



Course syllabus

Designmetodik Design Methodology

IDEA76, 13 credits, G1 (First Cycle)

Valid for: 2023/24

Faculty: Faculty of Engineering, LTH

Decided by: PLED ID

Date of Decision: 2023-03-16

General Information

Main field: Industrial Design.

Compulsory for: KID2

Language of instruction: The course will be given in English

Aim

The aim of this course is to provide an overview of the structure of the design process and with the support of the latest professional and scientific advances, introduce the essential principles of design methodology. Furthermore, previous and newly acquired knowledge and skills will be applied on a design project.

Learning outcomes

Knowledge and understanding

For a passing grade the student must

- Be familiar with the structure of the design process and a range of design methods.
- Have gained an understanding of the possibilities and limitations in the use of various design methods in relation to the design process and the implementation into a design project.
- With some guidance and supported by a given brief, the design process and previously acquired knowledge, implement relevant design methods in a project and develop a product.
- Within a given time frame document and present the process and the outcome.

Competences and skills

For a passing grade the student must

- Understand the complexity of the design process and how it relates to different design methods.
- Within a specified timeframe and with some guidance be able to structure, carry out, document and present an individual design project by implementing a design process with relevant methods.

Judgement and approach

For a passing grade the student must

- Critically reflect over and analyse their own process.
- Reflect the cultural mission and ethical responsibility of the designer

Contents

The course begins with an introductory lecture on design methodology, which aims to provide an overview of the methods used to analyse and structure the design process. Various methods will be taught to enable them to carry out a design project. Theoretical and practical aspects will be applied to and accompanied by exercises using design methods and creative techniques to develop a design proposal. Previously acquired skills such as sketching, computer aided image processing and model making will be incorporated into the course along with marketing related aspects etc.

In addition to theoretical lectures, the course is based on exercises under supervision, with the aim to attain knowledge about design methods. The exercises are completed with oral presentations, analysis, synthesis and critics - individually or in a group. The contribution of PhD teachers and invited researchers ensures that the current research findings of the area are addressed. During the course the students are introduced to the latest research results, and in this context they learn to make independent and critical assessments. Finally, the design project is presented both orally and in a written report, the form of which the lecturer will decide.

Examination details

Grading scale: TH - (U,3,4,5) - (Fail, Three, Four, Five)

Assessment: 80% attendance required. The assessment is based on individual and group assignments, project documentation and an oral presentation. If necessary, a written self-evaluation of the project.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Admission

The number of participants is limited to: No

The course overlaps following course/s: IDEA40

Reading list

- Grinyer, C.: Smart Design, Products That Change Our Lives. Mies; RotoVision, 2001, ISBN: 2-88046-524-9. Recommended reading.
- Jones, J. C.: Designing Designing. London: Architecture Design and Technology Press, 1991, ISBN: 1-85454-150-1. Recommended reading.

- Jones, J. C.: Design Methods. New York: Van Nostrand Reinhold, 1992, ISBN: 0-442-01182-2. Recommended reading.
- Jordan, P. W.: Designing Pleasurable Products, An Introduction to the New Human Factors. London: Taylor & Francis, 2000, ISBN: 0-7484-0844-4. Recommended reading.
- Landqvist, Jan: Vilda idéer och djuplodande analys, Om designmetodikens grunder. Stockholm: Institutionen för industridesign, Konstfack, 2001, ISBN: 91-7203-391-6. Recommended reading.
- Lawson, B.: How Designers Think, The Design Process Demystified. Oxford: Architectural Press, 2006, ISBN: 75066-077-5. Recommended reading.
- Cullen, C. D. and Haller, L.: Design Secrets, Products 2: 50 Real-Life Projects Uncovered. Gloucester, Mass.: Rockport, 2004, ISBN: 978-1-56496-476-2. Recommended reading.
- Whitten, J. L. and Bentley, L. D. : Systems Analysis and Design Methods, 7th edition. Boston: McGraw-Hill/Irwin, 2007, ISBN: 0-07-305233-7. Recommended reading.
- Text compendium provided at course start: Design Methodology, Industrial Design, Lund University.
- Bürdek, Bernhard E: Design: history, theory and practice of product design, 2 rev. uppl. Basel: Birkhauser Va, 2015, ISBN: 3035604037. Recommended reading.
- Cross, N: Designerly ways of knowing. Basel: Birkhäuser, 2007, ISBN: 978 3764384845. Recommended reading.
- Elam K. : Geometry of Design, Studies in Proportion and Composition. Princeton Architectural press, ISBN: 9781568982496. Recommended reading.
- Greet Hannah G.: Elements of Design. Princeton Architectural press, 2002, ISBN: 1-56898-3. Recommended reading.
- Suri, J. F.: Thoughtless acts?: observations on intuitive design, 1. ed. San Francisco: Chronicle Books,, 2005, ISBN: 0-8118-4775-6. Recommended reading.
- Wikberg Nilsson Å., Ericson Å, Törlind P.: DESIGN process och metod. Lund. Studentlitteratur AB , 2015, ISBN: 978-91-44-10885-8. Recommended reading.

Contact and other information

Course coordinator: Prof. Claus-Christian Eckhardt, claus.eckhardt@design.lth.se

Course homepage: <http://www.ide.lth.se>

Further information: In addition to theoretical lectures, the course is based on exercises under supervision, with the aim to learn about methods. The exercises are completed with oral presentations, analysis and critics - individually or in a group. The finishing project is presented both orally and written form.