



LTH

FACULTY OF
ENGINEERING

Course syllabus

Designerns verktyg Tools for a Designer

IDEA02, 15 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. **Depth of study relative to the degree requirements:**

First cycle, has only upper-secondary level entry requirements.

Compulsory for: KID1

Language of instruction: The course will be given in Swedish

Aim

The aim is to give the student an opportunity to train essential techniques in the design process as well as to be able to present a design concept.

Learning outcomes

Knowledge and understanding

For a passing grade the student must

- get a hands-on understanding of the form/technique/material relationship.

Competences and skills

For a passing grade the student must

- Be able, under supervision, to work with traditional shop machines such as the band saw, lathe and milling machine.
- Present a design concept of a minor product using hand-rendered sketches as well as classical technical drawing views.
- Under guidance build a composite presentation model of the corresponding design concept, including product graphics. The precision should be equivalent to 1/10 mm

Judgement and approach

For a passing grade the student must

- be sensitive to adequate precision level and pay attention to details.

Contents

The course starts with an introduction to the possibilities and restrictions of a workshop, the aim of which is for the student to be able to work more independently in the workshop's machine park. Sketches and drafting techniques are introduced and practised. The training in shop techniques is expanded to include those particular for model building. Graphic design is introduced and practised with a focus on product graphics.

A form evolution workshop is integrated in the course with the objective to introduce various methods of generating a 3-dimensional form.

Examination details

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

Assessment: Individual examination in the form of assignments. The final grade is determined by weighing the different assignments. To pass the course, the student has to receive a passing mark on all assignments.

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.

Parts

Code: 0115. **Name:** Tools for a Designer, Part 1.

Credits: 7,5. **Grading scale:** UG. **Assessment:** Participation in workshop introduction. Written exam and assignment in technical drawing. Assignments i sketching. To pass the course, the student has to receive a passing mark on all assignments. **Contents:** Introduction to the possibilities and restrictions of a workshop, sketches and drafting techniques are introduced.

Code: 0215. **Name:** Tools for a Designer, Part 2.

Credits: 7,5. **Grading scale:** TH. **Assessment:** Examination will be individual based on the model and assignments. To pass the course, the student has to receive a passing mark on all assignments **Contents:** Sketching techniques and techniques for model building, graphic design with a focus on product graphics and a form evolution workshop.

Admission

The number of participants is limited to: No

The course overlaps following course/s: IDEA35, IDEA01

Reading list

- Wim Muller: Order and meaning in Design. Utrecht: Lemma, 2001, ISBN: 90 5189 6298.
- Andersson, N: Skissteknik, En Handbok i visualisering av designförslag. Umeå: Designhögskolan.
- Lindström, Lindström, B., Bonde-Wiiburg, E. (red.) : Karlebo Handbok. Stockholm: Liber, 2000, ISBN: 91 4701 5586.
- Scott Robertson : How to Draw, Drawing and Sketching Objects and Environments from Your Imagination. 2013, ISBN: 9781933492759.
- Scott Robertson: How To Render, Communicating Form and Rendering a Wide Range of Materials. ISBN: 9781933492834.

- John Montague: Basic Perspective Drawing. John Wiley And Sons Ltd. Sverige., 2004, ISBN: 9780471472742. Paperback.
- Hallgrímsson, B: Prototyping and modelmaking for product design. London: Laurence King, 2012, ISBN: 9781856698764.

Contact and other information

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Further information: After outlined theory and knowledge based briefings, the student exercises various work phases under supervision.