

Data Journalism

Code: 104991
ECTS Credits: 6

2024/2025

Degree	Type	Year
2501933 Journalism	OB	3

Contact

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Teaching groups languages

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

Prerequisites

The course is in the area of theory and practice of journalism and accompanies the subject of Sources, Techniques and Organisation of Journalistic Work. Therefore, it requires the student to know in advance the handling of information sources. Students must also know the basic principles of journalistic writing and the structure of journalistic genres in different formats, as well as know how to use different tools for journalistic production in the digital environment.

Objectives and Contextualisation

The general objective of the Data Journalism course is to develop students' criteria and skills for the world of data journalism through the understanding and execution of processes linked to the search, extraction, analysis and visualisation of data.

The course, which emphasises in open information, introduces different methods of data analysis and processing that can be applied to everyday journalism practices such as developing stories, interpreting a database, contextualising information and the interactive presentation of news genres.

The course also has the following specific objectives:

1. To make an approach to the concepts of Big Data, Open Data and Data Journalism as trends and realities in the generation of information and as a path for the generation of added value to communicative processes.
2. To train students in the management of data collection, transformation, analysis, interpretation and presentation applications.
3. To provide students with practical tools for interpreting databases based on structured information.
4. To orientate participants' skills towards the management and exploration of databases and information within open data channels, as well as from their own database constructions.
5. Encourage students to use tools for searching, collecting, analysing and visualising data, using techniques currently employed by the media.

Competences

- Abide by ethics and the canons of journalism, as well as the regulatory framework governing information.
- Design the formal and aesthetic aspects in print, graphic, audiovisual and digital media, and use computer-based techniques to represent information using infographic and documentary systems.
- Introduce changes in the methods and processes of the field of knowledge to provide innovative responses to the needs and demands of society.
- Relay journalistic information in the language characteristic of each communication medium, in its combined modern forms or on digital media, and apply the genres and different journalistic procedures.
- Research, select and arrange in hierarchical order any kind of source and useful document to develop communication products.
- Show leadership, negotiation and team-working capacity, as well as problem-solving skills.
- Students can apply the knowledge to their own work or vocation in a professional manner and have the powers generally demonstrated by preparing and defending arguments and solving problems within their area of study.
- 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 be capable of communicating information, ideas, problems and solutions to both specialised and non-specialised audiences.
- Students must develop the necessary learning skills in order to undertake further training with a high degree of autonomy.
- Take sex- or gender-based inequalities into consideration when operating within one's own area of knowledge.

Learning Outcomes

1. Adapt the presentation of the news to the needs established by the editorial space.
2. Analyse the sex- or gender-based inequalities and the gender biases present in one's own area of knowledge.
3. Communicate using language that is not sexist or discriminatory.
4. Describe the workings of editorial boards.
5. Handle information facts in the most appropriate journalistic genre.
6. Identify situations in which a change or improvement is needed.
7. Properly comment on and edit texts or other media productions related to journalism.
8. Propose new methods or well-founded alternative solutions.
9. Propose new ways to measure the success or failure of the implementation of innovative proposals or ideas.
10. Recognise the potential and limits of freedom of speech in appraising information processes.
11. Research information sources, select them and apply critical appraisal criteria.
12. Research, select and arrange in hierarchical order any kind of source and useful document to develop communication products.
13. Show leadership, negotiation and team-working capacity, as well as problem-solving skills.
14. Students can apply the knowledge to their own work or vocation in a professional manner and have the powers generally demonstrated by preparing and defending arguments and solving problems within their area of study.
15. 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.
16. Students must be capable of communicating information, ideas, problems and solutions to both specialised and non-specialised audiences.
17. Students must develop the necessary learning skills in order to undertake further training with a high degree of autonomy.
18. Write news, articles and reports with their respective sub-genres.

Content

Unit 1. The data society: Introduction to the course in which the digital society is contextualised and the economic and political universe of the data society is presented.

Unit 2. Data Journalism: Presentation of the concept, history and foundations of data journalism in contemporary newsrooms. At the same time, the student is introduced to the processes and roles involved in a data journalism project, as well as to the new journalistic genres associated with data.

Unit 3. Data sources and data capture: Introduction to open data sources, the processes of accessing and requesting public information and transparency laws. Beginning the process of searching, downloading and storing different types of data (formats).

Unit 4. Data processing and analysis: Handling of data cleaning and analysis tools and functions to find journalistic stories in information.

Unit 5. Storytelling with data: Building the script of a journalistic story from data: What to show? How to show it? and with what resources and tools?

Unit 6. Data visualisation: Presentation of data visualisation tools for journalistic stories based on different representations and interaction possibilities.

Unit 7. Data mapping: Presentation of different tools and possibilities of cartographic representation of information for data-driven news stories.

Unit 8. Factcheck: Presentation of methods and practices of the information verification.

(*) The calendar will be available on the first day of class. Students will find all information on the Virtual Campus: the description of the activities, teaching materials, and any necessary information for the proper follow-up of the subject. In case of a change of teaching modality for health reasons, teachers will make readjustments in the schedule and methodologies.

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The content of this subject will be sensitive to aspects related to the gender perspective.

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Theoretical sessions	15	0.6	2, 3, 7, 12, 15, 16, 17, 18
Type: Supervised			
Laboratory	30	1.2	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18
Workshops	50	2	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 18
Type: Autonomous			
Autonomous work: reading and following	38	1.52	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17,

The structure of the course, in which different practical activities are carried out, seeks to internalise competences related to the four processes involved in data journalism (search, extraction, analysis and publication of data) and, at the same time, aims to generate a critical self-awareness in students about the data-driven society. Its methodology is completely practical. Through laboratory activities, workshops and the final evaluation, both the theoretical component of the subject and the practical application of the contents studied are evaluated. Thus, the aim is to evaluate the progression of learning from a set of different practical activities under the concept of learning by doing.

The continuous assessment of the subject, in which specific and continuous short-term practical activities are carried out, allows for a very precise monitoring of the student's learning and progression. In addition, work is done progressively on the acquisition of knowledge that, step by step, is involved in the next activities.

The Data Journalism course includes four types or categories of training activities:

Theoretical classes: sessions in which the subject's teachers explain the basic concepts related to data journalism.

Laboratory practices: individual or team work in which practical activities are carried out with a specific deliverable with a time limit. Students must apply knowledge, distribute time and prepare deliveries within the classroom and in the hours allocated for practice under the guidance of the teacher.

Classroom practices: short-term individual or team work carried out in large theory groups to check the acquisition of basic skills related to data extraction, cleaning and analysis.

Preparation of reports: development of an end-of-course project (report) that synthesizes the learning acquired by the students in the development of the course.

Professors who teach the course may indicate to the students that, for the correct development of the class and to guarantee good coexistence in the classroom, electronic devices or screens cannot be used during the class, except when indicated the opposite for a specific teaching situation.

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

Continous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Class exercises and participation	20%	6	0.24	1, 4, 5, 7, 10, 11, 12, 13, 15, 16, 18
Final exam	20%	1	0.04	1, 3, 4, 5, 7, 10, 11, 14, 15, 16, 17, 18
Laboratory	40%	4	0.16	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18
Report	20	6	0.24	1, 3, 5, 7, 11, 12, 14, 15, 16, 18

The evaluation activities are:

Activity A: Practice 1, which has a weight of 5% on the final grade

Activity B. Practice 2, which has a weight of 5% on the final grade

Activity C. Practice 3, which has a weight of 10% on the final grade

Activity D. Practice 4, which has a weight of 10% on the final grade

Activity E. Practice 5, which has a weight of 10% on the final grade

Activity F. Final exam, which has a weight of 20% on the final grade

Activity G. Report, which has a weight of 20% on the final grade

Activity H: Class exercises and participation, which has a weight of 20% on the final grade. The conditions to qualify for this part of the qualification will be explained on the first day of class.

In order to pass the course, it is necessary to obtain a minimum passing grade (5.0) in the weighted grade of the course.

RECOVERY: In the last two weeks of the course, students who have not passed the course may take a re-evaluation synthesis test that will consist of a theoretical test and a practical exercise. The obligatory condition to be able to choose to recover the course is to have done, at least, 2/3 of the total practices of the course (activities A - H) and to have obtained an average grade equal to or greater than 3.5 (and less than 5) in the final grade of the course.

According to the criteria indicated above, if a student does not carry out at least 66% of the practices activities , they will be considered non-assessable for this course.

PLAGIARISM:

The student who performs any irregularity (copying, plagiarism, impersonation ...) will be graded with 0 this act of evaluation. In case of several irregularities, the final grade of the subject will be 0.

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Software

As this is a completely practical course, the software required is the usual one for the journalistic tasks of content production in different formats.

Specifically, the following tools are required:

Audiovisual editing software: DaVinci Resolve.

Audio editing software: Audacity

Text editing software: Word or similar

Image editing software: Canvas

Data analysis software: Excel or similar

Data visualisation software: Infogram - Datawrapper - Flourish

Multimedia editing software: Wordpress - Blogger - Wix

The Faculty also has cameras and other equipment available for the correct performance of journalistic practices.

As the subject will carry out practical sessions during all its activities, it is recommended that students (if possible) always bring their laptop to the sessions.

Language list

Name	Group	Language	Semester	Turn
(PLAB) Practical laboratories	11	Spanish	first semester	morning-mixed
(PLAB) Practical laboratories	12	Catalan/Spanish	first semester	morning-mixed
(PLAB) Practical laboratories	13	Catalan/Spanish	first semester	morning-mixed
(PLAB) Practical laboratories	21	Spanish	first semester	morning-mixed
(PLAB) Practical laboratories	22	Catalan/Spanish	first semester	morning-mixed
(PLAB) Practical laboratories	23	Catalan/Spanish	first semester	morning-mixed
(TE) Theory	1	Spanish	first semester	morning-mixed
(TE) Theory	2	Spanish	first semester	morning-mixed