

Syllabus Course description

Course title	Virtual communication and Human-Computer Interaction
Course code	17324
Scientific sector	ICAR/17 INF/01
Degree	Bachelor in Communication Sciences and Culture
Semester	2nd
Course year	2nd
Credits	6 + 6
Modular	Yes

Total lecturing hours	45 + 45
Total lab hours	
Attendance	according to the regulation
Prerequisites	Knowledge of digital prototyping (e.g., Figma)



Specific educational objectives

Virtual Communication (ICAR/17)

The course aims at providing participants with a comprehensive and critical perspective on the history and the contemporary developments of communication through, with and between digital devices, systems and (infra)structures. Alongside an exploration of relevant literature and philosophical/ theoretical contributions on a diverse range of themes related to the field, the course focusses on practical exercises, collective mappings and dialogic exchanges as its core educational methodology.

By the end of the course, participants should have experienced a variety of perspectives in the field of Virtual Communication, should have further developed their ability to critically analyse and understand it, and should have acquired tools and methodologies to work with/through it.

Human-Computer Interaction (INF/01)

The course deepens the students' knowledge on topics related to human-centered perspectives on Computer Science research and development. The focus of the course will go beyond the user-system interface and delve into digital technologies as tools for communicating between teams, groups, and societies.

The theoretical competences will include domains that deal with the collaborative (e.g., Computer-Supported Collaborative work) social (e.g., Social Computing), and societal aspects (e.g., Critical Computing) of digital technologies. These theoretical foundations will allow students to develop critical thinking on collaborative (e.g., groupware), and data-rich products (e.g., AI, automatic-decision making systems). The practical competences will be developed through case studies and practical examples presented during the lectures and laboratories.

Module 1	Virtual communication
Lecturer	Pra Mio Matteo (40 ore)
Scientific sector	ICAR/17
Teaching language	English
Office hours	from Monday to Friday on request
List of topics covered	Virtual Communication is explored in several scales (e.g. individual, group, mass), fields (e.g. interpersonal, political, advertising, information, infrastructural, culture/arts, entertainment, etc.) and critical thematic clusters (e.g. ecosocial impact of VC technologies, misinformation campaigns through VC, VC as a tool for artistic/cultural mediation, etc.).



Teaching format	Each lecture will combine frontal input, practical workshop modules and dialogic sessions. Individual lectures may feature additional educational formats, such as reverse engineering, readings, tutorials, games, etc. Occasionally students will be asked to gather information or produce materials in advance that will be used as input during lectures. Some lectures will be "joined lectures" with the HCI module.
Total lecturing hours	45
Credits	6

Module 2	Human-Computer Interaction
Lecturer	Maria Menendez Blanco Maria.MenendezBlanco@unibz.it
Scientific sector	INF/01
Teaching language	English
Office hours	from Monday to Friday on request
List of topics covered	The course will focus on three main thematic areas , namely Computer-Supported Collaborative Work, Social Computing, and Critical Computing, each area will be covered in more than one lecture/laboratory.
	Each lecture will present theories and methods key to acquire foundational knowledge and skills on digital technologies as a communication tool within teams, groups, and societies:
	- Computer-Supported Collaborative Work: theory on key concepts that are important for developing collaborative technologies in cooperative settings such as articulation work, social translucence, and mutual awareness.
	- Social Computing: theory social aspects influencing online interactions (e.g., norms) and practical examples that reflect the impact of digitally mediated social interactions.
	- Critical Computing: concepts, examples, and discussions on how digital technologies shape societies, with an emphasis on data-products (e.g., how do social categorizations impact digital technologies, and vice versa? what are the human, social, and societal aspects behind artificial intelligence?)
Teaching format	Frontal lectures and laboratory exercises. Students will need to engage with interactive prototyping, therefore they are requested to bring a laptop, which may be borrowed by the ICT services before the lecture, if they have no personal laptop. Tablets or smartphones cannot substitute the laptop. Some lectures will be "joined lectures" with the VC module.



Total lecturing hours	45 (30 lecture + 15 laboratory)
Credits	6



Learning outcomes

Virtual Communication

Knowledge and understanding

Acquisition of a comprehensive and critical perspective on the history and the contemporary developments of communication through, with and between digital devices, systems and (infra)structures.

Applying knowledge and understanding

Improvement of the ability to critically analyse Virtual Communication, its implications and its potential. Development of the capacity to evaluate, plan and design VC elements.

Making judgments

Critically assess and evaluate Virtual Communication elements and related systems in a holistic and intersectional manner, considering their ethical, ecological, social, political and emotional impact and influence.

Communication skills

Develop a deeper awareness and understanding of Communication with a specific focus on its Virtual expression. Improve one's individual ability to plan and use Communication through and within digital environments.

Learning skills

Experience approaches and methods of discovery, learning and expression grounded in practice and dialogic exchange, which can be transferred to other learning contexts and fields of knowledge/practice.

Human-Computer Interaction

Knowledge and understanding

- Describe Human-Computer Interaction as a field of Computer Science that focuses on user, activities, contexts, and technologies
- Describe theories and concepts relevant for the design and evaluation of computer-supported collaboration
- Elaborate on the social and societal impact of digital technologies (e.g. data work, crowdsourcing)

Applying knowledge and understanding

- Ability to discuss how digital platforms (e.g., groupware, social media) shape collaboration and/or collective action
- Ability to discuss how data generation and production shapes digital technologies
- Practical experience on developing interactive prototypes

Making judgments

- Being able to critically reflect on the present and future use of digital platforms as a communication tool within teams and groups
- Being able to critically reflect on how data-rich products shape societies



Communication skills - Demonstrate the ability to work in groups and establish effective communication and collaboration - Improve verbal and written presentation skills Learning skills - Students will develop their independent learning skills, abilities to work in group, analytical thinking, and ability to shape and express personal reflections on complex topics related to digital technologies and their impact on societies.



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Assessment

Virtual Communication

Students work and learning will be assessed through direct observations focussing on:

- The quality of participation in the course's activities and dialogic sessions.
- The quality, completeness and contextual relevance of the work produced during workshops and practical exercises.
- The overall educational development over the timeframe of the course.
- The quality and contextual relevance of spontaneous contributions to the course.

A **written report** consisting of a critical self assessment of the learnings experienced and work produced during the course. This will be a joined assessment with the HCI module.

An **oral exam** consisting of a series of questions on the course's content. This will be a joined assessment with the HCI module.

Human-Computer Interaction

For students who regularly attend the course (>60% attendance), the course will be evaluated as follows:

- Formative individual assesments (30%). Three
 individual exercises related to concepts and methods
 being taught during the lectures. Students will be given
 enough time to complete the exercises, and feedback
 will be provided during the lab hours. The deadline for
 the last exercise is two weeks before the oral exam
- Participation and engagement during the lectures and exercises (20%)
- **Final individual oral exam** (50%) on topics and concepts presented during the course. To provide a holistic assessment, there will be an joint oral exam for Virtual Communication and Human-Computer Interaction

For non-attending students:

- Individual Project (50%) that combines topics, concepts, methods, and practical skills discussed during the course. Please contact the professor as early as possible to clarify the requirements for this project.
- **Final individual oral exam** (50%) on topics and concepts presented during the course. To provide a holistic assessment, there will be an joint oral exam for Virtual Communication and Human-Computer Interaction

Assessment language

English



Evaluation criteria and criteria for awarding marks

Awarding of a single final mark, average of the assessments of the individual modules.

Virtual Communication

Intermediate assessment in itinere, final portfolio (70%) and oral discussion (30%).

Oral examination: relevance, clarity of argument, capacity for critical analysis, ability to revise, reflection (30%).

Human-Computer Interaction General Criteria for the individual assessments:

Relevance to the course topics, methodological rigor, relevance of the results, development of critical reflections, quality of the developed artefacts (e.g., interactive prototype), mastery of language (with respect to the terms, theories, and methods introduced during the course) and general quality of the report (e.g., presentation, clarity, structure, use of language, reference to relevant work). Any additional specific criteria will be provided with each exercise.

Criteria for the evaluation of the oral exam:

clarity of answers, skills in critical thinking, mastery of language (with respect to the terms, theories, and methods introduced during the course), ability to summarize, evaluate, and establish relationships between topics.

Attendance is encouraged, participation and engagement during the course adds up to 20% of the final mark.

Required readings	Virtual Communication: • Due to the vast list of topics treated in the course, and the potential number of readings needed, few bibliography references will be provided by the teacher
	Human-Computer Interaction: Required readings will be allocated before the lectures
Supplementary readings	