

Course syllabus

Designmetodik Design Methodology

IDEA75, 5 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: Technology. Compulsory for: MD3

Language of instruction: The course will be given in Swedish

Aim

To provide an overview of the structure of a design process and to introduce the basics of various methods used by professional industrial designers to carry a design project forward, e.g. different methods used in various steps of the design process from problem description to design solution. Hence, to give insight into how industrial designers communicate their work process. In addition to lectures on how a design process is structured and relevant methods for practical accomplish a design project; the course is also building on the student carrying out, under supervision, exercises in order to practically try out their knowledge about presented methods.

Learning outcomes

Knowledge and understanding
For a passing grade the student must

- Demonstrate an understanding of the use of the methods presented in the course in relation to realization of a design project.
- Deomonstrate an understanding of the structure and complexity of the design process through practical experience.

For a passing grade the student must

- within the given timeframe, demonstrate an ability to apply (individually / in groups)
 their new knowledge, with guidance, to realize a design project from problem to
 concept idea.
- demonstrate the ability to with guidance, describe the carried out design project in a
 written documentation in which both the design process and the end result in form of a
 design concept is presented.
- demonstrate the ability to orally present, in seminars, the carried out design project for the other participants in the course supported by a visual / graphic presentation.

Judgement and approach

For a passing grade the student must

- demonstrate the ability to reflect on the use of methods in the design process and to critically analyse over his/ her own work.
- eflect the cultural mission, the ethical responsibility of the designer and a sustainable development of society.

Contents

The course starts with an introduction lecture, which aims to provide an overview of methods used to analyze and structure the work in a design process. The theoretical and methodological approach is then used in several practical exercises throughout the course. To provide the students with tools supporting them to be able to work in a design process by themselves the course introduced different ways to plan, organize and implement a design assignment, and in addition problem solving methods are presented. Previously acquired skills such as sketching, computer aided drawing/illustration and model making will be included alongside marketing related aspects such as user polls, target group definitions, mood-boarding as well practice in presentation and communications skills.

Examination details

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

Assessment: The assessment is based on 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

Jan Landqvist: Vilda idéer och djuplodande analys. , Om designmetodikens grunder.
 Carlsson Bokförlag, 1994, ISBN: 9172033916. Some parts of this book are required reading, these will be disturbed in the beginning of the course since this book is no

- longer available.
- Claus-Christian Eckhardt: Textkompendium: Design Methodology. Required Reading. the compendium will be available at the start of the course.
- Åsa Wikberg, Åsa Ericson, Peter Törlind: Design, process och metod. Studentlitteratur, 2015, ISBN: 978-91-44-10885-8. Required reading.
- Karl T Ulrich; Steven D Eppinger: Produktutveckling, konstruktion och design. Studentlitteratur, 2014, ISBN: 978-91-44-07421-4. Only chapter 11 is required reading.
- Lynn Haller and Cheryl Dangel Cullen: Design Secrets: Products 2: 50 Real-Life Projects Uncovered. Rockport Publishers, ISBN: 1592530710. All following literature is recommended reading for the student who wish to get deeper knowledge in the topic.
- Clive Grinyer: Smart Design, Products That Change Our Lives. RotoVision, ISBN: 2880465249.
- Jeffrey L. Whitten, Lonnie D. Bentley, Gary (CON) Randolph: Systems Analysis And Design Methods, 7th Edition. McGraw Hill Higher Education, 2005, ISBN: 9780073052335.
- Jones, John Christopher: Design Methods. John Wiley & Sons Inc, 1992.
- Jones, John Christopher: Designing Designing. Architecture Design and Technology Press, 1991.
- Bryan Lawson: How designers Think, The design process demystified. Routledge, 2005, ISBN: 978-0-7506-6077-8.
- Bryan Lawson: What designers know. Routledge, 2004, ISBN: 978-0-7506-6448-6.
- Victor Margolin; Richard Buchanan: The Idea of Design. The MIT press, 1995, ISBN: 978-0-262-63166-2.
- Nigel Cross: Designerly ways of Knowing. BirkHäuser, 2007, ISBN: 978-3-7643-8484-5.
- Patrick W Jordan: Designing pleasurable products. Taylor and Francis, 2000, ISBN: 0-748-40844-4.

Contact and other information

Course coordinator: Universitetslektor Elin Olander, Elin.Olander@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.