



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

**Lecturers:** Maria João Cruz and Elisabeth Robert (coordinators), Hugo Costa, Mário Pulquério, David Avelar, Luís Dias, Ana Gomes, Sílvia Carvalho (CCIAM, ce3c)

**Calendar:** July 13-17<sup>th</sup> 2015

**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) Study climate change and socio-economic scenarios and have an overview of what are the predictions for Portugal, Europe and the World;
- ii) Explore the main expected impacts of climate change in a range of sectors,
- iii) Explore direct and indirect impacts on biodiversity; introduction vulnerability assessment methodologies;
- iv) Study specific responses to climate change, namely Mitigation and Adaptation (including Ecosystem based Adaptation), looking at specific examples in a range of scales.

#### **General Plan:**

1. The climate system and climate change
2. Climate change and socioeconomic scenarios
3. Climate change impacts, risks and vulnerability: assessment methodologies; vulnerabilities in different sectors (e.g.: water resources, coastal areas, health; agriculture)
4. Climate change and Biodiversity: direct and indirect impacts
5. Vulnerability assessments for Biodiversity
6. Climate change and Forests

7. Adaptation: methods for preparing adaptation strategies at different scales (from local to national to European)
8. Ecosystem based adaptation
9. Mitigation: mitigation in practice at different scales (Europe, National, Local, businesses)
10. Integrating climate change adaptation and mitigation into decision making; looking into sustainable pathways
11. Adaptation and mitigation into practice

**This course can have a recognition of 6 ECTs for FCUL PhD students enrolling in it as part of their first doctoral year. For 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'.**

**Location:** Departamento de Biologia Animal (FCUL)

**Nº (min, max) students:** 10 – 20

**Minimum formation:** 'Licenciatura' (bachelor) in Biology or related area

**Fee:** free for 1st year PhD students in the Doctoral programme in Biology (FCUL), Biodiversity, Genetics and Evolution (UL; UP) and Biology and Ecology of Global Changes (UL, UA); 20 € for PhD students from institutions of the PEERS network (CBA, CFE, ABG); 100 € for FCUL Master students and unemployed; 150 € for BTI, BI and other PhD students; 200 € for Professional and postdocs.

**Deadline for applications:** June 19th, 2015

Candidates should send a short CV and motivation letter to Ângela Antunes (email - [amantunes@fc.ul.pt](mailto:amantunes@fc.ul.pt)).