

Course and Examination Fact Sheet: Spring Semester 2025

8,755: Verantwortung/Responsibility: Biodiversity, Business and People

ECTS credits: 3

## Overview examination/s

(binding regulations see below)

decentral - Written work, Digital, Individual work individual grade (60%)

Examination time: Term time

decentral - Presentation, Analog, Group work group grade (40%)

Examination time: Term time

#### Attached courses

Timetable -- Language -- Lecturer

8,755,1.00 Verantwortung/Responsibility: Biodiversity, Business and People -- English -- Weise Florian, Walls Judith Louise

## Course information

## Course prerequisites

None

### Learning objectives

At the end of this course students can expect to be able to:

- Using trans-disciplinary insight, analyze how biodiversity interrelates with human and economic activity, and
  understand the complexities and challenges of human dependence on the natural environment.
- Describe the interconnection between the natural environment and human social and business activities, with a
  particular emphasis on biodiversity and land use (and its relation to climate change action).
- Understand the diversity of ecological services rendered by the natural environment and their value(s) to human societies and business activity.
- Apply quantitative and qualitative methods of valuing biological assets and ecological services in both monetary and non-monetary ways.
- Develop strategic business and marketing solutions that recognize humanity's reliance on intact biodiversity and healthy natural systems, allowing both human and wildlife activity to flourish.

#### Course content

Biodiversity is a key component of intact, productive ecosystems that any organism, including humans, depends upon for the provision of natural services such as food, water, shelter, and reproduction. Biodiversity is also the foundation for much of the world's business activity and human prosperity. The widespread downgrading of natural systems and biodiversity has led to a recognition of the need to protect biodiversity and restore healthy ecosystems while considering human livelihoods and business activity. With healthy biodiversity, the services that ecosystems provide to businesses and society are better safeguarded. Understanding and mitigating business impacts on biodiversity are also becoming core prerequisites under legal compliance. Businesses both affect and rely upon ecosystem services and their underlying biodiversity, regardless of organization size, location, and sector. The implications are complex because human-nature interactions are determined by a matrix of policy frameworks, financial interests, biodiversity protection aims, human attitudes, and emotions.

This course aims to provide participants with a holistic perspective by integrating ecological and economic realities, drawing on concepts and experiences from various professional disciplines. Through exploring a variety of business-biodiversity case studies, students will examine the diverse interrelations between human society, natural resources, and ecosystems. They will learn about biodiversity valuation concepts such as Willingness to Pay, as well as impact evaluation techniques like eco-



balance. Participants will be at the forefront of measuring the interrelationship between business and biodiversity and will learn about key resource utilization concepts, including Planetary Boundaries and Earth Overshoot Day.

A core element of this course will be to identify, lobby, and negotiate solutions by debating with internal and external stakeholders to determine the sustainable future use of natural resources. Thereby, participants will learn the relevance of conservation psychology, the role of media and politics in negotiating human-biodiversity coexistence, and the importance of legal frameworks that govern contemporary biodiversity use and management. Participants will gather their own data, develop their standpoints and ideas, and communicate their findings using different types of media.

# Course structure and indications of the learning and teaching design

"Biodiversity, People & Business" includes a kickoff and a 3-day Block Seminar. The course will be delivered through a combination of taught and practical exercises, presentations, debates, applied case studies, and group discussions.

Contextual Studies are considered part of **Contact Learning**; thus, taking part properly implies **regular attendance**. It is the students' own responsibility to ensure that there is **no timetable clash** between the courses they have chosen. A detailed course outline and all relevant documents will be made available on **StudyNet**. Only the current timetable as published on **Courses** does apply.

#### Course literature

- Alberts, E.C. (2022) Global biodiversity is in crisis, but how bad is it? It's complicated. Article. Mongabay News. https://news.mongabay.com/2022/04/global-biodiversity-is-in-crisis-but-how-bad-is-it-its-complicated/
- Breidert, C. et al. (2006) A Review of Methods for Measuring Willingness-To-Pay. Innovative
   Marketing <a href="https://www.researchgate.net/publication/242382759">https://www.researchgate.net/publication/242382759</a> A Review of Methods for Measuring Willingnes s-to-Pay
- CBD (2021) Businesses more dependent on Biodiversity than expected. <a href="https://www.cbd.int/article/2020-01-17-16-56-37">https://www.cbd.int/article/2020-01-17-16-56-37</a>
- 4. CBD (2021) Financial Sector Guide for the Convention on Biological Diversity. Convention on Biological Diversity. https://www.cbd.int/doc/c/8e24/f151/326b69024f014a8fb9684a8d/cbd-financial-sector-guide-f-en.pdf
- 5. Darimont, C.T., Cooke, R., Bourbonnais, M.L., Bryan, M.H., Carlson, S.M.,....Worm, B. (2023) **Humanity's diverse** predatory niche and its ecological consequences. communications biology, 6(609), 1-10.
- Ecochain (2022) Life Cycle Assessment (LCA) Complete Beginner's Guide. Video. <a href="https://ecochain.com/knowledge/life-cycle-assessment-lca-guide/">https://ecochain.com/knowledge/life-cycle-assessment-lca-guide/</a>
- ENV, Everard, M. (2016) Ecosystem Services and Biodiversity Science for Environment Policy. Video. <a href="https://youtu.be/D6luBEJfi3s">https://youtu.be/D6luBEJfi3s</a>
- 8. European Commission (2021) **Guide to measuring biodiversity for financial institutions.** <a href="https://ec.europa.eu/newsroom/env/items/706837/en">https://ec.europa.eu/newsroom/env/items/706837/en</a>
- 9. FfB (2021) Finance for Biodiversity: Guide on biodiversity measurement approaches. Finance for Biodiversity. https://www.financeforbiodiversity.org/wp-content/uploads/Finance-for-Biodiversity Guide-on-biodiversity-measurement-approaches 2nd-edition.pdf
- 10. Hayward, M.H., Meyer, F.V., Balkenhol, N., Beranek, C.T., Bugir, C.K., Haswell, P.M., ...Lindsey, P.A. (2022) Intergenerational Inequity: Stealing the Joy and Benefits of Nature from Our Children. Opinion, 10, 1-6.
- 11. Müller, L. & Lammerant, J. (2022) Case studies on site level biodiversity measurement approaches for business. Webinar. <a href="https://www.youtube.com/watch?v=93gFHjSdSNU">https://www.youtube.com/watch?v=93gFHjSdSNU</a>
- 12. Nelson, F. & Harris, A. (2016) **Five Ways to Advance Conservation**Entrepreneurship. <a href="https://ssir.org/articles/entry/five">https://ssir.org/articles/entry/five</a> ways to advance conservation entrepreneurship#
- 13. Richardson, K., Steffen, W., Lucht, W., Bendtsen, J. Cornell, S.E., .... Rockström, J., (2023) Earth beyond six of nine planetary boundaries. Science Advances, 9, 1-16.

Supplementary Resources (not mandatory – a registration is needed)

Unter, K., Vogel., L. & Walls, J. (2023) Connecting Business Strategy to Biodiversity
 Preservation. <a href="https://www.cutter.com/journal/connecting-business-strategy-biodiversity-preservation">https://www.cutter.com/journal/connecting-business-strategy-biodiversity-preservation</a>

## Additional course information

Judith Walls is Full Professor and Chair of Sustainability Management at the Institute for Economy and the Environment, University of St.Gallen, Switzerland. Her research focuses on the nexus of corporate governance and environmental sustainability. Prof. Walls's work has examined the role of CEOs, top management teams, boards of directors, shareholders, and stakeholders in driving corporate transformation for sustainability. She has a special interest in the topic of biodiversity and land use and the (emotional) dynamics of contested industries, such as mining and trophy hunting.

Florian Weise has been working as a resident conservation scientist at various institutions in southern Africa and is an affiliated scholar at the Institute for Economy and the Environment (IWOe) at the University of St Gallen. He holds a Ph.D. in Conservation Biology with a background in large carnivore management and ecology. He has worked with several international conservation bodies such as the IUCN and his work has been widely published in print and digital media, including over 30 scientific articles and book chapters. His research interests concern human-carnivore conflict, ecosystem integrity, bio-indicators and conservation psychology. He is particularly interested in human decision-making processes concerning biodiversity management and the services that biodiversity and ecosystems render to society. He now manages a field research programme in Zambia and consults for start-up research and biodiversity protection efforts. Florian is an active member of different international wildlife forums and specialist groups.

## **Examination information**

#### Examination sub part/s

## 1. Examination sub part (1/2)

**Examination modalities** 

Examination type Written work
Responsible for organisation decentral
Examination form Written work
Examination mode Digital
Time of examination Term time
Examination execution Asynchronous
Examination location Off Campus

Grading type Individual work individual grade

Weighting 60% Duration --

Examination languages Question language: English Answer language: English

Remark

Concept Development

Examination-aid rule

Free aids provision

Basically, students are free to choose aids. Any restrictions are defined by the faculty members in charge of the examination under supplementary aids.

Supplementary aids

See course outline for more details.

### 2. Examination sub part (2/2)

**Examination modalities** 

Examination type Presentation Responsible for organisation decentral

Examination Form Oral examination

Examination mode Analog
Time of examination Term time
Examination execution Asynchronous
Examination location On Campus



Grading type Group work group grade

Weighting 40% Duration --

Examination languages Question language: English Answer language: English

Remark

Stakeholder Debate

Examination-aid rule

Free aids provision

Basically, students are free to choose aids. Any restrictions are defined by the faculty members in charge of the examination under supplementary aids.

Supplementary aids

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### **Examination content**

#### 1. Stakeholder Debate

In this interactive examination, students will engage in a stakeholder debate centered around a complex real-life biodiversity-business case study, i.e. a resource utilization topic in a business framework. This exercise is designed to immerse students in a dynamic environment where they can apply their own content research, critical thinking and discourse, negotiation skills, and knowledge of various perspectives. Students are allocated into groups representing different stakeholders and topic opinions and, in a panel-like discussion forum, negotiate their positions and content research to address the resource utilization topic. The debate consists of three rounds, each offering a unique opportunity for students to delve deeper into the case study's complexities and challenges. Before the exam, students will receive fictive CVs representing different stakeholder profiles related to the case study. These CVs will guide them to adopt the varied roles of resource stakeholders and organize their content collection for the debate.

Breaks will be provided between debate rounds, offering students the chance to lobby other stakeholders in an informal setting, reflecting realistic circumstances. These lobbying sessions are crucial for students to build alliances, negotiate synergies, and gain insights from different perspectives. This provides opportunity to refine their arguments based on emerging discussions.

#### 2. Concept Development (Written Work)

Students will develop a concept to enhance a designated area in St.Gallen, focusing on nature restoration, biodiversity, and community engagement. Students will first assess the current conditions, including vegetation, wildlife, and infrastructure, to identify improvement opportunities. Then, students will propose a detailed plan that promotes ecological recovery using native plants and which enhances habitats for local flora and fauna. The proposed design should also make the space accessible and engaging for students and the public.

Students must work independently, presenting original ideas: They are expected to outline their project, including an assessment of the current situation, proposed improvements and required actions, biodiversity strategies, community engagement, costs, and an implementation timeline. The essay should not exceed 2,200 words (excluding references and appendices) and may include up to six graphical or tabular appendices for support.

#### Examination relevant literature

The examination literature consists of the readings listed above, literature on the Canvas (published until 24.03.2025), and course materials (e.g., lecture slides, guest lectures, and discussion material) available on Canvas (published until 24.03.2025)



## Please note

Please note that only this fact sheet and the examination schedule published at the time of bidding are binding and takes precedence over other information, such as information on StudyNet (Canvas), on lecturers' websites and information in lectures etc.

Any references and links to third-party content within the fact sheet are only of a supplementary, informative nature and lie outside the area of responsibility of the University of St.Gallen.

Documents and materials are only relevant for central examinations if they are available by the end of the lecture period (CW21) at the latest. In the case of centrally organised mid-term examinations, the documents and materials up to CW 13 (Monday, 25 March 2025) are relevant for testing.

Binding nature of the fact sheets:

- Course information as well as examination date (organised centrally/decentrally) and form of examination: from bidding start in CW 04 (Thursday, 23 January 2025);
- Examination information (supplementary aids, examination contents, examination literature) for decentralised examinations: in CW 12 (Monday, 17 March 2025);
- Examination information (supplementary aids, examination contents, examination literature) for centrally
  organised mid-term examinations: in CW 14 (Monday, 31 March 2025);
- Examination information (regulations on aids, examination contents, examination literature) for centrally
  organised examinations: two weeks before ending with de-registration period in CW 15 (Monday, 07 April
  2025).