# PhD in Energy and Sustainable Development Cycle XXXV

## Structured educational offer program Coordinator: prof. Franco Cotana

The didactic activities offered by the course will be agreed by the student with the reference tutor taking into account the research topic related to each personalized curriculum.

## **Lecturer: Prof. Adriano Ciani**

N. hours: 4 - 2 ECTS

26/11/2019, time: 10:00-12:00

1- Origin and evolution of the Sustainable Development Model;

03/12/2019, time: 10:00-12:00

2- The Sustainable Development Goals of Agenda 2030 towards the Green New Deal;

## Lecturers: Dr. Guido Lombardo and Dr. Stefano Pagano

N. hours: 8 - 4 ECTS

Social and health effects of the energy availability and thermo-hygrometric comfort conditions

Period:

17/12/2019, time: 9:00 - 13:00

07/01/2020, time: 9:00 - 13:00

## **Lecturer: Dr. Gianluca Cavalaglio**

Green chemistry applications for bioenergy and bioproducts plants

N. hours: 16 - 8 ECTS

Period:

28/01/2020, time: 9:30-13:30

04/02/2020, time: 9:30-13:30

11/02/2020, time: 9:30-13:30

18/02/2020, time: 9:30-13:30

## **Lecturer: Dr. Luca Fondacci**

N. hours: 12 - 6 ECTS

Sustainable urban and industrial regeneration

Period to be defined

## **Lecturer: Dr. Valentina Coccia**

Evaluation and measurement of odor emissions into the atmosphere by means of dynamic olfactometry with a panel of human receptors

N. hours: 16 - 8 ECTS

Period:

05/03/2020, time: 14:30-17:30

12/03/2020, time: 14:30-17:30

19/03/2020, time: 14:30-17:30

26/03/2020, time: 14:30-17:30

02/04/2020, time: 14:30-18:30

## **Lecturer: Dr. David Rotteghen (IPPC Commission)**

Analysis of the regulatory framework on waste

N. hours: 4 - 2 ECTS

Period:

16/04/2020, time: 09:00 - 13:00

## **Lecturer: Dott. Michele Zinzi (ENEA-DTE-SEN)**

Performance and properties of advanced glazing systems for building applications

N. hours: 4 - 2 ECTS

Period: 11-15 May 2020

## **Lecturer: prof. Andrea Borgia**

N. hours: 12 - 3 ECTS

Polyphasic, polycomponent, thermal modeling of flow in porous and fractured media with application to geothermal fields

Period:

25/05/2020, time: 11:00-13:00 14:00 16:00

26/05/2020, time: 11:00-13:00 14:00 16:00

27/05/2020, time: 11:00-13:00 14:00 16:00

## Lecturer: Dr. Alessandro Petrozzi

Renewable energy plant: case study and regulation

N. hours: 12 - 6 ECTS

Period:

09/06/2020, time: 15:30-19:30

11/06/2020, time: 15:30-19:30

13/06/2020, time: 15:30-19:30

#### INTERNATIONAL STRUCTURED TEACHING

Workshops will be organized with foreign members of our PhD Board:

<u>Prof. Shuji Nakamura</u>, Japanese naturalized-American scientist, professor at the University of California, Santa Barbara (Nobel Prize in Physics 2014, together with Isamu Akasaki and Hiroshi Amano, for the invention of efficient blue light diodes that allowed to obtain brilliant energy-saving white light sources) (spring 2020)

<u>Prof. Elie Bou Zeid</u>, Full Professor of Civil and Environmental Engineering at Princeton University, Director of the Curriculum in Environmental Engineering and Water Resources (fall 2020)

<u>Prof.ssa Luisa Cabeza</u>, Full Professor of energy systems and director of the GREIA Research Center on Energy, the Environment and Artificial Intelligence. Universitat de Lleida (fall 2020)

<u>Prof. Mattheos Santamouris</u>, Full Professor of Internationally Recognized Merit at the University of New South Wales in Sydney (fall 2020)

Prof. Andrea Baccarelli (summer 2020)

Further seminars will also be organized with visiting foreign professors as part of international exchange programs at the University of Perugia:

<u>Dott.ssa Kelen Almeida Dornelles</u>, Università San Paolo, Brazil (CAPES program funded by the MEC "Ministério da Educação")

#### **OTHER EDUCATIONAL OFFERS**

The PhD Course offers doctoral students the opportunity to participate in foreign language courses held at the University Linguistic Center (CLA).

The Course offers PhD students the opportunity to participate in computer labs already offered in other University degree courses.

The PhD Program offers the possibility to participate in courses, which provide for the recognition of ECTS credits on the basis of the number of hours provided, on the research management, the knowledge of research systems and funding systems.

The PhD Program offers the opportunity to participate in courses, which provide for the recognition of ECTS credits based on the number of hours provided, on the enhancement of research and intellectual property.

In the case of specific interest in these activities, the methods must be agreed with the reference tutor.