University of St.Gallen

Course and Examination Fact Sheet: Autumn Semester 2024

7,234: Managing Collaborative Innovation for Net-Zero

ECTS credits: 4

Overview examination/s

(binding regulations see below)
decentral - Presentation, Analog, Group work group grade (40%)
Examination time: Term time
decentral - Active participation, Analog, Individual work individual grade (25%)
Examination time: Term time
decentral - Oral examination and technical discussions, Analog, Group work individual grade (35%)
Examination time: Term time

Attached courses

Timetable -- Language -- Lecturer
7,234,1.00 Managing Collaborative Innovation for Net-Zero -- English -- Zobel Ann-Kristin

Course information

Course prerequisites

No specific prior knowledge is required. Basic knowledge of the principles of innovation management are recommended. As the course will be taught in English, very good command of the language (reading, writing, and discussing) is required.

Learning objectives

- Understand why and under which conditions firms open up their innovation processes and differentiate between various collaborative innovation strategies based on their purposes and characteristics.
- Develop a nuanced understanding of the opportunities and challenges associated with different collaborative innovation strategies, learning when and how these strategies can be effectively implemented in corporate environments.
- Acquire a comprehensive toolbox of collaborative innovation, including theories, frameworks, and best practices, to guide firms from closed to open innovation processes.
- Cultivate a deep interest in climate change, internalizing its importance for sustainable business practices, and develop competencies in crticially assessing net-zero strategies of firms.
- Learn to creatively combine collaborative innovation with net-zero strategies, gaining insights into how these combinations can help firms decarbonize.
- Apply theoretical concepts and frameworks of collaborative innovation to real-world case challenges, developing novel decarbonization pathways for firms.
- Sharpen presentation, analytical and problem-solving skills by researching, presenting, and critically debating cases and challenges in the context of firms' race to net-zero.

Course content

In today's rapidly evolving business landscape, mastering collaborative innovation is crucial for driving sustainable change. This course explores the dynamic world of collaborative innovation and its crucial role in addressing climate change.

Businesses across various industrial sectors are increasingly breaking down organizational boundaries to leverage external knowledge and experiment with new forms of collaborative innovation. The traditional locus of innovation, once confined to single, hierarchical firms, has now shifted to networks of distributed actors. These include incumbent firms, start-ups, lead users, crowds, research institutions, and public entities. In this new paradigm, collaborative innovation transcends bilateral inter-firm alliances, necessitating novel strategies for multilateral organization through crowdsourcing, platforms, and ecosystems.

The course is particularly relevant for students interested in how firms can develop robust strategies to reduce and remove emissions, and establish themselves as climate leaders. As more companies commit to becoming carbon-neutral, net-zero, or even climate-positive - like Microsoft, IKEA, or RWE, to name a few - there is an urgent need for innovation in technologies, products, services, business models, and value chains. The complexity and uncertainty inherent in decarbonizing businesses mean that single firms are unlikely to consistently develop or acquire all necessary high-value innovations independently. Thus, collaborative innovation becomes essential for reducing emissions, removing carbon from the atmosphere, and decarbonizing entire industries.

Students will gain comprehensive insights into analytical frameworks essential for understanding and critically assessing various modes of collaborative innovation. Through practical applications of these concepts to real-world challenges and case studies, students will learn how firms utilize collaborative innovation to reduce and remove emissions. By working on concrete cases and exchanging their ideas with practitioners, students will develop deep insights into the practicalities of enabling and facilitating industry-wide decarbonization and supporting net-zero strategies.

Join this course to become a leader in managing collaborative innovation for a sustainable, net-zero future.

Course structure and indications of the learning and teaching design

The seminar will be conducted over nine sessions, including the following topics:

- Crowdsourcing
- Startup-incumbent collaborations
- Platforms
- Innovation ecosystems
- Meta-organizations

Session Format:

Each session is divided into two main parts.

1. **Interactive Lecture:**

- Establishes, contrasts, and discusses the theoretical foundations of different collaborative innovation strategies
- Engaging students in an interactive learning experience, fostering a deep understanding of the concepts through dynamic discussions and activities

2. **Seminar and Case Analysis:**

- Focuses on analyzing and discussing concrete business challenges related to achieving net-zero.
- Students apply, illustrate, and critically reflect upon the introduced concepts by working through real-world scenarios.
- Student-Centered Approach: Small teams of students act as 'presenters' and 'facilitators' of the challenge, encouraging experimentation with different presentation, discussion, and collaboration tools to foster critical and lively discussions.

Additional Features:

- **Guest Lectures:** Selected sessions will feature guest speakers from industry, providing insights into real-world strategic opportunities and challenges of collaborative innovation for net-zero.
- **Active Participation:** Students are expected to prepare for in-class discussions by engaging with the assigned literature and participate actively in discussions, bringing diverse perspectives and ideas to the table.

Course literature

For each session, a selection of readings will be assigned on Studynet.

Mandatory Readings:

- A mix of academic articles and practitioner-oriented readings will be provided to provide a balanced perspective, combining rigorous theoretical foundations with practical insights.
- These readings will lay the groundwork for the interactive lectures, establishing the theoretical concepts and analytical frameworks necessary for in-depth discussion

Case Challenge and Supplementary Material:

- Session presenters and facilitators will have access to specific case challenges and supplementary materials relevant to their assigned topics
- The additional content will aid the prepration and facilitation of discussions, ensuring a robust and informed analysis of the business challenges presented

All assigned readings and supplementary materials will be made available on Studynet before the start of the course.

Additional course information

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Examination information

Examination sub part/s

1. Examination sub part (1/3)

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

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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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2. Examination sub part (2/3)

Examination modalities

Examination type	Active participation
Responsible for organisation	decentral
Examination form	Oral examination
Examination mode	Analog
Time of examination	Term time
Examination execution	Synchronous
Examination location	On Campus
Grading type	Individual work individual grade
Weighting	25%
Duration	--

Examination languages

Question language: English
Answer language: English

Remark

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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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3. Examination sub part (3/3)

Examination modalities

Examination type	Oral examination and technical discussions
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 individual grade
Weighting	35%
Duration	--

Examination languages

Question language: English
Answer language: English

Remark

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Examination-aid rule

Closed Book

The use of aids is prohibited as a matter of principle, with the exception of pocket calculator models of the Texas Instruments TI-30 series and, in case of non-language exams, bilingual dictionaries without any handwritten notes. Any other aids that are admissible must be explicitly listed by faculty members in the paragraph entitled “Supplementary aids” of the course and examination fact sheet; this list is exhaustive.

Procuring any aids, as well as ensuring their working order, is the exclusive responsibility of students.

Supplementary aids

None

Examination content

All course topics, including the key areas of:

- Crowdsourcing
- Startup-incumbent collaboration
- Platforms
- Innovation ecosystems
- Meta-organizations
- Transfer of concepts to the practical challenges

are relevant for the exam.

Active participation: Students will be graded based on the quantity and quality of their in-class participation in all sessions.

Presentation: Student teams will specialize in one of the key areas and apply the acquired knowledge about that specific form of collaborative innovation to a practical case challenge.

Oral examination: Building on their group presentations, in the oral examination, students will need to explain how they applied their acquired knowledge about collaborative innovation to the practical case challenge of reaching corporate net-zero.

Examination relevant literature

Both mandatory and optional readings will be made available on StudyNet before each session. All exam-relevant material (including readings and lecture slides) will be made available before the final session.

University of St.Gallen

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 (CW51) at the latest. In the case of centrally organised mid-term examinations, the documents and materials up to CW 42 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 34 (Thursday, 22nd August 2024);
- Examination information (supplementary aids, examination contents, examination literature) for decentralised examinations: in CW 12 (Monday, 18 March 2024);
- Examination information (supplementary aids, examination contents, examination literature) for centrally organised mid-term examinations: in CW 42 (Monday, 14 October 2024);
- Examination information (regulations on aids, examination contents, examination literature) for centrally organised examinations: two weeks before ending with de-registration period in CW 45 (Monday, 04 November 2024).