

Degree programme	Type	Course
Digital Humanities and Heritage	OP	1

Contact lecturer

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Teaching staff

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Group languages

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

Prerequisites

No prior knowledge of computer science or programming is required, except for some familiarity with computer equipment at an advanced user level. Prior knowledge of mathematics corresponds to that of compulsory secondary education.

Some familiarity with humanities and/or cultural topics is recommended.

Knowledge of English that allows reading texts.

Objectives

This course addresses the topic of human-computer interaction, placing emphasis on the design of interaction

methods and the evaluation of their possibilities, rather than on the underlying technology. The differences between user experience and user interface (UX vs UI) are explained, and the concept of Augmented and Extended Reality is introduced. Some experiences involving haptic and/or full-body immersion are studied. Finally, the course explores the potential of introducing intelligent guides, avatars, and chatbots to enhance the user experience in virtual environments. An introduction to educational videogames is also provided.

Learning outcomes

- CA18 (Examine the limits and drawbacks of specific designs related to human-computer interactive systems.) Examine the limits and drawbacks of specific designs related to human-computer interactive systems.
- CA19 (Investigate possible procedures for the design of interactive systems that do not discriminate against potential users on the basis of disability or differential access to technology.) Investigate possible procedures for the design of interactive systems that do not discriminate against potential users on the basis of disability or differential access to technology.
- CA20 (Explain the operation of interactive human-computer systems that provide concrete solutions to problems arising from public use and open access.) Explain the operation of interactive human-computer systems that provide concrete solutions to problems arising from public use and open access.
- KA21 (Identify interactive technologies that can be applied in the design of digital projects in cultural and humanistic matters.) Identify interactive technologies that can be applied in the design of digital projects in cultural and humanistic matters.
- KA22 (Identify different modes of interactive access to cultural and humanistic information.) Identify different modes of interactive access to cultural and humanistic information.
- SA26 (Design user experience and interactivity mechanisms in digital projects.) Design user experience and interactivity mechanisms in digital projects.
- SA27 (Design extended reality and augmented reality systems in the cultural and humanistic field.) Design extended reality and augmented reality systems in the cultural and humanistic field.
- SA28 (Use interactive whole-body systems to enhance communication and access to cultural goods.) Use interactive whole-body systems to enhance communication and access to cultural goods.

Contents

Human-Computer Interaction (HCI): Basic Concepts and Fundamental Principles.

User Experience (UX) Design for Digital Projects.

User Interface (UI) Design for Digital Applications.

Best Practices in the Design of User Interfaces and Interactive Systems.

Virtual Reality and Advanced Forms of Human-Computer Interaction.

Design and Implementation of Augmented Reality Experiences.

Gamification: Designing Games and Interactive Experiences for Outreach and Learning.

Evaluation, Verification and Validation of Interactive Systems and User Experience.

Digital Storytelling and the Design of Interactive Experiences.

Learning activities and methodology

Title	Hours	ECTS	Learning outcomes
Personal study. Text reading. Additional practical work	60	2.4	CA18, CA19, CA20, KA21, KA22, SA26, SA27, SA28

Practical work with computer equipment lead by the professor	18	0.72	CA18, CA19, CA20, KA21, KA22, SA26, SA27, SA28
Practical work at the lab and the classroom	34	1.36	CA18, CA19, CA20, KA21, KA22, SA26, SA27, SA28
Attendance to lectures given by the professor	18	0.72	CA18, CA19, CA20, KA21, KA22, SA26, SA27

Attendance at lectures delivered by the course instructor.

Attendance at seminars and practical sessions using computers and specialised software for the design, development and evaluation of interactive systems.

Classes are held in a dedicated computer laboratory.

Analysis of case studies and the resolution of design challenges related to interactive experiences and systems.

Design, prototyping and evaluation of interactive solutions, both individually and in teams.

Critical reading of specialised literature and independent consultation of scientific and technical resources. Part of the course materials is in English.

Class discussions and debates, moderated by the instructor, on the most relevant topics of the course.

Presentation, review and refinement of the proposed solutions based on feedback received.

Application of the principles of accessibility, professional ethics and the responsible use of digital technologies addressed in other courses of the Master's programme.

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	Weight	Hours	ECTS	Learning outcomes
Presentation of a written essay about a subject using Generative Artificial Intelligence	30%	5	0.2	CA18, CA19, CA20, KA21, KA22, SA26, SA27, SA28
Presentation of written essays comenting suggested bibliography	30%	5	0.2	CA18, CA19, CA20, KA21, KA22, SA26, SA27, SA28
Evaluation of practical work asked by the professor	40%	10	0.4	CA18, CA19, CA20, KA21, KA22, SA26, SA27, SA28

The evaluation methodology for this master's course is based on the active and reflective participation of students. Their analytical skills will be assessed through written comments on articles and bibliographic references proposed by the teaching staff. In addition, students will prepare critical summaries of class debates, in which they must express and argue their own viewpoints in relation to opposing opinions, demonstrating dialogue skills and critical thinking. Another key element of the evaluation will be the completion of a critical exercise involving the use of Generative Artificial Intelligence tools, applied to one of the topics

covered during the course. This work must include a reflection on the limitations and potential of such technologies within the field of Digital Humanities. Specific details regarding the format, criteria, and deadlines for this activity will be explained and discussed in class by the teaching staff.

Single assessment is permitted, upon request following the procedure approved by the Dean of the Faculty of Humanities.

At the time each assessment activity takes place, the teaching staff will inform students (via Moodle) of the procedure and the date for reviewing grades.

Resit procedure: only the final assignment (second case study) is eligible for resubmission. This decision will be made on a case-by-case basis after a personalized interview between the student and the instructor.

The resubmission deadline will also be set individually and by mutual agreement between the teaching staff and the student.

The student will receive a "Not assessed" grade if any of the required assignments are not submitted.

If the student commits any irregularity that could significantly affect the grade of an assessment activity, that activity will be graded with a 0, regardless of any disciplinary action that may be taken. If multiple irregularities occur in the evaluation activities of the same course, the final grade will be a 0.

The use of Artificial Intelligence (AI) technologies is encouraged in this course as an integral part of the assignment development, provided that the final result reflects a significant contribution from the student in terms of analysis and personal reflection. The student must:

(i) identify which parts were generated using AI;

(ii) specify the tools used; and

(iii) include a critical reflection on how these tools influenced the process and the final outcome of the activity.

Lack of transparency in the use of AI in this graded activity will be considered academic dishonesty and will result in the activity being graded with a 0 and not eligible for resubmission, or in more serious cases, may lead to further sanctions.

Bibliography

Bødker, S. (2015). Third-wave HCI, 10 years later. *Interactions*, 22(5), 56-62. <https://doi.org/10.1145/2804405>

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Card, S. K., Moran, T. P., & Newell, A. (1991). *The psychology of human-computer interaction*. Lawrence Erlbaum Associates.

Falk, J. H., & Dierking, L. D. (2013). *The museum experience revisited*. Left Coast Press.

Heath, C., & Lehn, D. (2020). Configuring interactivity: Enhancing engagement in museum exhibitions. *Museum Management and Curatorship*, 35(2), 123-140. <https://doi.org/10.1080/09647775.2019.1706208>

Liew, C. L., et al. (2019). Participatory digital heritage: A systematic review. *Digital Applications in Archaeology and Cultural Heritage*, 13, e00099. <https://doi.org/10.1016/j.daach.2019.e00099>

Norman, D. A. (2013). *The design of everyday things* (Revised and expanded edition). Basic Books.

Parry, R. (2007). *Recoding the museum: Digital heritage and the technologies of change*. Routledge.

Preece, J., Rogers, Y., & Sharp, H. (2015). *Interaction design: Beyond human-computer interaction* (4th ed.). Wiley.

Roussou, M., & Drettakis, G. (2020). Immersive interactive storytelling for cultural heritage. *Journal on Computing and Cultural Heritage*, 13(4), 1-19. <https://doi.org/10.1145/3414685>

Software

The selection of software and technological equipment will depend on the nature of the tasks assigned during the internship, and may include applications for the digitisation of documentary collections, collection management, digital text editing, data analysis, Geographic Information Systems (GIS), database creation, information visualisation, digital preservation, web development, or content management, among other tools commonly used in the fields of Digital Humanities and Cultural Heritage. Likewise, when required by the activities, specific digitisation and data capture equipment may be used, such as scanners or other technical devices available at the host institution or at the university. This information will be provided in the UAB-MOOC Virtual Campus.

Course groups and languages

The information provided is provisional until November 30. After this date, you will be able to consult the language of each group through this [link](#). To access the information, you will need to enter the course CODE

Type of teaching	Group	Language	Semester	Shift
(SEMm) Seminars (master)	1	Catalan/Spanish	second semester	afternoon