



**Syllabus**  
**Plants and environment**  
**6 CFU**

Prof. Alessandro Travaglini, Prof. Daniel Klingefeld

The course is divided into two sections. The first section consists of classes held by doct. A. Travaglini (University of Rome – Tor Vergata); the second section is held as a seminar by doct. D. Klingefeld (PhD), Head of the Director's Staff at Potsdam Institute for Climate Impact Research (PIK).

**First Section**  
**(Doct. A. Travaglini)**

**Course Description**

Our planet is quickly changing, and our climate is also changing. In the last decades the human population has increased and so has its need for energy, food and space. Can plants help us? How? This course deals with the relationship between climate and plants, as well as the risk and the consequences due to climate change on vegetation and flora.

The course considers possible strategies and innovative methodologies and policies. It aims to provide students with a fundamental knowledge of the dynamics of biological life and its relationship with the human presence on earth.

Schedule of Topics: Climate on Earth, climate distribution on Earth: causes of distribution; tropical evergreen forest, tropical deciduous forest; temperate evergreen forest, mixed wood; boreal wood, grasslands and steppe; tundra, desert and barren land; climate change.

**Teaching Method**

The course is carried out through lectures and power point presentations. Students are required to prepare short presentations on different topics. Each presentation in class is followed by discussion. Possible field visit to a farm.

**Second Section**  
**(Doct. D. Klingefeld)**  
**Addressing the Challenge of Climate Change**

**Course Description**

The course begins with an outline of the science of climate change and climate impacts in relation to future emissions scenarios. Mitigation of climate change and adaptation to climate impacts are explored as key response strategies. An analysis of the political framework conditions on the international, European, and select national levels is complemented by a discussion of bottom-up initiatives of civil society to confine climate change and its impacts.

### **Teaching Method**

The topic space is explored in a lecture format on 4-5 April. At the end of day 2 of the lecture, students form teams of 4-5 people to work on an in-depth analysis of a question covering one of the topics presented. The results will be presented and discussed in class on 18-19 April and a written report turned in by each team.

Each student is expected to write about 1.200-1.500 words and individual contributions should be specified.

### **General Assessment**

The final mark takes into consideration the mark assigned for the first section and the mark assigned for the second section.

*First section evaluation:* Written mid-term exams (1 or 2) and written final exam are considered. Each written exam consists of some multiple choice questions and one or two open questions. The final evaluation is the average of the different marks obtained in the tests.

*Second section evaluation:* Grading is based on 50% for the group presentation and 50% as an individual mark for the personal contribution to the report.

### **Office hours**

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Monday 4 PM-5: 30 PM

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Daniel Klingenfled will receive students after class.

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