving/case studies/exercises:

1. Practical Challenges: Students will face challenges where they must design and create a device that integrates principles of social psychology applied to human-machine interaction.
2. Innovation Projects: Projects will be proposed that require identifying and solving real problems using concepts of social interaction, fostering critical thinking and creativity.

2. Cooperative learning and peer evaluation:

1. Teamwork: Work groups will be formed to foster collaborative learning, where students share knowledge and skills.
2. Peer Evaluation: Students will evaluate their peers' work, providing constructive feedback and learning to appreciate different perspectives.

3. Lectures:

1. Inspiring Sessions: Theoretical classes will be designed to be inspiring, using current examples and relevant case studies.
2. Dynamic Interaction: Active participation will be encouraged through debates and discussions in class, facilitating deeper and more meaningful learning.

4. Tutorials:

1. Personalized Guidance: Group tutorial sessions will be offered to provide personalized guidance, resolve doubts, and support project development.
2. Continuous Mentoring: Tutors will act as mentors, guiding students through the learning process and helping them overcome obstacles.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Assessment

Continuous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Evaluation on the reading of an article for the state of the art	20%	2	0.08	3, 4, 11, 15
Final assessment	35%	3	0.12	1, 2, 3, 14, 13, 12, 4, 5, 6, 11
Final deliverable of the group work	30%	2	0.08	1, 2, 3, 14, 13, 12, 4, 5, 6, 7, 8, 9, 11, 10, 15
Oral presentation of the final work	15%	1	0.04	3, 11, 15

There will be 4 pieces of evidence for evaluation:

1. Evaluation on the reading of an article for the state of the art (SoA).
2. Final deliverable of the group work (FD).
3. Oral presentation of the final work (OP).
4. Final evaluation test (FE).

The final grade will be the result of applying the following formula: FINAL GRADE = SoA 0.20 + FD 0.30 + OP 0.15 + FE 0.35

To pass, it will be necessary for the evaluation of each piece of evidence to exceed the minimum required (5) and for the total evaluation to exceed 5 points. If the course is not passed, the numerical grade in the record will be the lower value between 4.5 and the weighted average of the grades.

There is no option for a single evaluation.

Positive contributions to discussions will round up the grade decimals. To qualify for honors, it is necessary to have had a participative attitude in class discussions. Honors will be granted globally, resulting from calculating five percent or a fraction of the students enrolled in all teaching groups of the course. They can only be awarded to students who have obtained a final grade of 9 or higher.

Late submissions, as long as there is prior notice, will be accepted and penalized with a lower grade. Under no circumstances will late submissions be accepted without prior notice or justification of force majeure. A second submission period may be opened for reports that receive a negative evaluation. Unsubmitted work will receive a grade of 0 and will not have a second evaluation option. Repeat students can validate the parts passed in previous years.

Continuous evaluation can be recovered with the final exam (EF). Failure to attend the final exam (EF) implies a "Not evaluable" in the records. The final exam can be recovered with a second exam. All exams will be adjusted according to the school's schedule. The dates of continuous evaluation and submission of work will be published on the Caronte website (<http://caronte.uab.es>) and may be subject to scheduling changes due to adaptation to possible incidents. Changes will always be informed on the Caronte website, as it is understood that the Caronte website is the usual mechanism for exchanging information between teachers and students.

For each evaluation activity, a place, date, and time of review will be indicated where the student can review the activity with the teacher. In this context, claims about the grade of the activity can be made, which will be evaluated by the faculty responsible for the subject. If the student does not attend this review, this activity will not be reviewed later.

Without prejudice to other disciplinary measures that are deemed appropriate, and in accordance with current academic regulations, irregularities committed by the student that may lead to a variation in the grade of an evaluation act will be graded with zero. Therefore, plagiarizing, copying, or letting others copy an activity or any other evaluation activity will result in a fail with a zero and cannot be recovered in the same academic year. If this activity has a minimum associated grade, then the subject will be failed.

This subject allows the use of AI technologies as an integral part of the submitted work, provided that the final result reflects a significant contribution from the student in terms of analysis and personal reflection.

The student must clearly (i) identify which parts have been generated using AI technology; (ii) specify the tools used; and (iii) include a critical reflection on how these have influenced the process and final outcome of the activity.

Lack of transparency regarding the use of AI in the assessed activity will be considered academic dishonesty; the corresponding grade may be lowered, or the work may even be awarded a zero. In cases of greater infringement, more serious action may be taken.

Bibliography

Suchman, Lucy. *Plans and Situated Actions: The Problem of Human-Machine Communication*. Cambridge University Press, 1987.

Lupton, Deborah. *The Quantified Self: A Sociology of Self-Tracking*. Polity, 2016.

Crawford, Kate. *Atlas of AI: Power, Politics, and the Planetary Costs of Artificial Intelligence*. Yale University Press, 2021.

Norman, Donald A. *The Design of Everyday Things*. Basic Books, 2013.

Software

No

Groups and Languages

Please note that this information is provisional until 30 November 2025. You can check it through this [link](#). To consult the language you will need to enter the CODE of the subject.

Name	Group	Language	Semester	Turn
(PAUL) Classroom practices	711	English	first semester	afternoon
(TE) Theory	71	English	first semester	afternoon