Sustainability concepts and SDGs

Professor: Silvia Ayuso
Office hours: by appointment
Course Type: Compulsory
Credits: 3 ECTS
Term: First

Course Description

Sustainability concepts and SDGs introduces the concept of sustainability and its roots, history and definitions. Throughout history, various civilizations have disappeared for not being sustainable. Since the industrial revolution,with the intensification of the use of resources, this problem has become more evidentand currently humanity faces several environmental and social challenges. Different perspectives have been developed to describe, frame and communicate environmental, social and economic aspects of sustainability.

In this course students will learn about the origin and meaning of the basic concepts related to sustainability, global policies developed to advance towards sustainability such as the Sustainable Development Goals (SDGs) of United Nations and alternative visions and frameworks to address current challenges of unsustainability.

The course in the study plan

This **compulsory** course belongs to the subject of **Fundamentals of Sustainability** of the study plan. It takes place in the **first quarter**.

Learning Objectives

At the end of the course, students should:

- Know the basic sustainability notions and concepts and distinguish between different perspectives of environmental, social and economic sustainability
- Understand new emerging models and frameworks to describe, understand and address key sustainability challenges
- Identify and discuss the practical and moral issues around unsustainability
- Critically reflect on the policies directed to promote sustainable development,

including the current SDGs

Related SDG

SDG 1: No Poverty
SDG 2: Zero Hunger
SDG 3: Good Health and Well-being
SDG 4: Quality Education
SDG 5: Gender Equality
SDG 6: Clean Water and Sanitation
SDG 7: Affordable and Clean Energy
SDG 8: Decent Work and Economic Growth
SDG 9: Industry, Innovation and Infrastructure
SDG 10: Reduce Inequalities
SDG 11: Sustainable Cities and Communities
SDG 12: Responsible Consumption and Production
SDG 13: Climate Action
SDG 14: Life below Water
SDG 15: Life on Land
SDG 16: Peace, Justice and Strong Institutions
SDG 17: Partnerships for the Goals

2. COURSE LEARNING PLAN

Methodology

The course comprises eight 3-hour sessions, which combine theory lecturing with students' active participation in different planned in-class activities: debates, simulation games, presentations, etc. Activities will entail both individual and group work and will require also autonomous work outside the classroom for readings and homework assignments.

Specifically, students will be given an exercise to do at home (analysis of a country's sustainability performance) and in groups of two will have to prepare and do a short presentation on one specific Sustainable Development Goal in class.

Hours devoted by the student (according to ECTS) **75**

Evaluation criteria

Four elements concur in the final mark:

- **Final exam (40%):** the final exam is used to assess the individual level of knowledge and understanding of each student. It will include questions covering topics from all the classes. This item counts for 40% of the final mark. To pass the exam the minimum grade is 5.
- **Group assignment (20%):** In pairs of two, students will have to prepare and give a short presentation on one specific Sustainable Development Goal and lead the subsequent discussion in class.
- **Individual assignment (20%):** Students will have to do an essay analyzing a country's' sustainability performance with data available on an interactive website.
- **Class attendance and active participation (20%):** Class attendance is compulsory and will be considered for the final grade, as well as punctuality. Active participation in class entails meaningful participation in the proposed class activities and submission of the optional post-lesson reflections.

Other evaluation criteria to take into consideration:

Retake

Students who fail the course during regular evaluation will be allowed ONE re-take of the examination/evaluation. Students that pass any Retake exam should get a 5 by

default as a final grade for the course. If the course is again failed after the retake, students will have to register again for the course the following year.

No-show

In case of a justified no-show to an exam, the student must inform the corresponding faculty member and the director(s) of the program so that they study the possibility of rescheduling the exam (one possibility being during the "Retake" period). In the meantime, the student will get an "incomplete", which will be replaced by the actual grade after the final exam is taken. The "incomplete" will not be reflected on the student's Academic Transcript.

Plagiarism

Plagiarism is to use another's work and to present it as one's own without acknowledging the sources in the correct way. All essays, reports or projects handed in by a student must be original work completed by the student. By enrolling at any UPF BSM Master of Science and signing the "Honor Code," students acknowledge that they understand the schools' policy on plagiarism and certify that all course assignments will be their own work, except where indicated by correct referencing. Failing to do so may result in automatic expulsion from the program.

Calendar and contents

The schedule of topics covered in class and the related activities is the following:

Session 1

Introduction to the course

Concept of sustainability: roots, history and definitions

From the Millennium Development Goals to the Sustainable Development Goals

In-class activity:

Identifying problems of unsustainability and interconnections

Session 2

Human impacts on nature: Anthropocene and planetary boundaries

In-class activity:

Simulation game (About that Forest)

Session 3

Ethics of sustainability: fairness and equity

In-class activity:

Debate on limitarianism

Session 4

Doughnut Economics and alternative economic models

Critical perspectives on sustainable development (guest speaker)

Session 5

Policy responses to environmental challenges

In-class activity:

Students' presentations SDGs 1-4

Session 6

Policy responses to social challenges

In-class activity:

Students' presentations SDGs 5-8

Session 7

Guest speaker from the Advisory Council for the Sustainable Development of Catalonia

In-class activity:

Students' presentations SDGs 9-12

Session 8

Reflections on transformative change

Concluding remarks of the course

In-class activity:

Students' presentations SDGs 13-16

3. PROFESSOR

Silvia Ayuso is a lecturer and researcher in the field of sustainability management and the academic director of the MANGO Chair in Corporate Social Responsibility of ESCI-UPF. Prior to joining academia, she has worked as an environmental consultant and environmental management systems auditor (ISO 14001).

Silvia graduated in Environmental Engineering from Technical University of Berlin and holds a PhD in Environmental Sciences from Autonomous University of Barcelona. Her main research areas are sustainability assessment, social accounting and corporate social responsibility.

4. READING MATERIALS/ BIBLIOGRAPHY/RESOURCES

No textbook is required for this course. All the required material will be provided. Any readings, notes, handouts, dataset, or additional course material will be available through the course website.

At the end of each session, compulsory reading materials will be communicated, and a list of further reading recommendations will be provided.