

COURSE DATA

Data Subject	
Code	36632
Name	Data journalism
Cycle	Grade
ECTS Credits	6.0
Academic year	2023 - 2024

Degree	Center	Acad. year	Period
1334 - Degree in Journalism	Faculty of Philology, Translation and Communication	4	First term

Subject-matter				
Degree	Subject-matter	Character		
1334 - Degree in Journalism	7 - Información periodística y su tecnología	Obligatory		

Coordination

Study (s)

Name	Department
CANO ORON, LORENA	340 - Language Theory and Communication
	Sciences

SUMMARY

The Data Journalism course aims to teach students how to access and manage databases, understand and apply basic statistical concepts and how to critically analyse data. It also aims to equip them with the skills to perform effective data visualisations using specialised tools and software. Students will learn techniques and methods to critically examine data, identify patterns, trends and anomalies, and draw meaningful conclusions. This will enable them to gain valuable information for developing data-driven news stories. By the end of the course, they will be able to develop data-driven news stories, collecting and analysing information in a rigorous manner, creating clear visualisations and presenting information in a way that is understandable to the general public. The main objective is that students use data and statistics correctly and communicate them in an accessible way for mainstream dissemination.



PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree

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

Other requirements

No enrolment restrictions have been specified for other subjects in the syllabus.

This course focuses on data analysis and the elaboration of journalistic pieces based on them, and students are expected to put into practice the concepts and skills developed in previous subjects, such as Communicative Documentation, Information Genres, Multimedia Journalism and Graphic Design and Computer Graphics.

Other requirements

Good command of your mother tongue (Valencian and Spanish).

Skills in the search for information.

OUTCOMES

1334 - Degree in Journalism

- Students must have acquired knowledge and understanding in a specific field of study, on the basis of general secondary education and at a level that includes mainly knowledge drawn from advanced textbooks, but also some cutting-edge knowledge in their field of study.
- Students must be able to apply their knowledge to their work or vocation in a professional manner and have acquired the competences required for the preparation and defence of arguments and for problem solving in their field of study.
- Students must have the ability to gather and interpret relevant data (usually in their field of study) to make judgements that take relevant social, scientific or ethical issues into consideration.
- Students must be able to communicate information, ideas, problems and solutions to both expert and lay audiences.
- Students should be able to work as a team, communicate their own ideas and integrate themselves into group projects aimed at achieving results.
- Students should be able to adapt to technological and socio-occupational changes.
- Students should be able to obtain and select relevant information and sources in order to solve problems and elaborate on strategies.
- Students should be able to express themselves fluently and effectively in their own languages, as well as in a third language (preferably English), taking advantage of the linguistic and literary resources that are most appropriate for the different forms of media.



- Students should be able to search for, select, read, interpret and analyse both written and audiovisual texts and documents (analytically, synthetically and critically).
- Students should be able to experiment and innovate through the understanding and use of the applied methods and technologies.
- Students should be able to recover, organize, analyse and process information and communication with the purpose of private or collective uses through various media and supports or in the creation of productions of any kind.
- Students must be able to communicate in their own language through traditional forms of media (the press, photography, radio, television), through new combined forms (multimedia), through new digital forms (the internet), or through hypertextuality.
- Students must be able to reasonably propose ideas from the basics of rhetoric, as well as to communicate through the techniques of persuasion.
- Students must be able to use the communicative and informative technologies and techniques in different medias and combined/interactive systems (multimedia).
- Students must have an understanding of the data and mathematical operations performed, with some of them commonly used in the media. Students must know how to use data and statistics in a correct and understandable way for global dissemination.
- Students must be able to design both formal and aesthetic aspects in written, graphic, audiovisual and digital media, as well as the use of computer techniques for the representation of facts and data through infographic systems.

LEARNING OUTCOMES

English version is not available

DESCRIPTION OF CONTENTS

1. Introduction to data journalism

- 1.1. Background of data journalism. Precision journalism
- 1.2. Data journalism: definition and references.
- 1.3. Data-driven news

2. Data journalism in the newsroom

- 2.1. Professional profile
- 2.2. Work team
- 2.3. Journalistic genres associated to data
- 2.4. Quality standards





3. Sources of information

- 3.1. Types of information sources
- 3.2. Criteria for data reliability
- 3.3. Advanced data extraction techniques.
- 3.4. Public information requests. Transparency laws
- 3.5. Artificial intelligence

4. Basic concepts of statistics

- 4.1. Definitions
- 4.2. Comparisons
- 4.3. Basic operations
- 4.4. Surveys, sample studies
- 4.5. Audiences
- 4.6. Mistakes to avoid

5. Data processing and analysis

- 5.1. Assisted data analysis techniques
- 5.2. Interpretation of data: in search of the story

6. Data visualisation

- 6.1. Types of graphs and their uses
- 6.2. Data visualisation tools
- 6.3. Composition
- 6.4. Content publication formats

WORKLOAD

ACTIVITY	Hours	% To be attended
Computer classroom practice	40,00	100
Theory classes	20,00	100
Development of individual work	30,00	0
Study and independent work	20,00	0
Readings supplementary material	15,00	0
Preparation of evaluation activities	10,00	0
Preparation of practical classes and problem	15,00	0
TOTAL	150,00	





TEACHING METHODOLOGY

English version is not available

EVALUATION

FIRST CALL:

- ORDINARY EVALUATION: The ordinary evaluation consists of a continuous evaluation that has several evaluation modalities:-There will be a final group/group work of practices (SE4), which will count for 55% of the final grade. Part of the development of this work will be carried out in class hours. In addition to the work, students will have to submit a technical sheet specifying the role played by each member of the group in the development of the work.-Several individual practicals will be carried out during the practical sessions (SE3), which will be worth 15% of the final mark.-There will be a theory exam (SE1), which will be worth 30% of the final mark. It will consist of two parts, questions on theoretical issues of the subject and a critical analysis of a news item of data journalism, with the possibility of doing a voluntary work with which you can raise up to 0.5 in the final grade.
- EXTRAORDINARY EVALUATION: In the period of time foreseen for the final exam of the subject, different tests will be carried out to evaluate the theoretical knowledge (40%) and the practical knowledge (60%) through different types of exercises.

SECOND CALL:

In the case of having passed the practicals throughout the course, only the written test (theory exam) included in the Ordinary Assessment (30%) will be taken. In the case of not having done the practicals or not having passed them, the Extraordinary Assessment will be carried out.

Attention:

Intellectual honesty is vital in academic communities, and for the fair assessment of student work. All work submitted for this course must be original authorship. Papers that make use of fraudulent collaboration or composition with the help of artificial intelligence (ChatGPT or others) will not be accepted.

In the case of plagiarism in a student's assessment work, this may be marked with a numerical grade of zero and lead to the suspension of the course, regardless of the disciplinary procedure that may be initiated and, if applicable, the appropriate sanction in accordance with current legislation.

The following will also be considered serious misconduct and, therefore, may result in immediate suspension from the exam session: copying or facilitating the copying of work among undergraduate students; irregularly accessing or appropriating in advance the content of a test or exam; facilitating or procuring the appropriation, alteration or subsequent destruction of the content or results of an assessable activity and impersonation of the person in exams. When the serious misconduct mentioned in this point is detected, the teacher must notify the Grade Coordination.



The presentation of work and/or exams with spelling or typographical mistakes and/or errors in syntax, coherence or writing will be penalised and may lead to the suspension of the exam.

REFERENCES

Basic

- Bounegru, L., Chambers, L., Gary, J (Eds.). (2020). The Data Journalism
- Handbook II. Towards a Critical Data Practice. European Journalism Centre and Google News Initiative. https://datajournalism.com/read/handbook/two
- Cairo, A. (2016). The Truthful Art: Data, charts, and maps for communication. New Riders.
- Dougherty, J., & Ilyankou, I. (2021). Hands-on data visualization. O'Reilly Media.
- Jauset, J.A. (2007). Estadística para periodistas, publicitarios y comunicadores (1 ed.). Catalunya: UOC.
- Martínez Pastor, J. I. (2019). Los datos sin tapujos: cómo interpretar y difundir las estadísticas sociales. Catarata.
- VVAA. (2015). Manual de periodismo de datos iberoamericano. HIVOS, International Center for Journalists (ICFJ) y la Escuela de Periodismo de la Universidad Alberto Hurtado de Chile. http://manual.periodismodedatos.org/index.php
- Córdoba-Cabús, A., Huber, B., & Farias-Batlle, P. (2023). Data journalism in Spain and Austria: features, organizational structure, limitations, and future perspectives. Profesional de la información, 32(1).
- Mezo, J. (2015). Encuestas y margen de error: una guía práctica. Cuadernos de Periodistas: Revista de La Asociación de La Prensa de Madrid, 30, 108-113. https://www.cuadernosdeperiodistas.com/encuestas-y-margen-de-error-una-guia-practica/

Additional

- Bounegru, L., Chambers, L., Gary, J. (Eds.) (2012). The Data Journalism Handbook: How Journalists Can Use Data to Improve the News, OReilly Media. https://datajournalism.com/read/handbook/one
- Cairo, A. (2017). ¿Visualización de datos: una imagen puede valer más que mil números, pero no siempre más que mil palabras. El profesional de la información, 26(6), 1025-1028.
- Córdoba-Cabús, A., García-Borrego, M., & López-Martín, Á. (2020). El periodismo de datos durante la crisis sanitaria del Covid-19 en la prensa española. Revista Ibérica de Sistemas e Tecnologias de Informação, (E35), 325-337.
- Córdoba-Cabús, A., & López-Martín, Á. (2022). Anatomía de las visualizaciones en el periodismo de datos. Los casos de España y Estados Unidos: Los casos de España y Estados Unidos. VISUAL REVIEW. International Visual Culture Review/Revista Internacional de Cultura Visual, 9(Monográfico), 1-9.



- Córdoba-Cabús, A. (2020). Estándares de calidad en el periodismo de datos: fuentes, narrativas y visualizaciones en los Data Journalism Awards 2019. Profesional de la información, 29(3).
- De Vega, J. (2013). Periodista, pregúntate qué puede hacer una buena Ley de Transparencia por ti, Fundación Civio. https://civio.es/tu-derecho-a-saber/2013/06/19/periodista-preguntate-que-puede-hacer-una-buena-ley-de-transparencia-por-ti/
- Ferreras Rodríguez, E.M. (2013). Aproximación teórica al perfil profesional del Periodista de Datos. Revista Icono 14, 11(4), 467-481.
- Ferreras Rodríguez, E.M. (2016). El periodismo de Datos en España. Estudios sobre el Mensaje Periodístico, 22(1), 255-272
- Healy, K. (2018). Data visualization: a practical introduction. Princeton University Press.
- Herrero de la Fuente, M., Saavedra Llamas, M. & Castillo, E. (2022). Periodismo de datos contra desinformación. Competencias, perfiles y formación requerida en el periodismo de datos. Estudios sobre el mensaje periodístico, (28), 827-840.
- Herrero-Solana, V., Rodríguez-Domínguez, A.M. (2015). Periodismo de datos, infografía y visualización de la información: un estudio de El País, El Mundo, Marca y El Correo. BiD: Textos universitaris de biblioteconomia i documentació, 34.
- La-Rosa, L., Sandoval-Martín, T. (2016). La insuficiencia de la Ley de Transparencia para el ejercicio del Periodismo de datos en España. Revista Latina de Comunicación Social, 71, 1208-1229
- López-García, X., Toural-Bran, C., Rodríguez-Vázquez, A.I. (2016). Software, estadística y gestión de bases de datos en el perfil del periodista de datos, El profesional de la información, 25(2), 286-294.
- López-Hernández, M. Á., Muñoz-García, F. J., & Domínguez-Delgado, R. (2022). El trabajo en equipo como elemento imprescindible en el periodismo de datos. Ibersid: revista de sistemas de información y documentación, 16(2), 45-56.
- Mancheño, A. A., Robles, F. A., & Avilés, J. A. G. (2022). Transparencia, conservación y paridad en los grandes proyectos de datos: el caso de los Data Journalism Awards (DJA) y Sigma Awards (2013-2020). Mediatika. Cuadernos de Medios de Comunicación, (19).
- Muth, L.C. (2019). How to prepare your data for analysis and charting in Excel & Google Sheets. Clean up data to prepare it for further analysis. Datawraper [online] https://blog.datawrapper.de/prepare-and-clean-up-data-for-data-visualization/