UNIVERSITY OF SKÖVDE

TRANSLATION FROM SWEDISH

COURSE SYLLABUS

Inclusive Design A1F

6 credits

Course code: VP717A
Version number: 4
Valid from: 1 July 2022
Ratified by: Curriculum Committee for Engineering Science
Date of ratification: 6 December 2021

1. General information about the course

The course is provided by the University of Skövde and is named Inclusive Design A1F (Inkluderande design A1F). It comprises 6 credits and is a second-cycle course. The level of progression is A1F.

The course is a part of the main field of study in Virtual Product Realization. The disciplinary domain of the course is Technology.

2. Entry requirements

A Bachelor's degree equivalent to a Swedish kandidatexamen of 180 credits, within the main fields of integrated product development, production engineering, automation engineering, mechanical engineering or information technology (or the equivalent) and passed course VP706G Industrial Ergonomics A1N (or the equivalent).

A further requirement is proof of skills in English equivalent of studies at upper secondary level in Sweden, known as the Swedish course English 6. This is normally demonstrated by means of an internationally recognized language test, e.g. IELTS or TOEFL.

3. Course content

The course deals with how tools and methods can be used to develop products or workplaces to consider diversity in the user group. Most design problems are of a multidimensional nature where several key factors in both user and product interact and need to be handled in parallel. Different methods for working with inclusive design and dealing with multidimensional design problems are presented and their advantages and limitations are discussed. The course also includes user studies with the aim of producing data to use in various analysis methods and in computer support to identify and estimate user exclusion. This data and subsequent analysis are then used as a basis when improved and more inclusive design proposals are developed.

4. Objectives

After completed course the student should be able to:

Knowledge and understanding

- explain the concept of Inclusive Design and its various principles and approaches,
- describe different ways in which users can be excluded from a design solution,

Competence and skills

- use an inclusive design process and its methods and show how the methodology fits into a larger product development process,
- collect user data and use analysis methods and computer support to identify and estimate user exclusion for a given design solution,

Critical judgement and approach

- reflect, discuss and argue about the importance of an inclusive design process and different effects for excluded users when inclusive design is not taken into account.

5. Examination

The course is graded A (Excellent), B (Very good), C (Good), D (Satisfactory), E (Sufficient) or F (Fail).

The examinations of the course consist of the following modes of assessment:

- **Written assignments**
  6 credits, grades: A/B/C/D/E/F

Students with a permanent disability who have been approved for directed educational support may be offered adapted modes of assessment.

6. Types of instruction and language of instruction

The teaching is comprised of laboratory sessions, teaching lessons, lectures and seminars/group discussions.

The teaching is conducted in English.

7. Course literature and other educational materials

Clarkson, J., Coleman, R. (Eds.). (2015) *Inclusive Design. Special Issue of Applied Ergonomics*. Volume 46, Part B, Pages 233-324 (January 2015).

Holmes, K. (2020). *Mismatch: How inclusion shapes design*. MIT Press.

University of Cambridge (2017). *Inclusive Design Toolkit*. http://www.inclusivedesigntoolkit.com/ Engineering Design Centre, University of Cambridge.

Articles, reports and manuals that are made available at the start of the course.

Reference literature

Eikhaug O. et al (2010). *Innovating with People - The Business of Inclusive Design*. (1st) Oslo: Norsk Designråd. URL: http://www.innovatingwithpeople.net/ ISBN 9788299185226.

Norman, D. (2013). *The design of everyday things: Revised and expanded edition*. New York: Basic books. ISBN 9780465050659.

Pheasant, S. & Haslegrave, C.M. (2005). *Bodyspace: Anthropometry, Ergonomics and the Design of Work*. (3th ed) London: Taylor & Francis. ISBN 0415285208.

8. Student influence

Student influence in the course is ensured by means of course evaluation. The students are informed about the results of the evaluation and potential measures that have been taken or are planned, based on the course evaluation.

9. Additional information

Further information about the course, as well as national and local governing documents for higher education, is available on the website of the University of Skövde.