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# Concepts of sustainability, circular economy and the SDGs

Professor: Silvia Ayuso

Office hours: by appointment

Course Type: Compulsory

Credits: 3 ECTS

Term: First

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## Course Description

Sustainability concepts and the SDGs is a first-term compulsory course in the MSc in Sustainability Management. It introduces the notion of sustainability, definitions, scope, trajectory and global policies on sustainable development. 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 evident and various policies have been put in place to meet this challenge. A whole conceptual framework and a specific vocabulary have been developed, the latest driving forces of which are the circular economy and the Sustainable Development Goals (SDGs). In this course students will learn about the origin and meaning of the basic concepts related to sustainability and the different public policies historically developed to advance towards sustainability.

## Objectives (resultados de aprendizaje) and competences

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 (like circular economy, doughnut economics, economy for the common good, etc.)
- Identify and discuss the practical and moral issues around unsustainability
- Critically reflect on the policies directed to promote sustainable development, including the current SDGs

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### Methodology

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

In particular, students will be assigned to a group project that will consist in preparing and giving a short "lecture" on an alternative economic model and leading the subsequent discussion in class.

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

#### **Week 1: 19 October 2022**

Introduction to the course

Concept of sustainability: roots, history and definitions

##### *In-class activity:*

Sustainability Literacy Test (Sulitest)

#### **Week 2: 26 October 2022**

Human impacts on nature: Anthropocene and planetary boundaries

##### *In-class activity:*

Simulation game (About that Forest)

#### **Week 3: 2 November 2022**

Ethics of sustainability: wealth, poverty, and inequality

##### *In-class activity:*

Simulation game (Ultimatum game)

#### **Week 4: 9 November 2022**

Doughnut Economics and alternative economic models

##### *In-class activity:*

Analysis and comparison of countries' performance relative to the Doughnut of social and planetary boundaries

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### Week 5: 16 November 2022

Policy responses to environmental challenges

In-class activity:

Students' presentation about alternative economic models I

### Week 6: 23 November 2022

Policy responses to social challenges

In-class activity:

Students' presentation about alternative economic models II

### Week 7: 30 November 2022

From the Millennium Development Goals to the Sustainable Development Goals

In-class activity:

Students' presentation about alternative economic models III

### Week 8: 14 December 2022

Invited speaker: Arnau Queralt, Director of the Advisory Council for the Sustainable Development of Catalonia (Consell Assessor per al Desenvolupament Sostenible de Catalunya, CADS)

In-class activity:

Students' presentation about alternative economic models IV

## Evaluation criteria

Three 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.
- **Project and presentation (40%):** Students will be in charge of giving a short "lecture" on an alternative economic model and leading the subsequent discussion (in groups).
- **Class attendance and active participation (20%):** Attendance in every session is expected and recorded by means of an attendance sheet. It is your responsibility to comply with this measure. Class attendance is compulsory and

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will be considered in your final grades; punctuality is a must. Note that unexcused absences reduce your score on the "attendance and participation" element of your final grade. In fact, two or more unexcused absences will result in an automatic score of zero and, in all likelihood, a fail mark for the course as a whole. Active participation in class entails participation in the proposed class activities and (written) 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.

## Bio of 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

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main research areas are sustainability assessment, social accounting and corporate social responsibility.

### 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.