

Scientific Journalism

Code: 103092
ECTS Credits: 6

Degree	Type	Year	Semester
2501933 Journalism	OT	4	0

The proposed teaching and assessment methodology that appear in the guide may be subject to changes as a result of the restrictions to face-to-face class attendance imposed by the health authorities.

Contact

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Use of Languages

Principal working language: catalan (cat)
Some groups entirely in English: No
Some groups entirely in Catalan: Yes
Some groups entirely in Spanish: No

Prerequisites

Scientific Journalism is an optional fourth subject within the Degree of Journalism. It will need that

The students have knowledge of current affairs, and a desire to know everything that is related to

Basic science, medicine, the environment and technology (we call it the pleasure of knowing). It will have to

Be able to reflect critically on all these issues. It will have to have a prospective vision (the

thought oriented towards the future). The future is a look that we turn towards the horizon (or perhaps towards

infinity) and

that makes us in the form of questions. You will need to have the intention of knowing the communication

systems

Common in the world of science (articles in reference magazines, congresses ...). It will be necessary to prove

the

Will to bring this knowledge to the greatest number of people (outreach: science without pain).

It will be necessary to have the purpose of understanding the scientific languages and of mastering the

transcoding formulas

towards less specialized languages, and especially the common language of the citizens. It will be necessary

as well

that the student demonstrates the capacity for the correct use of informative, written, audiovisual languages, in

the

network (and everything that we call narrative transmedia), and basic knowledge of English. You will have to

know the

methodology, genres and the basic techniques of the management of information and journalism (in the media

conventional and on the network), taking into account that you have already completed compulsory subjects related to

these professional skills.

Objectives and Contextualisation

The subject Science Journalism proposes to analyze the whole informative process: from the origin of the scientific facts

until they are converted into news and are published or broadcast in a medium. And he does it in a threefold way: like

Generic introduction to science in all its aspects, medicine and the environment (philosophy, sociology, history and current state), essentially as an object of informative communication (and as a result, journalism), and as a message issued from the same science (people and institutions).

In all these dimensions, a wide field of teaching and research is opened, in many cases without

Explore, in which the historical analysis of scientific, health and environmental communication, the studies of rhetoric and language codes, models of transcoding towards common language,

the adaptation of the genres, according to the levels of specialized communication, the problems posed by the dissemination, the practical application of information in the various media (printed, audio-visual and online), and the

design of global and specific communication strategies from the corporate production and service centers scientists, doctors and environmentalists.

Competences

- Abide by ethics and the canons of journalism, as well as the regulatory framework governing information.
- Demonstrate a critical and self-critical capacity.
- Demonstrate ethical awareness as well as empathy with the entourage.
- Differentiate the disciplines main theories, its fields, conceptual developments, theoretical frameworks and approaches that underpin knowledge of the subject and its different areas and sub-areas, and acquire systematic knowledge of the medias structure.
- Generate innovative and competitive ideas in research and professional practice.
- 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.
- Respect the diversity and plurality of ideas, people and situations.
- Use a third language as a working language and means of professional expression in the media.

Learning Outcomes

1. Conceptualise the theories and techniques of specialised journalism.
2. Demonstrate a critical and self-critical capacity.
3. Demonstrate ethical awareness and empathy with the entourage.
4. Demonstrate practical knowledge of specialised journalism.

5. Generate innovative and competitive ideas in research and professional practice.
6. Incorporate the principles of professional ethics in developing narrative journalism specialised in scientific information.
7. Know how to build texts in a third language that adapt to the structures of journalistic language and apply them to the different theme-based information specialisms.
8. Relay in the language specific to each communication medium narrative journalism specialised in scientific information.
9. Research, select and arrange in hierarchical order any kind of source and useful document to develop communication products.
10. Respect the diversity and plurality of ideas, people and situations.
11. Use interactive communication resources to process, produce and relay information in the production of specialised information.

Content

Below are the general contents of the subject that will be sensitive to the related aspects

from the perspective of gender.

Introduction: philosophy, sociology and history of science. What is science and who are the scientists? Science and power

The state of science in today's world: physics and cosmology, biology and medicine, palaeontology and evolution,

the world quite unknown of the brain, nature and the environment ...

Science and technology. The great technological advances and their impact on daily life.

Nanotechnology and new materials. Natural intelligence and artificial intelligence. The objects that think

From intelligent simulation to virtual reality.

Science, technology and means of destruction: technological warfare and the war of destruction

massive

Social, political, economic and cultural impacts of science and technology.

Fraud in science and false sciences. From homeopathy to diet to lose weight. The extraterrestrial

and other inventions.

The future of science and technology: a prospective vision.

The scientific culture in the information society.

Communication within the science and communication of science with the knowledge society.

The communication of science with society: scientific dissemination. The museums of science.

Science and literature. Science and cinema. The scientific documentary. Science fiction The scientific fantasy.

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Scientific information in the mass media: printed, audiovisual. From scientific programs to

great series of scientific content.

The scientific information on the net. The transmedia narrative.

The corporate communication of science.

The calendar detailed with the content of the different sessions will be presented on the day of presentation of the subject. It will be uploaded to the Virtual Campus, where students will also be able to access the detailed description of the exercises and practices, the various teaching materials, and any necessary information for the proper follow-up of the subject.

Methodology

Continued and active evaluation. This evaluation allows you to obtain a direct approval (5 or 6, if all)

the parameters are considered correct), without having to go to the exam, and includes the following:

Regular attendance and active participation in the theory, seminar and laboratory sessions, included work placement. The students will justify their attendance with their signature.

In-depth reading of a book proposed by the teacher, reflective criticism (two print sheets for one face) and the debate in class.

Group research work (informational archeology)

Public presentation of the synthesis of this work

It will be debated in class.

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.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Laboratory practices	15	0.6	9, 8, 1, 3, 4, 2, 5, 6, 10, 11
Seminars	15	0.6	9, 8, 1, 3, 4, 2, 5, 6, 10, 11
Theoretical	22	0.88	9, 8, 4, 5, 6, 10, 11
Type: Supervised			
Evaluation	3	0.12	9, 8, 1, 3, 4, 2, 5, 6, 10, 11
Tutorials	6	0.24	8, 1, 3, 4, 2, 5, 6
Type: Autonomous			
Student work (research, documentation, and production of information)	83	3.32	9, 8, 3, 2, 5, 6, 10, 11

Assessment

Evaluation activities will be carried out in sessions 5 (practical work + debate), 9 (practical work +

debate) and 15 (presentation of the works of informative archeology). In addition, the final test will be done at the

last session of the subject.

The students who have passed the continuous and active evaluation (with a 5 or 6 as a final grade), may go up note presenting voluntarily to the proof of follow-up of the acquired knowledge (exam

, which will take place at the end of the course. This test will be based on the teaching material that the teacher will have

theoretician)

provided in the Virtual Campus (or in Moodle) or in the texts selected for this purpose.

Students who have passed the continuous and active evaluation may also upload a note attending the

lectures or reading the books that the teacher will propose throughout the course, with a value of 0.5 points per

Unit and a cumulative maximum of 2 direct points on the final note. This value does not exclude that the student is

You can submit to the tracking test (exam) to upload a note.

The students who (for various reasons) have inadequately completed the continuous and active evaluation,

they must present themselves to a final test about the acquired knowledge, which will determine the

final note

There will be a review (or re-assessment) for students who have suspended the final test

, provided they have obtained a minimum score of 3. If this second test is exceeded, the final grade is

theoretical

It will also complete the other assessment guidelines.

To pass by course, continued attendance is required in class. Students who can not attend

, at the beginning of

Class or do so intermittently, they must contact the teacher

Course, to know the special conditions to pass the subject.

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Follow up examination of the acquired knowledge	40%	0	0	9, 4, 2, 5, 6, 10, 11
Group research work	30%	0	0	9, 8, 3, 4, 2, 5, 10, 11
Laboratory practices	20%	3	0.12	9, 8, 4, 10, 7, 11
Presentation of work	10%	3	0.12	9, 8, 1, 3, 4, 2, 5, 6, 10, 11

Bibliography

Bibliography

Recommended reading books

MUKHERJEE, Siddhartha. The Gen: a personal story. Barcelona: Debate, 2017.

NOAH HARAI, Yuval. Homo Deus: a short history of tomorrow. Barcelona: Ediciones 62, 2016.

NOAH HARAI, Yuval. Sàpiens: A brief history of humanity. Barcelona: Ediciones 62, 2014.

BOJS, Karin. My great European family. Barcelona: Ariel, 2017.

GLEICK, James. Travel in time Barcelona: Criticism, 2017.

HIGGS, John. Alternative history of the twentieth century: more weird than you can imagine. Barcelona: Taurus,

2015

BRYSON, Bill. Brief history of almost everything. Barcelona: La Magrana, 2012.

VAN DOREN, Charles. Brief History of Knowledge. Barcelona: Planet, 2009.

a. State of science, technology and prospecting

BAKER, Joanne. 50 things to know about the universe. Barcelona: Ariel, 2011.

BAKER, Joanne. 50 things to know about physics. Barcelona: Ariel, 2011.

BROOKS, Michael. 13 things that do not make sense. Barcelona: Ariel 2011.

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BROOKS, Michael. 13 things that do not make sense. Barcelona: Ariel 2011.

CARR, Nicholas. Trapped: how machines take over our lives. Madrid: Taurus, 2014.

DD. AA. 29 key concepts to enjoy science. Mexico: Fondo de Cultura Económica, 2010.

DD.AA. The great questions of science. Barcelona: Criticism, 2003.

HENDERSON, Mark. 50 things to know about genetics. Barcelona: Ariel, 2010.

HORGAN, John. The end of science. The limits of knowledge in the decline of the scientific age. Barcelona: Paidós, 1998.

Kaku Michio. The physics of the future. How science will determine the destiny of humanity and our life
Everyday in the XXII century. Barcelona: Debate, 2011.

MADDOX, John. What remains to be discovered. An incursion into the problems not yet resolved by science,
from the origin of life to the elfuturo of humanity. Madrid: Debate, 1999

MATTHEWS, Robert. 25 great ideas: The science that is changing our world. Madrid: Sword,
2007

MORGADO, Ignacio. How do we perceive the world? Barcelona: Ariel, 2012.

RAMENTOL, Santiago. Theories of bewilderment. Barcelona: Uranus, 2004

b. Science in general

BORDIEU, Pierre. The job of scientist: science of science and reflexivity. Barcelona: Anagram, 2003.

BROCKMAN, John (editor). The third culture Beyond the scientific revolution. Barcelona: Tusquets, 1996.

BUNGE, Mario. Scientific research: your strategy and your philosophy. Barcelona. Ariel, 1985.

CHALMERS, Alan F. What is that thing called science? Madrid: 21st Century, 2000

FREELAND, Horace. Anatomy of scientific fraud. Barcelona: Criticism, 2006.

KUHN, Thomas S. The structure of scientific revolutions. Mexico: Fondo de Cultura Económica, 1997.

MORIN, Edgar. Introduction to complex thinking. Barcelona: Gedisa, 1994.

MORIN, Edgard. Science with conscience Barcelona: Anthropos, 1984

MOSTERÍN, Jesus. Science, philosophy and rationality. Barcelona: Gedisa, 2013.

POPPER, Karl. The logic of scientific research. Barcelona. Laia, 1985.

POPPER, Karl. Conjectures and refutations: the development of scientific knowledge. Barcelona. Paidós, 1983.

POPPER, Karl. The objective knowledge: an evolutionary approach. Barcelona: Ediciones 62, 1985.

RUSSELL, Bertrand. The scientific perspective. Barcelona: Ariel, 1969.

TROCCHIO, Federico di. The lies of science. Madrid: Editorial Alliance, 1997.

WATSON, Peter. Ideas: intellectual history of humanity. Barcelona: Criticism, 2006

WATSON, Peter. 20th century intellectual history. Barcelona: Criticism, 2002.

WAGENSBERG, Jorge. Ideas about the complexity of the world. Barcelona. Tusquets, 1985.

WILSON, Edward O. Consilience. The unity of knowledge. Barcelona: Círculo de Lectores, 1999

WOLPERT, Lewis. The non-natural nature of science. Madrid: Accent, 1994.

ZiMAN, J. The credibility of science. Madrid: Alianza Editorial, 1988.

c. Communication of science

ASIMOV, Isaac. About science-fiction: in no way vulgar. Barcelona: Edhasa, 1986.

DAWKINS, Richard. I bowing to the rainbow. Science, illusion and the desire for astonishment. Barcelona. Tusquets

(Matemas 61), 2000.

FAYARD, Pierre. La cultura scientifique, moyens et enjeux. Paris: The Documentation Française, 1990.

FLASTE, Richard (editor). Scientific articles from The New York Times. Madrid: McGraw-Hill, 1996.

LEON, welcome. The documentary of scientific dissemination. Barcelona: Paidós, 1999.

NELKIN, Dorothi. Science in the showcase. Madrid: Fundesco, 1990.

PAULOS, John A. A mathematician reads the newspaper. Barcelona: Tusquets / Matemas, 1996

RAMENTOL, Santiago. The silences of science. Valencia: Editorial 3 and 4, 2000.

d. Science and society

DUMBAR, Robin. The fear of science. Madrid: Alianza Editorial, 1999

COMMONER, B. Science and survival. Barcelona: Plaza & Janés, 1984.

DD. AA. The scientists, the arms race and the disarmament. Barcelona: Serbal / Unesco, 1984.

DD. AA. Keys to the 21st century. Barcelona: Ediciones Unesco / Editorial Crítica, 2001.

FISAS, Vicenç. The militarization of science. Barcelona: Jaume Bofill Foundation, 1989.

HABERMAS, Jürgen. The technique and the science like ideologies. Valencia: L'Estel, 1974.

Software

For text edition.