

Sustainability in Economics and Business

SUSTAINABLE DEVELOPMENT GOALS



Semester 1 block b

2019-2020

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Introduction

This course serves as a foundation course for students who are interested in deepening their knowledge of sustainable development in the context of business and economics. Why do we feel it is necessary to offer such a course? Sustainable development is a complex subject, involving a range of disciplines. We can only really make headway with the changes that are necessary to transition towards a more sustainable future by working together. This course offers you the opportunity to hear and connect insights from the different disciplines (e.g. law, science, engineering) to your own programme of study. You can take this course as a stand-alone elective or as part of a larger suite of specialised electives in your programme of study.

Using the UN Sustainable Development Goals (SDGs) as the guiding template, we will discuss several aspects of sustainable development, such as biodiversity, climate change, poverty, inequality, human rights and food security. For each topic, we have invited guest lecturers from different faculties who are experts in their respective fields. We will use their expertise to reflect on questions such as:

- What is the problem related to the respective topic?
- Why does this problem exist (what are the causes)?
- How to determine (un)sustainability?
- How does the topic/problem relate to the relevant SDGs?
- What can you do?

We have designed the course as an interactive, reflection-based course. This means that as a student, you will be expected to prepare the course materials before class. Tutorial time will be spent on checking gaps in knowledge, doing group or individual exercises, and working on the assignment. This means lots of quizzes, looking up and analysing diverse datasets, collecting primary data, and (poster) presentations.

This course manual should provide you with most of the information you need, in accompaniment with the Nestor pages for the course. If you feel any information is missing, and/or you have remaining questions, please contact the course coordinator.

On behalf of the many people who are making a contribution to the course, we hope you enjoy the course!

Rieneke Slager

Course coordinator

Learning outcomes

Sustainable development is a complex topic. The broad aim of the course is to increase your knowledge about the topic's many different facets and its connection to economics and business. This is what we would like you to learn during the course:

1. Develop a thorough knowledge and understanding of the concept of sustainable development in international business and economics
2. Develop a thorough understanding of the UN Sustainable Development Goals
3. Relate and apply this knowledge to public and/or private organisations to analyse what their contribution to sustainable development is and how organisations can transition to sustainable development
4. Reflect on barriers and challenges related to transitions to sustainable development in organisations

Attendance

All the readings, lectures and classroom discussions form part of the material for the exam. Attendance is therefore necessary to successfully complete the course.

Summary course overview

Week	Topic	Guest lecturer	Tutorial
1	Introduction to the SDGs	Prof. Bert Scholtens	<ul style="list-style-type: none"> • SULI-test • Introduction of the assignment
2	Biodiversity	Dr.ir. Raymond Klaassen	<ul style="list-style-type: none"> • Reviewing the readings • Working on the assignment: practising interviews
3	Poverty & Inequality	Prof. Robert Inklaar	<ul style="list-style-type: none"> • Reviewing the readings • Working on the assignment: analysing impact
4	Human rights & social inclusion	Dr. Lottie Lane	<ul style="list-style-type: none"> • Reviewing the readings • Working on the assignment: Barriers and recommendations
5	Food security	Prof. Pablo Tittonell	<ul style="list-style-type: none"> • Reviewing the readings • Working on the assignment: Making a good poster
6	Climate change	Prof. Klaus Hubacek	<ul style="list-style-type: none"> • Reviewing the readings • Exam preparation & course review
7	Poster presentations	Thursday 9 th of January, location & time tbc	

Key readings

The key textbook is Sachs (2015) *The Age of Sustainable Development*, NY: Columbia University Press. This is complemented by selected chapters from Desai et al. eds. (2018) *From summits to solutions. Innovations in implementing the Sustainable Development Goals*, Brookings Institution Press.

The book by Sachs has a free Coursera course, where you can watch videos for each chapter: <https://www.coursera.org/learn/sustainable-development>. Signing up at Coursera is free.

Each week we will also discuss an additional paper or report. You can find the links to these in the respective week section below and/or on Nestor.

Week 1: the Sustainable Development Goals

In week 1 we will provide an introduction to the overall goals, objectives and activities of the course. We will discuss the central notion of the course: sustainable development. Furthermore, we will introduce the central overarching framework for the course, and for sustainable development globally: the United Nations Sustainable Development Goals. Also known as the Agenda 2030, we will discuss the origins of the goals, and review to what extent we are on track in reaching the goals and associated targets. Do we need adaptation, transition or transformation?

Please read:

- Sachs chapter 1,2,14
- Desai et al chapter 1
- Sachs et al (2019) Six Transformations to achieve the Sustainable Development Goals, **Nature Sustainability** https://www.nature.com/articles/s41893-019-0352-9.epdf?author_access_token=PYxHlfTzicPDZ1f8Mpi4ddRgN0jAjWel9jnR3ZoTv0OUvCcY5pZ8AaTx0MkoopkKOS7OzdwrSBL-nqy90SNoGgHmldD2otpknRagcTqK2IJMLpfAw86QRMHI3QEjytXGWz5FGotx9W9u1jWK0QbJVw%3D%3D

Before class, please reflect on and prepare an answer to the following questions:

1. "The essence of sustainable development in practice is *scientifically and morally based problem solving*." (Sachs Chapter 4, p.43) Reflect on this definition of sustainable development.
2. What are the broad underlying principles of the SDGs? According to Desai et al, what kind(s) of innovation do we need to achieve them?
3. Can the six transformations highlighted by Sachs et al (2019) be ranked in order of importance?

Week 2: Biodiversity

In week 2 we will discuss the topic of biodiversity. Our guest lecturer is dr.ir. Raymond Klaassen from the Faculty of Science and Engineering (see <https://www.rug.nl/staff/raymond.klaassen/research>). Dr. Klaassen is an ecologist who studies biodiversity and 'nature-inclusive agriculture'.

The planetary boundaries framework identifies the decline in biodiversity we are currently seeing across the world as one of the core boundaries that has already been crossed into an unsafe/high-risk zone. We will discuss the framework, including recent updates, and review several metrics on biodiversity, including the Living Planet Index.

Please read the following in preparation for the classes this week:

- Sachs chapter 6, 13
- Steffen et al (2015), Planetary boundaries: guiding human development on a changing planet, **Science**, 347.
<https://science.sciencemag.org/content/sci/347/6223/1259855.full.pdf>
- Living planet index summary report :
https://s3.amazonaws.com/wwfassets/downloads/lpr2018_summary_report_spreads.pdf

And prepare the following questions:

1. What are the major threats to biodiversity and why do they matter?
2. Discuss the role of scientific expertise in the Planetary Boundary framework.
3. How can we measure the human ecological footprint? Discuss some ideas and evaluate the feasibility of these ideas.

Week 3: Poverty & Inequality

In week 3 we will discuss economic development, poverty and inequality. Our guest lecturer is Prof. Robert Inklaar (see <https://www.rug.nl/staff/r.c.inklaar/research>). Prof. Inklaar is an economist with an interest in output and productivity across countries and over time, in particular understanding income differences and economic growth.

We will discuss cross-country income differences, economic development and economic growth. We will also discuss current research on inequality, and the implications of inequality for business and economics.

Please read the following in preparation for the classes this week:

- Sachs chapter 4,5
- Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist by Kate Raworth – book review by Branko Milanovic.
<https://braveneweuropa.com/doughnut-economics-seven-ways-to-think-like-a-21st-century-economist-by-kate-raworth>
- Phillips, N. (2017). Power and inequality in the global political economy, *International Affairs*, 93(2): 429-444
<https://academic.oup.com/ia/article/93/2/429/2997439>

And prepare the following questions:

1. How can cultural attitudes affect economic development? How can discrimination against women interfere with economic development?
2. How can poverty be defined? What are some pitfalls in defining poverty? Argue why it is realistic to think that the world can end extreme poverty in a generation.
3. The role of globalisation in economic development is contentious, discuss in which ways. What should be the appropriate role of (multinational) firms in this debate?

Week 4: Human rights and social inclusion

In week 4 we will focus on human rights and social inclusion in sustainable development. Our guest lecturer this week is Dr. Lottie Lane (see <https://www.rug.nl/staff/c.l.lane/research>) from the Faculty of Law, who is an expert in the area of business and human rights.

Human rights are core to the SDGs, and business plays a key role in respecting human rights. We will discuss the relation between human rights and the SDGs, the 'Protect, Respect & Remedy' framework, as well ways of measuring company actions in the area of human rights and SDGs.

Please read the following in preparation for the classes this week:

- Sachs chapter 7,8,9
- The business and human rights dimension of sustainable development: Embedding "Protect, Respect and Remedy" in SDGs implementation
https://www.ohchr.org/Documents/Issues/Business/Session18/InfoNoteWGBHR_SDGRecommendations.pdf

And prepare the following questions:

1. Discuss the various ways laws can discriminate against gender, racial or ethnic groups.
2. Describe how low educational attainment in developing countries is an example of a market failure. Explain the components that might lead to inadequate provision of education in a country
3. Discuss the possible obstacles in achieving the ten recommendations for achieving universal health. What role do the global health governance systems play?

Week 5: Food security

In week 5 we will focus on the topic of food security. Our guest lecturer this week is Prof. Pablo Tittonell (see <https://www.rug.nl/staff/p.a.tittonell/>) from the faculty of Science and Engineering. Prof. Tittonell is principal Research Scientist by Argentina's National Council for Science and Technology, and holds a part time WWF-endorsed Chair Professorship on Resilient Landscapes by the Groningen Institute of Evolutionary Life Sciences.

We will discuss what the current impacts of climate change and biodiversity loss mean for agri-food systems; how food security is linked to the SDGs; and what transitions are needed for sustainable development.

Please read the following in preparation for the classes this week:

- Sachs chapter 10
- Desai chapter 7,11
- Summary report of the Lancet EAT commission, *Food Planet Health, Healthy Diets from Sustainable Food Systems*, <https://eatforum.org/eat-lancet-commission/eat-lancet-commission-summary-report/>

And prepare the following questions:

1. Discuss how fishing, wood harvesting, and GHG emissions can lead to a "tragedy of the commons." Discuss what can be done to avoid the tragedy of the commons.
2. Look at the connection between food and the SDGs as conceptualised by the Stockholm Resilience Centre at <https://www.stockholmresilience.org/research/research-news/2016-06-14-how-food-connects-all-the-sdgs.html> . Can you think of examples for the linkages made in the image?
3. Review the prescribed diet by the EAT Lancet commission. What would be the main challenges in encouraging people to switch to such a diet?

Week 6: Climate change

Our topic this week is climate change. Our guest lecturer this week is Prof. Klaus Hubacek (see <https://www.rug.nl/staff/k.hubacek/>). Prof. Hubacek's expertise crosses geography, economics and environmental management.

Of course, climate change impacts on many of the other topics that already have been discussed in the course. Here, we'll focus on *carbon inequality*, linking geographical consumption patterns, emissions data and sustainable transition.

Please read the following in preparation for the classes this week:

- Sachs chapter 3,12
- Desai chapter 14
- DeFries et al (2019) The missing economic risks in assessment of climate change impact. <http://www.lse.ac.uk/GranthamInstitute/publication/the-missing-economic-risks-in-assessments-of-climate-change-impacts/>
- Why I broke the law for climate change. <https://www.nature.com/articles/d41586-019-02736-9>

And prepare the following questions:

1. President Reagan signed Executive Order 12291 on February 17, 1981, which stated "regulatory action shall not be undertaken unless the potential benefits to society from the regulation outweigh the potential costs to society." In your opinion, what are the implications of this Executive Order for climate change?
2. (Why) do you think economic models do not incorporate climate change risks appropriately? What are the consequences?
3. Choose an online carbon footprint calculator (e.g. <https://www.carbonfootprint.com> or <https://www.resurgence.org/resources/carbon-calculator.html>) and calculate your carbon footprint and ponder its implications.

Assessment

The course is assessed based on an exam (60%) and a group assignment (40%). To pass, students need to obtain a minimal grade of 5.5 for both elements.

Exam

The exam is a digital exam, consisting of both open and multiple-choice questions. The content of the exam will be based on the assigned readings, lecture content and class room discussions. A mock-exam will be provided on Nestor.

Assignment

The assignment will be undertaken in groups of approx. 3 students. The task is to identify and study an organisation that contributes to one or a small number of SDGs. The case study of this organisation should address the following questions:

1. Which SDG(s) is the organisation addressing, how are they doing it and why is it relevant for them to address these particular SDG(s)?
2. What is the impact of the organisation's actions on progress towards the respective SDG(s)?
3. What are the barriers faced by the organisation with regards to the respective SDG(s) and what are the recommendations for future actions?

Each group may select one organisation of their choice; this can be a public, private, local or international organisation or business. Each group will need to collect and analyse primary data (e.g. through interviews) and secondary data related to their organisation of choice. Each group will produce two outputs:

- A 5 page report (Times New Roman, font size 12, 1,5 line spaced) addressing the 3 questions, showing evidence of the data analysis and providing recommendations (see appendix 1 for the marking criteria).

-An A1 poster, which will be presented in the final session of the course in the first week of January. The poster can contain a balance of text and graphics to illustrate your points. You can be as creative as you like, but it should contain evidence of your analysis. Remember, its key aim is to provide an overview of your case study of the organisation's action on one/a limited number of SDGs. During the poster assessment (week 7) as a group you will be expected to answer any questions that we have about the ideas communicated in your poster.

Assignment deadlines:

- Notify the course coordinator of your selected organisation by the **27th of November 2019**
- Both the report and the file for the poster (to be printed on A1) need to be submitted Monday **the 6th of January 2020 by 12:00 (noon)**.
- The poster presentations will take place on the **9th of January**

Further details regarding submission and the poster presentation session will be provided on Nestor and/or in the tutorials.

Repair

A reparation opportunity for the group assignment will be provided. In case of a repair, both the case study report and the poster can be adjusted, but the poster will not be printed again. **Repaired assignments will be capped at a 6.** The deadline for the repaired assignment is **23rd January 2020.**

Marking criteria for the assignment

Criteria element	Learning outcome
1. Interpretation of the task: It is clear what the organisation is doing with regards to the SDGs and why it is relevant (motivation of case study selection)	2,3
2. Analysis of the issues: Quality primary data and secondary data has been collected and analysed for an assessment of the impact of the actions of the organisation	3,4
3. Conclusions drawn: There is a coherent & complete assessment of impact & barriers	3,4
4. Presentation: The poster and report are well structured & presented	3

Both the report and the poster will be marked on these four elements. Rubrics will be made available for the motivation of the marking. The final grade of the assignment will be calculated as the average of the mark for the report and the poster.