



Climate Change Adaptation

Lecturers/Organizers: Sílvia Carvalho, Luís Dias, João Pedro Nunes, André Vizinho and David Avelar (cE3c, FCUL)

Date: 22nd to 26th May 2023

Duration: 36 hours

Schedule: 9h-12h30 and 14h00-17h30 Monday to Thursday; 9h-12h30 and 14h00-18h30 Friday

Objectives: The course provides essential skills and knowledge that enable the participants to develop climate change adaptation strategies. Bringing together insights from atmospheric sciences, biology, hydrology, social science, environmental sciences, among others, this course allows participants to work with real climate data and tools to handle adaptation to climate change.

At the end of the course, participants will be able to:

- understand and manipulate climate scenario data
- assess vulnerability and adaptive capacity
- design stakeholders' engagement on adaptation
- identify and propose adaptation options
- understand the challenges and steps involved in climate adaptation planning

General plan: The course comprises 10 (morning or afternoon) blocks. Each block will consist of 1h of theoretical lecture, followed by 2h30 of practical applications. The course covers the development of

a climate change plan. It starts with methods of climate data collection, followed by vulnerability assessment methodologies. We'll then discuss the main expected impacts of climate change in a range of sectors, and build to specific responses to climate change adaptation. Finally the course will cover decision-making tools to support the definition of objectives and prioritizations of adaptation strategies.

Time table:

| | Morning | Afternoon |
|------------------|--|---|
| Monday | - Climate Change: basic concepts - Overview of adaptation planning processes - Selection of a case study | - Analysis of historical and future climate data |
| Tuesday | - Assessment of vulnerability to current and future climate | - Impact and risk assessment methodologies for different sectors (Part I) |
| Wednesday | - Impact and risk assessment methodologies for different sectors (Part II) | - Identification of adaptation options, strategies and measures |
| Thursday | - Quantitative and qualitative decision-support tools for evaluation | - Participatory planning and stakeholder engagement |
| Friday | - Oral presentation of participants' adaptation plans | - Challenges in climate adaptation planning and implementation |

This course can have a recognition of 6 ECTS for FCUL PhD students enrolling in it as part of their first doctoral year. These students need to deliver two reports after the course. For students only requiring 5 ECTS recognized in their specific PhD programmes the last 3.5 hours of the course are not mandatory, they need to deliver only the main report and the certificate will be on 'Topics in Climate Change Adaptation'. **Such report(s) are also advised for other students requesting creditation of the course in their institutions.**

Nº (min, max) students: 12 to 20

Minimal formation of students: Bachelor in Natural Sciences or Social Sciences with interest in climate change and other environmental issues.

Directed to: Professionals interested in adaptation planning processes, MSc, PhD students or post doc researchers in Environmental Sciences, Social Sciences or related sciences.

Fee: free for 1st year PhD students in Doctoral programmes at FCUL (e.g. Biología), Biodiversity, Genetics and Evolution (BIODIV FCUL/FCUP), Biology and Ecology of Global Changes (BEAG UL/UA) and Sustainability Science (UL), 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 1st year PhD

students enrolling in the programme Climate Change and Sustainable Development Policies (CCSDP, UL, Univ. Nova) and for more advanced PhD students of the BIODIV programme (ULisboa or UPorto); 50 € for other PhD students from cE3c, 80 € for PhD students from institutions of the PEERS network (CFE-Coimbra); 125 € for FCUL Master students and unemployed; 180 € for BTI, BI and other PhD students; 250 € 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: 1) cE3c students; 2) Climate Change and Sustainable Development Policies (not from cE3c); 3) BIODIV students (not from cE3c); 4) FCUL students (not from cE3c); 5) Sustainability Science (not from FCUL); 6) BEAG students (not from FCUL).

Deadline for applications: 21st April 2023

Candidates should send to Sílvia Carvalho (sccarvalho@fc.ul.pt) a short CV and motivation letter explaining why they 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 a Doctoral programme at FCUL (e.g. Biologia, Earth Systems), BIODIV (FCUL/FCUP), BEAG (FCUL or UA) or CCSDP?:

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)?:

Name of the PhD programme: