



# Strategies for citizen engagement in science communication

---

**Note:** This course will be ONLINE

---

**Lecturers:** Cristina Luís (CIUHCT-FCUL), Esther Marín (cE3c-FCUL), Patrícia Garcia Pereira (cE3c-FCUL), Patrícia Tiago (cE3c-FCUL)

**Departments Responsible:** Departamento de Biologia Animal, Departamento de História e Filosofia das Ciências

**Date:** March 6<sup>th</sup>- 10<sup>th</sup> 2023

**Duration:** 36 hours

**Schedule:** 10h00-13h00 and 14h30-17h30 Monday and Friday; 9h00-13h00 and 14h30-18h30 Tuesday to Thursday

**Nº (min, max) Students:** 8 – 20

**Location:** Faculdade de Ciências da Universidade de Lisboa, Campo Grande 1749-016 Lisboa

## Objectives

Engagement with science is usually presented as a dialogue or participation model in which scientists and non-scientists both benefit from listening to and learning from one another, generating mutual benefit. Citizen science is part of this larger process of engaging non-scientists in new forms of interaction with scientific research, challenging scientists and non-scientists whilst enlarging scientific knowledge and providing learning opportunities for all parties involved. These diverse interactions require innovative forms of multiway science communication.

This course aims to explore ways of communicating science to non-specialized audiences, such as policy makers, industry, general public (including students and teachers), through their engagement and participation in citizen science activities.

The course will particularly address co-creation as an effective tool to design, organise, implement and analyse the impact of public engagement in science activities. By the end of the course, students should be able to select and develop engaging initiatives to communicate scientific results and ideas.

### Learning outcomes and competences:

At the end of the course, participants should be familiar with the challenges of science engagement at different levels:

- Reaching several audiences, particularly those who usually don't interact with science;
- Develop an understanding of what can make written and visual communication more effective;
- Selection of the best tools and channels to improve communication and dissemination;
- Strategies to increase participation and facilitate engagement and dialogue with the audience.
- Strategies to further strengthen engagement in science to counter disinformation and to adapt to evolving threats and manipulations

**This course can have recognition of 6 ECTS for FCUL PhD students enrolling in it as part of their first doctoral year. For FCUL PhD students only requiring 5 ECTS recognized in their specific PhD programs the last 3.5 hours of the course are not mandatory and the certificate will be on 'Topics in Strategies for citizen engagement in science communication'. For FCUL PhD students requiring credits additionally to the exercises done during the week the delivery of a written report done after the course is mandatory. Students getting 6 ECTS have also to deliver a summary report. The reports must be delivered two weeks after the course. Such report(s) are also advised for other students requesting creditation of the course in their institutions.**

### Minimum formation

We require only curiosity about science communication and citizen science, and interest in learning about developing engaging science communication activities.

**Directed to:** For (but not limited to) PhD or Master students and Postdocs in any scientific area, as well as other professionals interested in this topic

---

## General Plan

Several examples of engagement initiatives, including citizen science projects, will be used across the course as examples on how to better engage several audiences with science and on how to improve the way science communication is performed. Both online and offline science communication will be explored through co-creation processes, using a design thinking approach. Alongside the barriers, challenges and opportunities to improve engagement in science communication will also be explored, as well as the analysis of the impact of the strategies to engage citizens in science communication.

## Course contents:

### 1. Engagement and Participation

Explore strategies to increase citizen engagement in science communication, the importance of continued dialogue and how can these improve and maintain participation.

### 2. Effective Written Messages

The steps to write engaging and informative messages for different audiences.

### 3. The Power of Images and Sounds

How to produce engaging images, videos, infographics and audio pieces and what communication and digital tools can be used.

### 4. Amusement and Emotion in Communicating Science

Showing how science can be seriously communicated while having fun through humor, games, performing arts, or science fairs and other events.

---

## Funding

Students fees

---

## Fee

Free for 1st year PhD students in Doctoral programmes at FCUL (e.g. Biologia), Biodiversity, Genetics and Evolution (BIODIV UL; UP), Biology and Ecology of Global Changes (BEAG UL, UA) and Sustainability Science (UL, several institutions), when the course counts credits for their formation, in which case the delivery of a final report done after the course is mandatory; the course is also free

for more advanced PhD students of the BIODIV programme (ULisboa or UPorto); 30 € for more advanced PhD students of cE3c of other programmes; 60 € for PhD students of the PEERS network (CFE); 105 € for FCUL Master students and unemployed; 160 € for BTI, BI and other PhD students; 230 € for Professional and postdocs.

When the maximum number of students is reached, 10 vacancies will be available for non-paying 1st year PhD students mentioned above, being, by order of preference students from: 1) cE3c; 2) BIODIV (not from cE3c); 3) FCUL (not from cE3c); 4) Sustainability Science (not from cE3c or FCUL); 5) BEAG (not from cE3c or FCUL).

**Deadline for applications:** February 10<sup>th</sup> 2023

### Contact for enrolment

To apply send an e-mail to Cristina Luís at [cmluis@fc.ul.pt](mailto:cmluis@fc.ul.pt) with a CV and a motivation letter explaining why you are interested in the course. The cv and letter should be named as *1st-lastNAME-CV.pdf* and *1st-lastNAME-ML.pdf* (that is personalize the name of each file with your first and last name).

### In the email please add the following information:

Full Name:

E-mail:

Phone:

Professional activity: Professional/Postdoc, BTI, BI (or other non-post-doc research grant), PhD student (with/ without scholarship), Lic. (Bachelor)/Master student

Academic formation:

PhD student of the 1st year of Doctoral programme BIODIV (FCUL/FCUP), Biologia (FCUL) or BEAG (FCUL or UA)?:

If yes to the above question, PhD student doing the Course to count credits for 1st year?:

PhD student of cE3c or CEF (Centro de Ecologia Funcional)?:

If PhD student from another programme/centre, which: