

Course guide

480USE018 - 480USE018 - Cooperation for Equitable Development

Last modified: 16/06/2026

Unit in charge: Barcelona School of Civil Engineering
Teaching unit: 710 - EEL - Department of Electronic Engineering.
 751 - DECA - Department of Civil and Environmental Engineering.

Degree: MASTER'S DEGREE IN SUSTAINABILITY AND STRATEGIES FOR A JUST GLOBAL TRANSITION (Syllabus 2026). (Optional subject).

Academic year: 2026 **ECTS Credits:** 5.0 **Languages:** Spanish, English

LECTURER

Coordinating lecturer: Vidal Lopez, Eva Maria

Others: Vidal Lopez, Eva Maria
 Etxeberria Larrañaga, Miren

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

At the end of the course, the student will be able to:

- Analyze the historical, territorial and gender causes that determine global inequality and structural poverty.
- Evaluate the consequences of climate change and defend proposals from the perspective of climate justice.
- Differentiate cooperation models and learn methodologies to measure the impact and transparency of projects.
- Implement ICTs as development tools promoting technological sovereignty.
- Identify the role of construction in economic development and propose popular housing policies.
- Select local eco-materials and sustainable technologies to design economic and earthquake-resistant constructions.

STUDY LOAD

Type	Hours	Percentage
Hours medium group	11,4	9.11
Hours small group	11,0	8.79
Hours large group	22,7	18.15
Self study	80,0	63.95

Total learning time: 125.1 h

CONTENTS

SUBJECT 1: The Atlas of Inequality: Causes and Context

Description:

content english

Full-or-part-time: 12h

Theory classes: 4h

Guided activities: 1h

Self study : 7h

Topic 2: Measuring territorial inequality

Description:

Statistical tools to quantify the gap between rich and poor are examined, going beyond GDP to include the Human Development Index (HDI) and multidimensional poverty. It will analyze how inequality is not only between states, but is growing alarmingly within cities themselves (urban-rural gap).

Related activities:

Intraterritorial inequality mapping

Full-or-part-time: 8h

Theory classes: 2h

Guided activities: 1h

Self study : 5h

3: Intersectionality: Gender and Minorities.

Description:

The gender component as an axis of inequality and the vulnerability of minorities in development.

Related activities:

Brainstorming: "Invisible Barriers".

Full-or-part-time: 10h

Theory classes: 2h

Guided activities: 1h

Self study : 7h

4. Sustainability and just global transition.

Description:

The inseparable link between environmental degradation and poverty is explored, emphasizing how those who have contributed least to climate change suffer the most from its consequences. The concept of "Climate Justice" and the ecological debt that industrialized countries have to the rest of the world will be discussed.

Full-or-part-time: 12h

Theory classes: 4h

Guided activities: 1h

Self study : 7h

5. Cooperation: Models and Instruments.

Description:

Different ways of intervening on the ground are reviewed, from emergency humanitarian aid to long-term development cooperation. The different actors (states, NGOs and universities) will be analyzed and how their tools have evolved towards the empowerment of local communities.

Related activities:

Related activities: Research for examples of actions with positive and negative results

Full-or-part-time: 10h

Theory classes: 2h

Guided activities: 1h

Self study : 7h

Topic 6: Evaluation and Results of Cooperation

Description:

Different methodologies are studied to measure whether or not projects really change people's lives. Emphasis will be placed on transparency, monitoring of funds and the importance of collecting direct feedback from beneficiary communities.

Related activities:

Analysis of real cases of positive projects and "white elephants"

Full-or-part-time: 10h

Theory classes: 2h

Guided activities: 1h

Self study : 7h

7: ICT as a tool for Cooperation

Description:

The potential of technology to "skip" stages of development, such as the use of mobile phones for telemedicine or education in remote areas. It will analyze what it means to bring the internet to places without previous infrastructure and how digital tools can close historical gaps.

Related activities:

Analysis of the implications of the digital divide.

Full-or-part-time: 10h

Theory classes: 4h

Guided activities: 1h

Self study : 5h

8: ICT Sustainability and Sovereignty.

Description:

Reflection on the dark side of digitalization: data colonialism, planned obsolescence and the flow of e-waste to the Global South. It will study how to promote a technology that is sovereign, ethical and does not turn poor countries into dumping grounds for the North.

Related activities:

Discussion on the right to repair and the use of free software in cooperation projects as a tool for technological independence.

Full-or-part-time: 10h

Theory classes: 2h

Guided activities: 1h

Self study : 7h

9: Construction in the countries of the South

Description:

Construction in development programs. Analysis of the implication of construction in economic development. Housing construction policies in urban and rural areas. Characteristics of construction projects

Full-or-part-time: 10h

Theory classes: 2h

Guided activities: 1h

Self study : 7h

10: Construction with sustainable and economic technologies

Description:

Description of alternative products and technologies for the construction of popular housing using solutions characterized by: reducing the consumption of materials and energy in the production process, use of local or national resources, allowing self-construction, decentralizing production, etc.

Full-or-part-time: 11h 30m

Theory classes: 3h 30m

Guided activities: 1h

Self study : 7h

11: Construction materials. Eco-materials.

Description:

We will work with construction materials used in southern countries: stone, wood, bamboo, cement materials (mortars, concrete, ferrocement), earth (tapial and BTC), ceramics. The use of recycled aggregates and industrial by-products in the manufacture of new sustainable materials will be described.

Full-or-part-time: 11h 30m

Theory classes: 3h 30m

Guided activities: 1h

Self study : 7h



12. Earthquake-resistant constructions. Building and infrastructures

Description:

It is proposed to carry out a construction with different materials. It will be necessary to carry out an assessment of the life cycle of the construction according to the use of different technologies and materials.

Full-or-part-time: 10h

Theory classes: 2h

Guided activities: 1h

Self study : 7h

GRADING SYSTEM

RESOURCES

Other resources:

The professor will provide the required bibliography at the beginning of the course.