



DEPARTMENT OF EARTH AND ENVIRONMENTAL SCIENCES

THE ANTHROPOCENE: A NEW EPOCH FOR THE EARTH, A NEW CHALLENGE FOR HUMANITY

**DATES**

Oct 11 - 16, 2021

**CREDITS**

3 ECTS

**TUITION**

€ 350

THE REGISTRATION FEE INCLUDES ALL THE SUMMER SCHOOL ACTIVITIES, SOCIAL DINNER, LUNCHEAS AND COFFEE BREAKS. IT DOES NOT INCLUDE TRANSPORT COSTS TO REACH LAMPEDUSA, ACCOMMODATION, HEALTH INSURANCE FOR NON-EU PARTICIPANTS, ANY ADDENDUM IN THE HOTEL. DISCOUNTED FEE ONLY FOR UNIMIB STUDENTS € 150 (MAX. 5 PLACES AVAILABLE)

**APPLICATION DEADLINE**

10 Aug 2021

**LOCATION**

LAMPEDUSA

**CONTACT**

andrea.franzetti@unimib.it

A TRANSDISCIPLINARY APPROACH TO THE THEORETICAL AND PRACTICAL ASPECTS OF SUSTAINABILITY

**PROGRAM DESCRIPTION**

The **Anthropocene** is a new geological Epoch, marked by an indelible human footprint. Human activities alter climate regulation, biogeochemical cycles, biodiversity, geomorphology, habitats and landscapes. The new phase of the Earth system requires that humanity becomes aware of facing a new challenge, in which it is necessary to integrate geological and ecological knowledge with social, economic and political knowledge. Although some of the questions related to the Anthropocene are still open, the topic is already the subject of specific scientific journals and university courses. The study of the Anthropocene, in fact, requires transdisciplinarity. Lessons from the past allow us to identify similarities and differences in the present age. Observing the different subsystems of the Earth allows us to understand the complexity of the problems and at the same time to identify solutions that can be effective. This course aims to offer a **complete view of the Anthropocene, and to provide participants with the unique opportunity to interact within a team of experts and participants from different cultural backgrounds.** The Summer School will take place in the buildings of the **Marine Protected Area of the Pelagie Islands on the island of Lampedusa (Italy).** Carrying out the school here will allow to bring the contents of the course in an evocative and coherent location, also providing the possibility of visits of great interest.

PREREQUISITES

The course is aimed at doctoral students and young researchers with scientific training interested in studying the themes of the Anthropocene.

All candidates will be selected on the basis of the relevance of their doctoral project with the contents and multidisciplinary nature of the course, also considering the need to ensure equal representation of gender and nationality. Discounted fees for UNIMIB students are only available for 5 places selected by the scientific committee.

HOW TO ENROLL

YOU ARE REQUIRED TO ENROLL THROUGH THE ONLINE APPLICATION FORM. EVERY PROGRAM ON [HTTP://WWW.SUMMERSCHOOLBICOCCA.COM](http://www.summerschoolbicocca.com) HAS AN **APPLY NOW** SECTION IN ORDER TO ACCESS TO THE APPLICATION. AFTER RECEIVING THE SELECTION NOTIFICATION, YOU WOULD BE REQUIRED TO PAY THE COURSE TUITION FEE WITHIN A SPECIFIED PERIOD. PLEASE FOLLOW THE SECTION **FEES & PAYMENT** ON OUR SUMMER SCHOOL WEBSITE FOR UNDERSTANDING THE PAYMENT OPTIONS.

TOPICS AND TEACHING METHODS

The topics of the lectures and seminars will be:

- Historical perspective of the Anthropocene;
- Impact of the Anthropocene;
- Sustainable use of resources and productions;
- Environmental restoration and reclamation;

TWO-HOUR LECTURES BY INTERNATIONAL EXPERTS (KEY LECTURES); 45-60 MINUTE SEMINAR LESSONS BY PROFESSOR OF THE UNIVERSITY OF MILANO BICOCCA, UNIVERSITY OF PALERMO AND OTHER INTERNATIONAL INSTITUTIONS; TEAMWORK; EDUCATIONAL VISIT TO THE MARINE PROTECTED AREA OF THE PELAGIE ISLANDS.

IN COLLABORATION WITH:



UNIVERSITÀ
DEGLI STUDI
DI PALERMO

ENDORSED BY



S.It.E. - Società Italiana di Ecologia

WEB-SITE

<https://summerschoolbicocca.com/21-anthropocene.php>





TEAMWORK ACTIVITY

In the modern times the climate is rapidly changing due to anthropo-pressure and as well natural factors. Nowadays, more than ever, societies needs to take action toward limitation of human impact into climate and environment. We are living the time when action is need, however a lot of people and organization is asking what and how we can do? One of the most modern answer for this question is using and thinking according the idea of system innovation.

The idea of **system innovation** has been widely diffused in academia and business to refer to major transformation in national and regional economies through technological breakthroughs, reorganizations of industries and the implications of a globalized economy. In the field of climate change, this concept has been deeply applied through the study of sociotechnical transition by a number of expert organizations.

During the summer school we would like to implement chosen tools from the idea of system innovation for scientific use and planning research projects.

During the summer school we are going to use following System Innovation tools:

Visioning and Backcasting

It is a method that allows thinking about scientific project from a wider perspective – thinking about how it can be implemented in practice in the future as well as about all the steps that are required to finalize it. It helps to create an attractive but also a realistic vision of the research project.

Elements of visualizations and visual storytelling The workshop will include selected ways of introducing visualization in presentations to increase their attractiveness and clarity.

Analysis of expectations Another topic would be ways of adjusting the presentation to the target audience. How to determine the expectations of the potential audience and how to fine-tune it to fulfill them.

Requirements for participants:

- Every participant will have to prepare a 3-minute presentation about himself/herself and his/her research project/interests. Its first version would be presented on the first day of the workshop and the last day of the summer school.

Before the school, participants are warmly invited to individually take a short on-line introduction to System Innovation.

Prof. Edyta Zawisza and Prof. Barbara Leoni



DETAILED PROGRAM

Monday 11/10/2021

9.00 - 13.00 Welcome to the participants

14.00 - 15.00 Registration

15.30 - 17.00 Poster session

20.00 - 22.00 Social Dinner

Tuesday 12/10/2021 – TOPIC: HISTORICAL PERSPECTIVE OF ANTHROPOCENE

9.00 - 11.00 Key lecture: Speaker to be confirmed – “The History of the Earth”

11.00 - 11.30 Coffee Break

11.30 - 12.30 Seminar: Emilio Padoa-Schioppa (University of Milano Bicocca) – “The epoch of environmental surprises”

12.30 - 14.00 Lunch

14.00 - 15.00 Seminar: Elisa Malinverno (University of Milano Bicocca) – “Seminar on paleo-climatology”

15.00 - 15.30 Coffee Break

15.30 - 16.30 Seminar: Stefano Malatesta (Università di Milano Bicocca) – “Human geography of small islands: the challenges of the Anthropocene”

16.30 - 17.30 Edyta Zawisza (Climate-Kic Poland) – “Introduction to teamwork and software”

Wednesday 13/10/2021 – TOPIC: THE IMPACT OF ANTHROPOCENE

9.00 - 11.00 Key lecture: Speaker to be confirmed – “The Limits of the Earth”

11.00 - 11.30 Coffee Break

11.30 - 12.30 Seminar: Tommaso La Mantia (Università di Palermo) – “Anthropogenic impact and climate change in the Mediterranean area: the case of the Pelagie islands”

12.30 - 14.00 Lunch

14.00 - 14.45 Seminar: Giovanni Zambon (University of Milano Bicocca) – “Eco-Acoustic indicators for the characterization and the evaluation of environmental quality”

14.45 - 15.30 Seminar: Luca Zoia (University of Milano Bicocca) – “Impact of climate change on biogeochemical cycles”

15.30 - 16.00 Coffee Break

16.00 - 18.00 Teamwork

Thursday 14/10/2021 – TOPIC: SUSTAINABLE USE OF RESOURCES AND PRODUCTIONS

9.00 - 11.00 Pfister Stephan (ETH Zurich, Switzerland) – “Life Cycle Assessment”

11.00 - 11.30 Coffee Break

11.30 - 12.15 Seminar: Ioannis Vogiatzakis (University of Milano Bicocca) – “Ecosystem Services a new path to Sustainability”

12.15 - 13.00 Seminar: Heiko Lange (University of Milano Bicocca) – “How to turn chemistry sustainable”

13.00 - 14.00 Lunch

14.00 - 18.00 Visit: “The change of the landscape in Lampedusa and the actions to contrast desertification” (Tommaso La Mantia, Emilio Padoa Schioppa)

Friday 15/10/2021 – TOPIC: ENVIRONMENTAL RESTORATION AND RECLAMATION

9.00 - 11.00 Key lecture: Speaker to be confirmed – “Microbial mitigation of climate change”

11.00 - 11.30 Coffee Break

11.30 - 12.30 Seminar: Paola Quatrini (University of Palermo, IT) – “Climate change adaptation and mitigation: the LIFE Desert-Adapt project”

12.30 - 14.00 Lunch

14.00 - 16.00 Teamwork

16.00 - 16.30 Coffee Break

16.30 - 18.30 Teamwork: “Project presentations”

Saturday 16/10/2021

8.30 - 9.30 Final Discussion and Networking

REGISTER TO: www.summerschoolbicocca.com
