











# Strategies for citizen engagement in science communication

Note: due to COVID-19 security measures the course will be given remotely (ONLINE)

**Lecturers:** Cristina Luís (CIUHCT-FCUL), Esther Marín (cE3c-FCUL), Filipa Vala (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 1st-5th 2021

**Duration: 36 hours** 

Schedule: 10h00-13h00 and 14h30-17h30 Monday and Friday; 9h00-13h00 and 14h30-18h30

Tuesday to Thursday

**№** (min, max) Students: 8 – 15

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











## **Objectives**

Citizen science can be part of the larger process of engaging people in new forms of interaction in scientific research, challenging scientists and citizens 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), and media professionals, 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. At the end of the course, students should be able to select and develop citizen 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 communication and citizen science at different levels:

- Reaching several audiences, particularly those who usually don't interact with science;
- Develop an understanding of what makes written and visual communication 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 the citizen science projects' work 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 6 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, in addition to the exercises done during the week the delivery of a written report is mandatory. The report must be delivered two weeks after the course.

#### 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 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 cocreation processes, using a design thinking approach. Alongside the barriers, challenges and opportunities to improve citizen's engagement in science communication will also be explored, as well as the analysis of the impact of the strategies to engage citizen's 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 (age, professional background) and outputs (books, blogs, handbooks, social networks).

## 3. The Power of Images and Sounds

How to produce engaging images, videos, infographics and audio pieces for social networks and websites 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, cartoons, science busking, etc.

#### **Funding**

Students fees, EU project funded by Horizon 2020 Research and Innovation program - Grant Agreement n. 873125 (will support the development of a science communication activity within the course)

#### Fee

Free for 1st year PhD students in Doctoral programmes at FCUL (e.g. Biologia), Biodiversity, Genetics and Evolution (BIODIV UL; UP) and Biology and Ecology of Global Changes (BEAG UL, UA) 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 8 vacancies will be available for non-paying 1st year PhD students mentioned above, being, by order of preference: 1) cE3c students; 2) BIODIV students (not from cE3c); 3) FCUL students (not from cE3c); 4) BEAG students (not from FCUL).

**Deadline for applications:** February 2<sup>nd</sup> 2021

## **Contact for enrolment**

To apply send an e-mail to Cristina Luís at 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: