# **Linnæus University**



# Course syllabus

School of Business and Economics

Department of Management

4FE168 Global innovation - transdisciplinära systemperspektiv för hållbar förändring, 30 högskolepoäng

4FE168 Global Innovation - Transdisciplinary System Perspectives for Sustainable Change, 30 credits

# Main field of study

**Business Administration** 

Subject Group Business Administration

**Level of classification** Second Level

**Progression** A1F

# **Date of Ratification**

Approved 2022-05-23 Revised 2022-12-09 by School of Business and Economics. Change of department The course syllabus is valid from spring semester 2023

# Prerequisites

General entry requirements for second-cycle studies, plus specific entry requirements: at least 15 credits passed in following course:

- Local Innovation –Interdisciplinary Innovation Processes in Theory and Practice 30 credits,
- English 6, or the equivalent.

# Objectives

**Module 1 Transdisciplinary system perspectives for sustainable change 7.5 credits** After completing this module the student should be able to:

- critically review organisations and businesses from a system perspective, based on different competencies in the fields of economics, technology, and design
- identify, analyse, and evaluate different stakeholders and their needs and relations, in local as well as global contexts
- analyse and critically review theories on system change for sustainable development

- relate to theories of sustainable change in local and global perspective based on competences within business, engineering and design
- assess system changes from the perspectives of ethics and sustainability

#### Module 2 Development of innovative concepts 7.5 credits

After completing this module the student should be able to:

- plan, implement, and critically review an innovation process, from problematisation to end result
- conduct an innovation project together with representatives from different companies and organisations
- apply theories on system change for sustainable development, based on different competencies in the fields of economics, technology, and design
- present and explain the innovation process and its result to representatives from different companies and organisations
- argue the development of innovative concepts, orally, visually and in writing, to representatives from different companies and organisations

#### Module 3 Implementation of innovations 5.5 credits

After completing this module the student should be able to:

- formulate, present, and reflect upon the consequences of innovations in societal, economical, and cultural contexts
- analyse and evaluate implementation of innovations for sustainable change from a local as well as a global perspective, based on different competencies in the fields of economics, technology, and design
- visualise, present, and explain strategies for implementation of innovations to representatives from different companies and organisations.

#### Module 4 Professional skill 2 credits

After completing this module the student should be able to:

- analyse and evaluate different concepts relating to professional skill in theory and practice
- explain and discuss the importance of practical examples in development work
- discuss in what ways formal systems may create opportunities and/or curb creativity in the application of professional skill.

#### Module 5 The innovation process and research methods 7.5 credits

After completing this module, the student should be able to:

- analyse and strategically evaluate different research methods as applied in an innovation process
- reflect upon and evaluate the significance, application, and consequences of different methods in the implementation of a transdisciplinary innovation project
- reflect upon and evaluate different methods' potential and limitations, as well as their roles, in the implementation of an innovation process
- identify and analyse what further knowledge is needed in the theory and practice of research, based on different competencies in the fields of economics, technology, and design
- assess different research methods from the points of view of ethics and sustainability.

# Content

#### Module 1 Transdisciplinary system perspectives for sustainable change 7.5 credits

In this module the students conduct projects in collaboration with companies and organisations. The module aims to problematise the need of sustainable change that the companies and organisations are facing, based on different competencies in the fields of economics, technology, and design.

The module contains:

- systems theory and systems analysis
- systemic thinking for organisational change
- Systems Engineering concepts and different stakeholders' needs analyses
- transdisciplinary project work in theory and practice
- · analysis of the UN's global goals for sustainable development
- · critical perspectives on societies' values, norms, and practices

#### Module 2 Development of innovative concepts 7.5 credits

This module continues the preceding project-based module and is carried out in collaboration with companies and organisations. It comprises an innovation process, the aim of which is to create possible solutions to the problems that were identified in Module 1.

The module contains:

- the innovation process in theory and practice
- · transdisciplinary project work
- sustainable development and systems change

#### Module 3 Implementation of innovations 5.5 credits

This module continues the second project-based module and is carried out in collaboration with companies and organisations. In this module, students plan, implement, and evaluate innovations that aim to solve different sustainability problems that the companies and organisations are facing. The module contains:

- implementation of innovations
- sustainable development and strategies for systems change
- application of Business Model Canvas
- sustainable marketing strategies.

#### Module 4 Professional skill 2 credits

This module consists of a series of seminars that support the other modules through reflection on the culture and values of different disciplines, and on how professional roles affect transdisciplinary innovation processes. The module contains:

- · professional skill and professional roles
- the importance of practical examples in development work from the point of view of different professions in the fields of economics, technology, and design
- the potential and limitations of formal systems.

#### Module 5 The innovation process and research methods 7,5 credits

This module consists of a series of lectures and seminars that support the transdisciplinary innovation projects through reflection on the different disciplines' approaches to research and research methods. The module contains:

- philosophy of science and its basic concepts
- introduction to different academic traditions, their methods, and their application
- ethical and sustainability aspects in research linked to transdisciplinary innovation project.

# Type of Instruction

The teaching consists of lectures, workshops, seminars, and presentations based on the different competencies and perspectives of the participant disciplines. The modules are partly project based and are supported by supervisors from all the relevant disciplines, as well as by external stakeholders collaborating with the programme. Instruction is in English and takes place on campus. Some parts of the course may, however, be conducted at the participant companies and organisations, wherefore practical work may be carried out within as well as outside the university.

## Examination

The course is assessed with the grades A, B, C, D, E, Fx or F.

#### Module 1 Transdisciplinary system perspectives for sustainable change 7.5 credits

The module is examined through hand-in assignments (1.5 credits) and a report (6 credits).

#### Module 2 Development of innovative concepts 7.5 credits

The module is examined through hand-in assignments (2.5 credits) and a report (5 credits).

#### Module 3 Implementation of innovations 5.5 credits

The module is examined through hand-in assignments (.,5 credits), a reflection paper (2 credits) and a report (2 credits).

#### Module 4 Professional skill 2 credits

The module is examined through a reflection paper (2 credits).

#### Module 5 The innovation process and research methods 7,5 credits

The module is examined through hand-in assignments (3 credits) and a reflection paper (4,5 credits).

#### The following applies to all modules:

The grade A constitutes the highest grade on the scale and the remaining grades follow in descending order where the grade E is the lowest grade on the scale that will result in a pass. The grade F means that the student's performance is assessed as fail. Grading criteria for the A–F scale are communicated in writing to the student by the start of the module at the latest, as well as how the weighting and weighting of grades on individual examining elements to the final course grade takes place. The basis for the student's grade is determined by the student's fulfillment of the objectives.

The grade of the course is a combined assessment from the grades of the various course modules. The combined assessment is based on the grades and the scope of the course (number of credits). The more extensive a module is, the greater impact it will have on the final grade. Module grades with the grading scale between G-U will not be considered into the combined assessment. However, a G is required for each of the modules in order to receive a final course grade.

Repeat examination is offered in accordance with Local regulations for courses and

examination at the first and second-cycle level at Linnaeus University. An examiner can, in exceptional cases, decide that a student who is close to the level for a passing grade may carry out supplementary assignments in order to reach the passing grade.

If the university has decided that a student is entitled to special pedagogical support due to a disability, the examiner has the right to give a customised exam or to have the student conduct the exam in an alternative way.

# **Course Evaluation**

During the implementation of the course or in close conjunction with the course, a course evaluation is to be carried out. Results and analysis of the course evaluation are to be promptly presented as feedback to the students who have completed the course. Students who participate during the next course instance receive feedback at the start of the course. The course evaluation is to be carried out anonymously.

# Credit Overlap

The course cannot be included in a degree along with the following course/courses of which the content fully, or partly, corresponds to the content of this course: Module 1-4: 4DI716, 4DI720, 4DI722, 4FE042, 4FE162, 4TS041, 4TS046 and 4TS341 with 22,5 credits each.

Module 5: 4DI721, 4DI723, 4DI713:5, 4FE043, 4FE163, 4FE168:5, 4TS043, 4TS343 and 4TS347:5 with 7,5 credits each.

## Other

The course includes study visits, laboratory sessions and field work. This may entail certain costs for the student.

# Required Reading and Additional Study Material

# Module 1 Transdisciplinary system perspectives for sustainable change 7.5 credits Required reading

Chick, A. & Micklethwaite, P. *Design for Sustainable Change - How Design and Designers Can Drive the Sustainability Agenda*. AVA Publishing SA. Latest edition. About 185 pages.

Mick, D. G., Pettigrew, S., Pechmann, C. & Ozanne, J. L. *Transformative Consumer Research for Personal and Collective Well-Being*. Rouledge. Latest edition. About 765 pages.

Motoyama, Y. Global Companies, *Local Innovations: Why the Engineering Aspects of Innovation Making Require Co-location*. Ashgate Economic Geography, Ashgate Pub Co. Latest edition. About 160 pages.

Trott, P. Innovation Management and New Product Development. Prentice Hall. Latest edition. About 650 pages.

von Hippel, E. *The sources of innovation*. Oxford University Press. E-bok. Latest edition. About 230 pages.

#### **Reference literature**

Burns, P. *Corporate Entrepreneurship*. Palgrave Macmillan. Latest edition. About 530 pages.

Moulaert, F., MacCallum, D., Mehmood, A. & Hamdouch, A. The International

Handbook on Social Innovation -Collective Action, Social Learning and Transdisciplinary Research. Elgar online. E-bok. Latest edition. About 530 pages.

Porter, M. *Competitor and Industry analysis*. Harvard Business Review. E-bok. Latest edition. About 430 pages.

#### Module 2 Development of innovative concepts 7.5 credits Required reading

Braungart, M. & McDonough, W. *Cradle to Cradle; Remaking the way we make things*. Random House UK. Latest edition. About 190 pages.

Chesbrough, H. W., Vanhaverbeke, W. & West, J. *Open Innovation Researching a New Paradigm*. Oxford. Latest edition. About 400 pages.

Keeley, L., Pikkel, R., Quinn, B. and Walters, H. *Ten Types of Innovations -the Discipline of Building Breakthroughs*. Wiley. Latest edition. About 260 pages.

#### **Reference literature**

Antvik, S. & Sjöholm, H. *Project Management and Methods*. Studentlitteratur. Latest edition. About 165 pages.

Hayes, J. *The Theory and Practice of Change Management*. Palgrave Macmillan. Latest edition. About 520 pages.

Kumar, V. 101 Design methods -a Structured Approach for Driving Innovation in your Organization. Wiley. Latest edition. About 325 pages.

Motoyama, Y. *Global Companies, Local Innovations: Why the Engineering Aspects of Innovation Making Require Co-location.* Ashgate Economic Geography, Ashgate Pub Co. Latest edition. About 165 pages.

#### Module 3 Implementation of innovations 5.5 credits Required reading

Radjou, N., Prabhu, J. & Ahuja, S. Jugaad Innovation: Think Frugal, Be Flexible, Generate Breakthrough Growth. Jossey-Bass. Latest edition. About 290 pages.

#### **Reference literature**

Normann, R. *Reframing Business: When the Map Changes the Landscape*. Wiley. Latest edition. About 355 pages.

Polaine, A., Lavrans, L. & Reason, B. *Service Design - From Insight to Implementation*. Rosenfeld Media. Latest edition. About 215 pages.

Module 4 Professional skill 2 credits Required reading

Göranzon, B. (2009). The Practical Intellect. Santerus Academic Press. 160 pages.

#### Module 5 The innovation process and research methods 7.5 credits Required reading

van Aken, J., Berends, H. & van der Bij, H. *Problem solving in organizations*. New York: Cambridge university press. Latest edition. About 245 pages.

#### **Reference literature**

Björk, L. A. & Räisänen, C. *Academic writing: a university writing course*. Lund: Studentlitteratur. Latest edition. About 400 pages.

Scientific articles. About 500 pages.