





## **CLIMATE CHANGE: SCENARIOS, IMPACTS AND RESPONSES**

**Lecturers:** Luís Dias (coordinator), Hugo Costa, David Avelar (CCIAM, cE3c)

Calendar: July 2<sup>nd</sup>-6<sup>th</sup> 2018

**Duration: 36 hours** 

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

## **Objectives:**

The goal of this short course is to introduce the students to the main climate change research concepts and prepare them to use available information on scenarios, impacts and adaptation. Specific goals include:

- i) Explore the current vulnerabilities in a range of sectors;
- ii) Study climate change scenarios (for local and national levels as well as for Europe and the World) and have an overview of projected changes and main expected impacts in different sectors;
- iii) Introduce vulnerability and risk assessment methodologies;
- iv) Study specific responses to climate change trough Adaptation (including Ecosystem-based Adaptation and Participatory approaches), looking at specific examples in a range of scales.

## **General Plan:**

- 1. Adaptation as a decision process: Motivations, objectives and processes;
- 2. Current climate impacts, risks and vulnerabilities: assessment methodologies in different sectors (e.g.: water resources, agriculture, biodiversity, energy, forests);
- 3. Climate system and climate change scenarios and projections;
- 4. Climate change impacts, risks and vulnerabilities: assessment methodologies in different sectors (e.g.: water resources, agriculture, biodiversity, energy, forests);
- 5. Adaptation solutions and prioritization (e.g.: Ecosystem-based adaptation, Scenario Workshop and Adaptation pathways, participatory cost-benefit analysis)
- 6. Integrating climate change adaptation into decision making: considering sustainable pathways;
- 7. Monitoring and evaluation of Adaptation

This course can have a 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 programmes, 6 hours of the course are not mandatory and the certificate will be on 'Topics in Climate Change: scenarios, impacts and responses'.

 $N^{\circ}$  (min, max) students: 10 - 20

**Minimal formation of students:** "Licenciatura" (bachelor) in environmental sciences or related areas.

**Directed to**: PhD or MSc students in Biology, Environmental studies, Geography or related areas, and postdocs and other professionals working in related topics.

Fee: free for 1st year PhD students in the Doctoral program in Biology (FCUL), 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; 25 € for PhD students from institutions of the PEERS network (cE3c, CFE); 125 € for FCUL Master students and unemployed; 180 € for BTI, BI and other PhD students; 250 € for professionals 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) BIODIV students (not from cE3c); 3) FCUL students (not from cE3c); 4) BEAG students (not from FCUL).

**Deadline for applications:** June 8<sup>th</sup>, 2018

Any doubts about the course should be addressed to Luís Dias (Ifdias@fc.ul.pt).

To apply send an e-mail to Ângela Antunes (amantunes@fc.ul.pt) with a cv, motivation letter and 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: