Linnæus University

Dnr: 2021/3599-3.1.2.2

Course syllabus

Faculty of Arts and Humanities

Department of Design

4DI712 Lokal innovation - interdisciplinära innovationsprocesser i teori och praktik, 30 högskolepoäng

Local Innovation - Interdisciplinary Innovation Processes in Theory and Practice, 30 credits

Main field of study

Design

Subject

Design

Level

Second cycle

Progression

A1N

Date of Ratification

Approved 2021-10-01.
Revised 2026-03-10. The prerequisite requirement has been supplemented with subjects according to GY25.

The course syllabus is valid from autumn semester 2026.

Prerequisites

90 credits within the main field of study, design including a degree project of at least 15 credits or the equivalent.

You also need:
Approved portfolio and English 6
Or:
Approved portfolio and English level 2
Or:
the equivalent.

Objectives

Module 1: Interdisciplinary Innovation Processes, 3.5 credits
After completing the module, the student should be able to

- plan, conduct and evaluate an interdisciplinary project on product development
- apply methods and tools used in the innovation process
- evaluate the concept of innovation and its process from a business administrative, technical or design perspective, as well as identify problems and possibilities from a sustainability perspective,
- analyse and evaluate a project on product development from a sustainability perspective,
- present an interdisciplinary project on product development orally, visually and in writing.

Module 2: Innovation Process I – Idea Generation, 5 credits
After completing the module, the student should be able to

- apply and justify their choice of method for identifying different needs
- apply and justify their choice of method for generating ideas
- identify and analyse different needs and, based on these needs, generate ideas in an interdisciplinary innovation process with a broad sustainability perspective.

Module 3: Innovation Process II – Realisation, 5 credits
After completing the module, the student should be able to

- develop ideas into concepts using different methods
- evaluate feasibility and justify their choice of methods from the point of view of a broad sustainability perspective
- develop material that can serve as a basis for communication and evaluation of concepts.

Module 4: Innovation Process III – Evaluation, 5 credits
After completing the module, the student should be able to

- analyse, evaluate and revise concepts using different methods
- analyse and evaluate methods for product development
- present an interdisciplinary innovation project orally, visually and in writing, looking at the full process, from idea to implementation, analysing and reflecting upon how the project relates to the sustainability goals.

Module 5: Professional Skills, 2 credits
After completing the module, the student should be able to

- analyse and reflect upon the expertise and skills involved in different professions
- discuss and evaluate the different ways in which different professions approach science and art
- analyse and reflect upon their own professional skills by means of critical reflection from a broad sustainability perspective.

Module 6: Interdisciplinary Work, 2 credits
After completing the module, the student should be able to

- analyse individual and group approaches in interdisciplinary work
- reflect upon their own approach in interdisciplinary work
- discuss and evaluate different strategies for efficient interdisciplinary work from a broad sustainability perspective.

Module 7: Innovation Methods and Tools, 7.5 credits
After completing the module, the student should be able to

- analyse and reflect upon different disciplines' approaches, methods and tools
- evaluate scientific and artistic methods that may be relevant in an innovation project
- argue for their choice of empirical material and relevant data collection methods
- analyse and evaluate research results based on scientific as well as artistic methods, including a broad sustainability perspective
- apply and evaluate different ways of communicating the processes and results of research work.

Content

Module 1: Interdisciplinary Innovation Processes, 3.5 credits
Module 1 introduces the different methods and tools used in the innovation process through a project on product development. The module includes the following components:

- interdisciplinary work
- innovation concepts and the innovation process

- concepts involved in product development
- sustainability concepts
- consumption patterns and sustainability
- visual and oral presentation techniques
- academic writing, focusing on reports.

Module 2: Innovation Process I – Idea Generation, 5 credits
Module 2 problematises the concept of need, and develops the ability to generate ideas through interdisciplinary work. The module includes the following components:

- theories of need and their applications in the innovation process
- methods and tools for creating ideas
- a sustainability perspective on needs and the development of ideas
- written, oral and visual presentation of the initiation of the innovation process.

Module 3: Innovation Process II – Realisation, 5 credits
Module 3 concerns the development of concepts, as well as analysis and evaluation of feasibility. The module includes the following components:

- analysis of feasibility
- the importance of innovation for sustainable development
- analysis and establishment of criteria for realisation of the innovation process
- creation of material that may serve as a basis for communication and evaluation of concepts
- written, oral and visual presentation of the realisation of the innovation process.

Module 4: Innovation Process III – Evaluation, 5 credits
Module 4 concerns the evaluation of the innovation process and its results. The module includes the following components:

- consumer behaviour and sustainable development
- behavioural transformation in theory and practice
- evaluation and impact analysis of innovation from a broad sustainability perspective
- analysis and evaluation of the methods used for product development in the innovation process

- written, oral and visual presentation of the innovation process.

Module 5: Professional Skills, 2 credits
Module 5 includes the following components:

- the concept of professional skill
- the different concepts used and approaches taken by different professions from a broad sustainability perspective
- dialogue seminars as a method.

Module 6: Interdisciplinary Work, 2 credits
Module 6 includes the following components:

- multi-, inter- and transdisciplinary processes
- individual and group strategies in interdisciplinary work
- understanding the perspective of sustainability through complex collaboration.

Module 7: Innovation Methods and Tools, 7.5 credits
Module 7 includes the following components:

- scientific and artistic approaches, methods and tools
- methods for collecting data
- methods for analysing and evaluating data
- methods for surveying, analysing and evaluating sustainability perspectives in the innovation process.

Type of Instruction

The course consists of lectures, workshops and seminars based on the different competences and perspectives of the participating disciplines. The modules are partly based on projects, supported by supervisors from all the participating disciplines, as well as external stakeholders in collaboration with the programme. Teaching is primarily carried out on campus, although some parts may take place in venues determined by the external stakeholders. Practical work may be conducted within or outside the university.

Examination

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

Module 1: Interdisciplinary Innovation Processes, 3.5 credits

Hand-in assignments and a report.

Module 2: Innovation Process I – Idea Generation, 5 credits

Hand-in assignments and a report.

Module 3: Innovation Process II – Realisation, 5 credits

Hand-in assignments and a report.

Module 4: Innovation Process III – Evaluation, 5 credits

Hand-in assignments and a report.

Module 5: Professional Skills, 2 credits

Hand-in assignments and an essay on reflection.

Module 6: Interdisciplinary Work, 2 credits

Hand-in assignments and an essay on reflection.

Module 7: Innovation Methods and Tools, 7.5 credits

Hand-in assignments individually and in groups and an essay on reflection.

The following applies to all modules:
The grade A is the highest grade and the grade E is the lowest grade for passing the course. The grade F means that the student's performance is assessed as failed. Assessment criteria for the A–F scale, along with information about how grades for individual assignments are weighted to calculate the final grades are communicated to the students in writing no later than at the start of the respective modules.

If the university has decided that a student has the right to special educational support due to a disability, the examiner may offer an adapted test or allow the student to conduct the test in an alternative form.

For students who do not pass their first examinations, retake examinations are provided in accordance with Local regulations for courses and examinations at the first and second levels at Linnaeus University.

Course Evaluation

During or shortly after the course, a course evaluation is conducted. Results and analysis of the course evaluations are promptly communicated to the students who have taken the course. Students who are taking the course when it is offered the next time are informed of the results at the start of the course. The evaluation is anonymous.

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:
4FE169 and 4TS346 with 30 credits each.
Modules 1–6: 4FE040, 4FE160, 4FE164, 4TS040, 4TS042, 4ST044, 4DI710 and 4DI714 with 22.5 credits each.
Module 7: 4FE041, 4FE161, 4FE165, 4MT042, 4TS045, 4DI711 and 4DI715 with 7.5 credits each.

Other Information

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

Required Reading and Additional Study Material

Interdisciplinary Innovation Processes 3.5 credits

Atkinson, Anthony A. *Management Accounting*. Pearson Education. The latest edition, in selection ca 150 pages.

Bamossy, Gary, and Solomon, Michael (2016). *Consumer Behaviour: A European Perspective*. Pearson Education, in selection ca 180 pages.

Curedale, Robert. *Design thinking –process and methods manual*. Design Community College Inc. The latest edition, in selection ca 80 pages.

Kumar, Vijay. *101 Design Methods –A Structured Approach for Driving Innovation in Your Organization*. John Wiley & Sons, Inc. The latest edition. 325 pages.

Thorpe, Ann. *The Designer's Atlas of Sustainability*. Island Press. The latest edition. 221 pages.

Trott, Paul. *Innovation Management and New Product Development*. Prentice Hall. The latest edition, in selection ca 150 pages.

Additional study material

Hannington, Bruce and Martin, Bella. *Universal Methods of Design: 100 Ways to Research Complex Problems Develop Innovative Ideas, and Design Effective Solutions.* Rockport Publishers Inc. The latest edition. 208 pages.

Lidwell, William, Holden, Kritina and Butler, Jill. *Universal Principles of Design*. Rockport Publishers Inc. The latest edition. 214 pages.

Innovation Process I – idea generation 5.0 credits

Curedale, Robert. *Design thinking –process and methods manual*. Design Community College Inc. The latest edition, in selection ca 80 pages.

Puccio Gerard J. (2011) *Creative Leadership Skills That Drive Change*. 2nd edition Sage publications, in selection ca 150 pages.

Trott, Paul. *Innovation Management and New Product Development*. Prentice Hall. The latest edition, in selection ca 150 pages.

Max-Neef, Manfred. (1991) *Human Scale Development*. The Apex Press, 115 pages.

Additional study material

Weischenk, Susan (2011). *100 things every designer needs to know about people*. New Riders, 241 pages.

Mundford, Michael. *Handbook of Organizational Creativity*. AP Elsevier. The latest

edition. 737 pages.

Schön, Donald Alan. *The Reflective Practitioner.* Ashgate Publishing Limited. The latest edition. 384 pages.

Innovation Process II – realisation 5.0 credits

Ashby, Micahel. F., Shercliff, Hugh and Cebon, David (2013). *Materials: Engineering, Science, Processing and Design.* Butterworth – Heinemann. The latest edition, in selection 150 pages.

Ulrich, Karl T. and Eppinger, Steven D. Product *Design and Development*. McGraw Hill Higher Education. The latest edition. 358 pages.

Additional study material

Harris, La Verne Abe. *Idea Engineering – Creative Thinking and Innovation*. Momentum press 2014, 197 pages.

Innovation Process III - evaluation 5.0 credits

Atkinson, Anthony A. *Management Accounting*. Pearson Education. The latest edition, in selection ca 50 pages.

Slack, Nigel, Brandon Jones, Alistar, Johnston, Robert and Betts, Allan. *Operations and Process Management.* Pearson. The latest edition, in selection ca 200 pages.

Trott, Paul. *Innovation Management and New Product Development*. Prentice Hall. The latest edition, in selection ca 150 pages.

Bamossy, Gary, and Solomon, Michael (2016). *Consumer Behaviour: A European Perspective*. Pearson Education, in selection ca 180 pages.

Scientific articles, ca 100 pages.

Professional Skills 2.0 credits

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

Scientific articles, ca 100 pages.

Interdisciplinary Work 2.0 credits

Mintzberg, Henry, Ahlstrand Bruce and Lampel, Joseph B. (2009). *Strategy Safari: Your Complete Guide Through the Wilds of Strategic Management.* 2nd Edition, Pearson Ed. Lmt, in selection ca 150 pages.

Weick, Karl E. (1995) *Sensemaking in Organizations*. Sage publications, Inc. in

selection ca 100 pages.

Innovation Methods and Tools 7.5 credits

Curedale, Robert. *Design thinking –process and methods manual*. Design Community College Inc. The latest edition, in selection ca 80 pages.

Barbour, Rosaline (2018). *Doing focus groups*. Sage. The latest edition. 177 pages.

Bryman, Alan and Bell, Emma. *Business Research Methods.* Oxford University Press. New York. The latest edition, in selection ca 250 pages.

Thiel, David V. (2014). *Research Methods for Engineers*. Cambridge University Press. The latest edition. 306 pages.

Scientific articles, ca 150 pages.