COURSE DATA

DATA SUBJECT

Code: 44407
Name: ICT applied to language and literature research
Cycle: Master's Degree / Doctorate
ECTS Credits: 5
Academic year: 2025-26

STUDY (S)

Degree	Center	Acad. year	Period
2207 - Master's Degree in Language and Literature Research	Facultat de Filologia, Traducció i Comunicació	1	First quarter
3135 - PhD Language, Literat., Cult., and its application	Escola de Doctorat		First quarter
3135 - PhD Language, Literat., Cult., and its application	Escola de Doctorat		First quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
2207 - Master's Degree in Language and Literature Research	Techniques, methodologies and ICT applied to research in languages and literatures	COMPULSORY
3135 - PhD Language, Literat., Cult., and its application		
3135 - PhD Language, Literat., Cult., and its application		

COORDINATION

GUTIERREZ KOSTER ISABEL

SUMMARY

The module **44407 ICTs applied to language and literature research** is part of the compulsory module *Techniques, methodologies and ICTs applied to research in languages and literatures,* whose contents may be necessary for application in subsequent modules. The module focuses on training in information and communication technologies specifically applied to research in languages and literatures. Its aim is to equip students with the critical and specialized use of digital technologies, providing them with a solid foundation to integrate technical tools and innovative methodological approaches into their research.

It consists of two main subjects:

Computer tools for language and literature research

Digital bibliographic research

On the one hand, the module introduces Information and Communication Technologies (ICT) applied to research in languages and literatures, as well as key concepts such as digitization and Digital Humanities. It also explores specialized digital resources (virtual libraries, academic databases, and institutional repositories), academic search engines, and reference managers that facilitate the organization and citation of sources. Attention will be given to the Open Access movement and the ethical use of digital sources. In all cases, priority will be given to the use of freely accessible tools or those available through the University of Valencia, thus ensuring inclusive access and effective use of digital resources.

The module critically addresses the use of Artificial Intelligence (AI) in academic research processes. Students will work with emerging tools and state-of-the-art language models applied to research, such as ResearchRabbit, Consensus, and Elicit, among others, as well as platforms for textual corpus analysis, such as Voyant Tools. The objective is to understand the possibilities and limitations of these tools in tasks such as text generation, lexical analysis, and academic writing assistance. In addition, students will experiment with AI in data extraction, automatic text summarization, semantic classification, stylometric analysis, and assisted translation. Ethical issues related to the use of AI in research¿such as authorship, originality, algorithmic bias, and transparency in knowledge production¿will also be addressed.

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

There are no specified enrollment restrictions with other subjects of the curriculum.

OTHER REQUIREMENTS

COMPETENCES / LEARNING OUTCOMES

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Demonstrate knowledge and experience in using specific computer tools, programs, and applications for research in the field of Philology.

Students should apply acquired knowledge to solve problems in unfamiliar contexts within their field of study, including multidisciplinary scenarios.

Students should demonstrate self-directed learning skills for continued academic growth.

Students should possess and understand foundational knowledge that enables original thinking and research in the field.

To acquire an interest in encouraging, through academic and professional concepts, the scientific, social and cultural progress of a society based on the knowledge of the field of languages and literatures.

To acquire the appropriate methodologies for scientific research in languages and literatures.

To be capable of conceiving, designing and implementing a research process in the field of languages and literatures with responsibility and scientific rigour.

To be capable of locating, managing and synthesising specialised bibliographic information, in both the target language used in the Masters Degree and other modern languages, either in libraries or in physical or online archives.

To develop an ethical commitment, focusing on aspects such as gender equality, equality of opportunities, values of culture of peace, democratic values and environmental and sustainability issues, as well as the knowledge and appreciation of diversity and multiculturalism.

To have a good command of the different techniques and methodologies for analysing and interpreting complex texts from a formal and/or conceptual standpoint.

DESCRIPTION OF CONTENTS

Computer Tools for Research in Languages and Literature
1. Introduction to ICT applied to research in languages and literatures: presentation of basic concepts (ICT, digitization, Digital Humanities), with a special focus on the use of these technologies within the University of Valencia.
2. Tools for source search and management: exploration of academic and specialized search engines; digital repositories specific to languages and literatures; introduction to bibliographic reference managers; relevant databases and analysis of impact metrics.
3. The scientific community and open access: analysis of the Open Access movement; ethical aspects and copyright in the use of digital sources; building a researcher¿s digital identity.
4. Digital Humanities: introduction to Digital Humanities; review of methodologies and tools from the field; case analysis and examples of projects in this area.

Artificial Intelligence Applied to Research in Languages and Literature
1. Fundamentals of AI in the Humanities: introduction to basic concepts of AI and machine learning; its evolution and specific applications in the field of languages and literatures; current landscape of tools and resources.
2. Language models and text processing: analysis of cutting-edge language models (such as GPT and other AI systems), their functioning and applications in automatic text generation, lexical analysis, classification, and semantic tagging.
3. AI tools for research: hands-on exploration of emerging tools specific to academic research, such as ResearchRabbit, Consensus, Elicit, and platforms for textual corpus analysis (Voyant Tools); integration of these technologies into research practice. Use of AI in tasks such as automatic data extraction, text summarization, stylometric analysis, assisted translation, and

textual data visualization.
4. Ethics and responsibility in AI use: analysis of the ethical challenges posed by AI in research: authorship, originality, transparency, algorithmic bias, data protection, and reproducibility; promotion of critical and responsible use.

The learning outcomes of this course include the application of appropriate methodologies and techniques for scientific research in languages and literatures; the ability to locate, manage, and synthesize specialized bibliographic information, both physical and digital; the proper use of digital tools for research in this field; and the capacity to analyze and interpret complex texts from both formal and conceptual perspectives.

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Computer classroom practice	32,50
Total hours	**32,50**

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	26,50
Independent study and work	40,00
Preparation of lessons	26,00
Preparation for assessment activities	0,00
Resolution of case studies	0,00
Total hours	**92,50**

TEACHING METHODOLOGY

The methodology of the module is structured around four key pillars that are progressively integrated throughout the course, aiming to foster active, critical training focused on developing key competencies in the field of Digital Humanities:

1. **Classroom practices**: face-to-face sessions focus on the introduction and practical application of concepts, tools, and methodologies of digital research. Problem-based learning, collaborative work, and critical use of information technologies are prioritized.
2. **Source search and analysis**: students are guided in locating, selecting, and critically evaluating relevant primary and secondary sources, both in digital repositories and academic databases. This process strengthens information literacy and methodological rigor in research.
3. **Presentations and debate**: students actively participate in oral presentations and debates on the topics covered, developing communication skills, synthesis ability, and

critical thinking. These dynamics foster a deeper understanding of the content and encourage the exchange of ideas from a pluralistic perspective.

4. **Portfolio creation**: the individual or group portfolio allows students to continuously document their progress, integrating activities, reflections, and learning outcomes. Special value is placed on self-assessment and the ability to articulate a coherent academic discourse based on evidence.

This module explicitly aligns with Sustainable Development Goals (SDGs) 4 and 9, promoting quality education (SDG 4) through the strengthening of advanced digital skills and active learning methodologies. At the same time, it contributes to innovation and educational infrastructure (SDG 9) through the critical incorporation of information technologies and artificial intelligence into research and knowledge production processes in the humanities.

EVALUATION

The assessment is divided into three components:

- Portfolio (50%)
- In-class practices (40%)
- Attendance and active participation (10%)

A minimum grade of 5 out of 10 is required in each of the two courses to pass the module.

Assessment Criteria

Portfolio: This activity consists of compiling a work diary in which students critically reflect on the contents covered in each session. The diary will be submitted on a date determined at the beginning of the course and must follow formal guidelines that will be previously provided. This activity is recoverable in the second assessment period.

In-class practices: These are short activities carried out during sessions, aimed at applying and consolidating the presented content. This activity is recoverable in the second assessment period.

Attendance and active participation: The quality of student contributions during class will be assessed. This activity is not recoverable in the second assessment period.

The use of content authored by others without proper citation will be considered plagiarism and will be penalized with a fail grade (0) in the affected activity. Students are advised to consult the Protocol for Action against Fraudulent Practices at the University of Valencia (ACGUV 123/2020), approved by the Governing Council on July 14, 2020 (https://www.uv.es/sgeneral/Protocols/C83.pdf).

Intellectual honesty is vital to an academic community, and for the fair evaluation of students' work. All work submitted for this course must be originally authored by every student. No student shall engage in unauthorized collaboration or make use of ChatGPT or other AI composition software, unless their use is part of the contents of the course and is authorised by the teaching staff.

The general grading system will comply with the regulations of the University of Valencia, approved by the Governing Council on 30 May 2017. ACGUV 108/2017.

REFERENCES

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