lcomu2600
2025

Scientific popularisation

5.00 credits	30.0 h	Q1

Language :	French
Place of the course	Louvain-la-Neuve
Main themes	The course offers discussion on the relationships between popularisation and scientific discourse. To this end, it analyses the three stages involved in a popularisation device: • the production of a popularising discourse: the psycho-social and scientific role of the mediator, or third man, and the constraints of a didactic discourse ; • the reformulation of a source discourse within a second discourse (e.g. paraphrase, transcoding, translation, narrative and metaphorisation) ; • recognition by the public of a popularised message (e.g. deciphering and appropriation of scientific information, and the attitudes of a reader of scientific popularisation).
Learning outcomes	**At the end of this learning unit, the student is able to :** 1. Know the main theories relating to scientific popularisation and writers on the subject ; 2. Evaluate a communication or scientific popularisation device, and design the necessary adaptations ; 3. Design and construct a small popularisation device (including, at least, a text and an image) designed to reformulate an area of scientific knowledge.
Evaluation methods	The course assessment comprises two components: a project and an exam. **Project:** Students, working in groups, are required to create a science communication initiative based on a theme and format identified at the beginning of the course. The first stage of this task is an individual analysis of existing scientific documents and science popularization materials, aimed at contributing to the development of a science communication scenario. This work is done individually to enrich the group's discussions and is worth 10% of the final grade. The second stage is a group effort, involving the creation of a science communication scenario, the realization of the media , and its pre-testing with an audience. The entire process culminates in a presentation at the end of the semester and in a reflective written report, both evaluated together at 40% of the final grade. Thus, the project counts for 50% of the final grade: 10% from the individual score and 40% from the group score. **Written Exam:** A closed-book written exam will be conducted during the session, focusing on the understanding and application of the concepts and theories covered in the course. This exam accounts for 50% of the final grade. **Evaluation in the Second Session:** The conditions remain the same, and students are assessed based on the creation of a science communication media presented in a reflective report (10% for document analysis + 40% for the overall project approach) and a written exam (50%). A passing grade obtained in the first session for either the written exam or the project can be carried over to the second session. If this is the case, during the second session, the student only needs to retake the part for which they did not achieve at least half the points in the first session.
Teaching methods	The course will be conducted in person, alternating between lectures given by the professor, discussions with students, case studies, seminars to discuss progress, and presentations of final projects. Occasionally, some course sessions will require preparation through critical reading of texts or audiovisual materials. From time to time, documents or short video clips that focus on a specific point of the course may be used to free up time in sessions for exchanges and discussions, or to compensate for a canceled class session.
Content	The first chapter of the course "Popularization, Science, and Society" aims to contextualize the practice of scientific popularisation by identifying its stakes and main contemporary challenges. Starting with a brief history, it proposes to distinguish three approaches (deficit, dialogic, participatory) that still influence

	discussions on scientific popularization and its practice today, in order to identify their contributions and limitations.
	The second chapter presents scientific popularization as a specific form of communication. This chapter provides an overview of the major questions posed by the information and communication sciences, which help to think about and practice scientific popularization by focusing on related challenges:
	• the shaping and reformulation; • the relationships between communication actors; • cognitive effects; • engagement and participation.
	These theoretical explorations aim to build an analytical framework that enables students to improve their skills in evaluating and designing scientific popularization initiatives.
Inline resources	Presentation materials, useful links, assignment instructions, and other external resources will be made available to students on the course's Moodle platform.
Bibliography	Baur, M. (2024). *La vulgarisation scientifique sur le web. Étude des pratiques de vulgarisation de vidéastes et de podcasteurs et podcasteuses francophones indépendants (2020-2023).* http://hdl.handle.net/2078.1/287168 Bucchi, M., & Trench, B. (Éds.). (2021). *Routledge Handbook of Public Communication of Science and Technology#: Third Edition*(3e éd.). Routledge. https://doi.org/10.4324/9781003039242 Cairo, A. (2016). *Truthful Art, The#: Data, Charts, and Maps for Communication*(1st edition). New Riders. Mayer, R. E. (2014). *The Cambridge Handbook of Multimedia Learning* (2e éd.). Cambridge University Press. Pigliucci, M. (2018). *Nonsense on Stilts.* University of Chicago Press. https://doi.org/10.7208/chicago/9780226496047.001.0001 Priest, S., Goodwin, J., & Dahlstrom, M. F. (Éds.). (2018). *Ethics and Practice in Science Communication* (1st edition). University of Chicago Press.
Other infos	English-friendly course#: • Reading: bibliographical references in English can be provided • Questions: students can ask their questions in English • Evaluation: students can do presentations and write essays in English; oral translation will be provided in case of Quiz • Dictionary: students are allowed to use a dictionary (monolingual French dictionary or bilingual French-mother tongue dictionary, as specified by the teacher). Regarding the use of artificial intelligence tools, students are expected to use them responsibly, as defined in "La note sur l'utilisation responsable des IA" approved in July 2024 by the ESPO Faculty Office, available on the course's Moodle page.
Faculty or entity in charge	COMU

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Multilingual Communication	MULT2M	5		🔍
Master [120] in Communication	CORP2M	5		🔍
Master [120] in Information and Communication Science and Technology	STIC2M	5		🔍
Master [60] in Information and Communication	COMU2M1	5		🔍
Master [120] in History	HIST2M	5		🔍
Master [120] in Environmental Bioengineering	BIRE2M	3		🔍
Master [120] in Chemistry and Bioindustries	BIRC2M	5		🔍
Master [120] in Communication	COMM2M	5		🔍
Master [120] in Journalism	EJL2M	5		🔍