TEACHING GUIDE - 2026-2027

Global Environmental Challenges & the Business Response

UGRA_000680

Departments	Department of Society, Politics and Sustainability, Dept. of Operations, Innovation & Data Sciences, Operations, Innovation and Technology Management (OITM)
Teaching Languages	English
ECTS	4
Teacher responsible	Rafael Sardá Borroy - rafael.sarda@esade.edu

Course Goals

The main aim of this course is to provide students with up-to-date knowledge, skills and capabilities to understand the new concept of Corporate Sustainability and its present tendency in a world in which humanity is facing huge Global Environmental Challenges. The course will show how Businesses are responding these days to strategically address these major issues by creating sustainable value. Different specific objectives would be:

a) facilitating knowledge development in a topic that is becoming highly strategic today for firms, the interdependence between business and the environment, and the development of the Corporate Sustainability concept of the 21st Century,
b) framing the development of a new language in business linked to the environmental variable,
c) introducing the framework "Business In Nature" with its pre-conditions and its two main frameworks: corporate sustainability strategies and rethinking of the company value chain and,
c) knowing how firms are creating sustainable value and developing responsible social-ecological values these days.

Previous knowledge

No previous knowledge rather than the normal management degree courses are required.

Prerequisits

The course has been designed to provide skills and competencies for future leaders to address the necessities of today's business in balancing economic development with environmental protection, a priority for mankind, and, decoupling economic growth from environmental impact, its mandatory requirement. The course does not need previous basic knowledge rather than the previous general courses of the program.

Teaching methodology

This course offers the opportunity to work with all these topics through teaching materials, case studies and a group project, individually and as a team member. Global Environmental Challenges and the Business Response is aimed to develop in our students not only the ability but also the necessary skills to be able to manage environmental issues in the firm by creating adequate corporate added value.

The course follows a recent Routledge book (Taylor & Francis Publ.) "Corporate Sustainability in the 21st Century: increasing the resilience of social-ecological systems" (Sardá & Pogutz, 2019). You will have a copy of this book during the course by having access to it for one entire year with possibilities to download some pieces of the text. In this book, we are introducing and discussing a new conceptual framework for Corporate Sustainability "Business In Nature", a concept that should guide business towards an extended rethinking of the corporate value chain with the ultimate goals to have a positive impact for business and society and to increase the resilience of social-ecological systems.

The course consists of a combination of interactive lectures, case discussions and other materials. During each session, the case studies will serve as the basis for the discussion of the main topics outlined in the file's handout each day. The course consists of a combination of interactive lectures, case discussions, and other materials. You are asked to read the material prepared for every class before attending (reading material and case studies); reflect on these readings and proactively look for additional material. During each session, the case studies and lectures will serve as the basis for the discussion of the main topics outlined in the files handout each week. In addition, for some of the case studies, students will be asked to develop small (less than a page) essays that will respond to assigned questions. A final individual essay will be asked at the end of the course for its conclusion

Description

Course contribution to program

The course contributed to the student's education by:

a) introducing the students to the Corporate Sustainability concept of the 21st Century,
b) framing the development of a new language in a business linked to the environmental variable and the used business tools
c) showing students how to address major global environmental challenges,
d) developing sustainable and responsible social-ecological values in your career formation, and
e) promoting teamwork.

Short description

The bio-physical functionality of the planet is becoming more and more unpredictable. Many evidences demonstrate that human activity, predominantly the global economic system, has become an accelerated driver of change in the Earth since the Industrial Revolution, and it is having a significant impact on influencing Earth's natural processes. Today, balancing economic development with environmental protection must be a priority for mankind. If we need to manage the consequences of a new era in Earth dynamics, highly unpredictable, sustainability frameworks in the 21st Century should be targeted differently from what we initially did.

During the last decades, despite the efforts that companies have put in “greening” their operations, their overall ecological footprint has increased, with a corresponding growth in the human ecological footprint on the planet crossing several planetary boundaries. To develop solutions, two key questions need to be addressed without delay:

- To what extent are current environmental management practices compatible with ecological sustainability?
- To what extent do we need to reduce our footprint and take care of our dependence on nature in line with the maintenance of ecological integrity and its resilience?
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There are no clear answers to these questions. We must rethink the way we are doing business, while contributing in a positive manner to society without damaging our Natural Capital. Basically, we need to develop a different method to drive our gigantic production and consumption “machinery” so that it ensures the resilience of social-ecological systems in an acceptable, functional manner. Whatever new economic growth we pursue for the future, it will need to be Green- or Blue- growth.

Then, addressing the global environmental crisis and its associated challenges implies incorporating nature into decision-making. Not only humans but also business organizations are nested in social-ecological systems, exercising pressure on natural capital and depending on ecosystem services. In order to deal with these complex challenges that cross spatial and temporal scales, a multidisciplinary approach between modern ecology, policy and business is required. We propose the concept of Business In Nature (BInN businesses) to capture these interdependences, analyzing and discussing the managerial implications. A sustainable organization today must integrate a novel strategic approach that acknowledges the pressure-dependence framework transforming products, supply chains, and business models. Managing companies within nature boundaries drives value creation processes through the reduction of risks and the generation of new business opportunities. Business In Nature offers a new paradigm to deal with the global environmental challenge of our current epoch.

Transferring new concepts and jargon into the above perspective, the course evolves on two conceptual frameworks. The course introduces the most pressuring risks humanity is facing these days and it redefines a set of corporate sustainable strategies that companies can develop to manage environmental issues in practice and create positive sustainable added value. On the other side, the course acknowledges the notion of corporate extended responsibilities and the transformation of organizational and operational boundaries framing four basic approaches that can guide managers in rethinking the corporate value change: increasing the eco-efficiency and eco-effectiveness of productive units; making supply chains more sustainable; designing new sustainable product and services and; moving into sustainable business models and collaborative schemes.

Bibliography

Rafael Sardá and Stefano Pogutz, Corporate Sustainability in the 21st Century: increasing the resilience of social-ecological systems, Routledge, 9781138744653 (Book)

Activities

Group presentations
A couple of group presentations and a group project will be carried out during the course

Presentations
Ten interactive sessions

Case study analyses
In preparation for the cases, you will be asking to answer small assigned questions (1 tweet, just 140 characters without spaces) and to upload your file into the assignments sites in the learning area

Content

#	Topic
1	SESSION 1: WELCOME TO THE ANTHROPOCENE The new era of the Anthropocene. We depart from scientific evidence of the environmental crisis based on new knowledge taken from global ecology and natural sciences and we review warnings, global assessments, and calls for action from the United Nations organization. The session provides the basis for understanding why companies need to go beyond the triple bottom-line approach and adopt transformative changes to address the social-ecological crisis they find their selves in. 1.1.- Welcome to the Anthropocene 1.2.- The Planetary Boundaries framework 1.3.- Social-Ecological Systems: an accounting framework 1.4.- Governance for the Planet; a life dignity for all and the SDGs
2	SESSION 2: THE CORPORATE RESPONSE: "BUSINESS IN NATURE" We will introduce the final demands for Corporate Sustainability in the 21st Century by introducing the “Business IN Nature” concept, and two conceptual frameworks for its analysis: a) we will review the main

#	Topic
2	corporate strategies to address environmental issues through the use of a framework that it will be employed during the rest of the course, and b) we will also explain the different possibilities for rethinking the corporate value chain. Finally, we will see what are those drivers for engagement. Why do companies engage? 2.1.- Corporate Sustainability: the evolution of the concept 2.2.- Corporate Sustainability 3.0: the “Business In Nature” concept 2.3.- Why do companies engage? External and internal drivers 2.4.- The Business Case for Sustainability and the Concept of Sustainable Value Case study: PINKTON HOTELS.
3	SESSION 3: AN EQUITABLE, CARBON-NEUTRAL, NATURE-POSITIVE WORLD The world faces interconnected crises of biodiversity loss, climate change, and human development inequities. While equitable development for humans is the focus of the Sustainable Development Goals and the goal of carbon-neutrality sums up the combined efforts under the Paris Agreement to the UNFCCC, another goal need to be addressed for Biodiversity. We will discuss this in class, addressing the path of decarbonisation and observing business responses to these claims such as the current path for decarbonization. 3.1.- Planetary Boundaries 3.2.- Goal 2050 Carbon-Neutral: the climate emergency and the 450ppm boundary 3.3.- Goal 2050 Nature-Positive: global goal for Nature 3.4.- Ecosystem Goods and Services
4	SESSION 4: DEALING WITH ENVIRONMENTAL RISKS You will be able to recognize what constitutes an environmental risk and how to respond to it. We will be debating about risk perception issues and we will introduce a risk analysis framework. We will discuss whether such environmental risks can be managed like financial ones, and the need to create environmental tools to respond to emergencies and major pollution incidents. The link between risks and responsibilities will be considered at the end. 4.1.- The basic concepts of Environmental Risk Management 4.2.- Global Risk Reports 4.3.- The Risk Analysis/Management frameworks Case study: BP DEEPWATER HORIZON
5	SESSION 5: THE BLUE ECONOMY This session examines the new concept of the Blue Economy as an example for this course and the future of humanity. What is the difference between the ocean economy and the blue or sustainable ocean economy? Is it enough that future economic activity minimizes harm to the ocean, or rather, should the aim be to restore its health? 5.1.- Towards the Blue Economy 5.2.- Between Conservation and Sustainable Use 5.3.- Awareness and Activation 5.4.- The Business Response and the Blue Economy (introducing the Group project)
6	SESSION 6: DRIVING PRODUCTION SYSTEMS SUSTAINABLE This session examines production unit systems and their relationship with the management of sustainability. Eco-efficiency is a magic word in the environmental arena but is also a big dilemma. We will explore the relationship between eco-efficiency, sustainability, and corporate strategies as well as the move from efficiency to effectiveness and the role of Clean-Tech Innovation. We will connect these issues with key drivers for adopting environmental management systems (EMS) at a company level, and describe the key stages for implementation. The different EMS standards as well as the possible transition to sustainability management systems will also be addressed. 6.1.- From Clean Production to Clean Technologies 6.2.- From efficiency to effectiveness 6.3.- From Environmental Management Systems to Sustainable Management Systems 6.4.- Transparency and Reporting Case study: L’OREAL
7	SESSION 7: MANAGING SUSTAINABLE SUPPLY CHAINS How to Green the Supply Chain? We will analyze the costs and opportunities that companies have by not addressing properly externalities along their supply chain. We will explore strategic options to redesign operations and we will discuss the key tools used by industry to reduce the ecological footprint of products and services. The effects of globalization, information technology,

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7	and activist pressure will be commented and the development of “green clubs” and the use of certification labels for traceability will be explored too. 7.1.- Green Supply Chain in Sustainable Operation Management 7.2.- Interdependences with the concept of “ecosystem services” 7.3.- Stakeholder platforms and/or Green Clubs. Case study: IKEA and Better Cotton
8	SESSION 8: MAKING SUSTAINABLE PRODUCTS AND SERVICES We will analyze the area of sustainable product development to meet increasing product demands as well as the relationship with competitive and innovative strategies associated with sustainable product development. We will explore the most used and updated tools for the design of new sustainable products and services. 8.1.- Sustainable Consumption 8.2.- Life Cycle Thinking (LCA’s, KPI’s, EPD’s) 8.3.- The Circular Economy 8.4.- Designing Sustainable Products and Services: green products and eco-labelling Case study: PATAGONIA
9	SESSION 9: INNOVATING BUSINESS MODELS FOR SUSTAINABILITY AND THE SUSTAINABILITY PLAN We will be able to understand why green consumers can be key consumers in the future as new purchasing ethical behavior is emerging. You will be able to identify different eco-labeling and certification systems and describe the role of sustainable consumption initiatives from the public sector and civil society. We will explore how environmental challenges can accelerate problem solution by developing new ideas and new business models in line with new ways of production and consumption. Using one of the most recent well-known case studies, we will understand the new consumer needs related with the environment and to find out the different ways to meet these demands. We will be also working with the development of industrial ecosystems and cooperation platforms to solve pressuring issues. Framing Change by understanding the signals, developing strategies and putting the strategies into action, monitoring and disclosing information. Final thought on Corporate Sustainability and the “Business IN nature” concept. 9.1.- Business Models for Sustainability 9.2.- Circular business models 9.3.- Designing and preparing the Sustainability Plan 9.4.- Concluding remarks Case study: ENEL GREEN POWER
10	SESSION 10: GROUP PRESENTATIONS 10.1.- Final group project presentations

Assessment

Tool	Assessment tool	Category	Weight %
Attendance and punctuality	Attendance, particpation in sessions, and individual assignemnts	Retake and ordinary round	30.00%
Group project	Final Group project	Retake and ordinary round	30.00%
Final individual project	A final take-home learning reflection paper which will be due two weeks after the course. Writing the 2/4-page reflection on your learning experience will lead you to actively reflect on your changes in thinking throughout the topic. This exercise is desi	Retake and ordinary round	40.00%

PROGRAMS

AI26-Exchange Program Bachelor in Business and Artificial Intelligence (Undergraduates: Business)
- AI26 Year 1 (Optative)

AI26S-Exchange Program Bachelor in Business and Artificial Intelligence (Undergraduates: Business)
- AI26S Year 1 (Optative)

B13-Exchange Program Bachelor of Business Administration (BBA) (Undergraduates: Business)
- B13 Year 1 (Optative)

B13S-Exchange Program Bachelor of Business Administration (BBA) (Undergraduates: Business)
- B13S Year 1 (Optative)

BBA20-Bachelor of Business Administration (BBA) (Undergraduates: Business)
- BBA20 Year 3 (Optative)
- BBA20 Year 4 (Optative)

BBA23-Bachelor of Business Administration (BBA) (Undergraduates: Business)
- BBA23 Year 3 (Optative)
- BBA23 Year 4 (Optative)

BBA25-Bachelor of Business Administration (BBA) (Undergraduates: Business)
- BBA25 Year 1 (Optative)
- BBA25 Year 3 (Optative)

BITLASI22-Bachelor in Transformational Leadership and Social Impact (Undergraduates: Business)
- BITLASI22 Year 1 (Optative)
- BITLASI22 Year 4 (Optative)

DBAI21-Double Degree in Business Administration and Artificial Intelligence for Business (Undergraduates: Business)
- DBAI21 Year 3 (Optative)
- DBAI21 Year 4 (Optative)

DBAI23-Double Degree in Business Administration and Artificial Intelligence for Business (Undergraduates: Business)
- DBAI23 Year 4 (Optative)
- DBAI23 Year 1 (Optative)
- DBAI23 Year 3 (Optative)

GEL19-Bachelor in Global Governance, Economics and Legal Order (Undergraduates: Law)
- GEL19 Year 3 (Optative)
- GEL19 Year 4 (Optative)
- GEL19 Year 1 (Optative)

GEL23-Bachelor in Global Governance, Economics and Legal Order (Undergraduates: Law)
- GEL23 Year 1 (Optative)
- GEL23 Year 3 (Optative)
- GEL23 Year 4 (Optative)

TUM23-TUM Entrepreneurship Exchange Programme (Undergraduates: Business)
- TUM23 Year 1 (Optative)