SYLLABUS

Advanced service design 15 credits I0002E

Avancerad tjänstedesign

Course syllabus admitted: Spring 2023 Sp 3 - Present

DECISION DATE
2022-06-17

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LULEÅ TEKNISKA UNIVERSITET

Advanced service design 15 credits I0002E

Avancerad tjänstedesign

First cycle, I0002E

Education level	Grade scale	Subject	Subject group (SCB)
First cycle	U G VG *	Informatik	Informatics/Computer and Systems Sciences

Main field of study

Social Informatics

Entry requirements

In order to meet the general entry requirements for first cycle studies you must have successfully completed upper secondary education and documented skills in English language and In order to meet the general entry requirements for first cycle studies you must have successfully completed upper secondary education and documented skills in English language. The course assumes basic knowledge of Social Informatics, 60 ECTS.

Selection

The selection is based on 1-165 credits.

Examiner

Anna Ståhlbröst

Course Aim

After the course, the student should be able to:

- Describe and explain the philosophy and principles behind an agile and design-thinking approach
- Plan, lead and reflect on design methods and their suitability in different design situations
- Describe, apply and reflect on theories and methods that support AI-driven service design projects
- Analyze strengths and weaknesses with a design-oriented and agile approach based on a specific service development work
- Plan, implement a AI-driven service design project where an agile and design-oriented approach is applied
- Document, evaluate and critically discuss a AI-driven service design projects based on own experiences from service design projects
- Make visible and discuss how different stakeholders' roles and needs are achieved in a service design project
- Apply, discuss, and argue for a norm-critical perspective in digital AI-service development

Contents

During the course, the student applies principles for a design-oriented and agile approach by planning, implementing and reflecting on a design workshop where methods for service design are used. The student learns about the design thinking and agile development, its background and basic philosophy. The course will deal with the history of different methods, the philosophy behind these methods and tool casting and gain practical experience of methods that exist such as User Journey mapping, Personas and SCAMPER. The course will also include principles and management of service development projects and agile development. The course also has practical elements where the student learns to plan, use and analyze different working methods.

Realization

Each course occasion´s language and form is stated and appear on the course page on Luleå University of Technology's website.
The teaching consists of lectures, seminars, practical workshops, active participation in real project work, reflection assignments, supervision and project presentations. The student is trained in oral and written presentation by conducting workshops, presentations and written assignments. The student works with open design issues where they, through the application and choice of creative methods, design an AI-driven service for a client outside, or inside, the university. The teaching transforms theoretical knowledge into experience by practically applying the theories that the course covers.

Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided.
The course is examined through oral individual assignments, written individual assignments, group presentations and a real AI-service development project conducted in groups. The individual assignments examine the ability to describe and explain the philosophy behind design thinking and its principles, as well as reflect on the suitability and use of design methods in design situations. In these individual assignments, students write an individual assignment where they are examined in the ability to apply and argue for a norm-critical design perspective in the digital service development area linked to a current societal phenomenon. In another individual assignment, students reflect on design methods suitability. In the group assignments, students must plan, describe and apply theories and methods for agile and design-oriented working methods in a service development work. Based on these experiences, students must document, explain, argue for, evaluate and critically review a service development project where they analyze strengths and weaknesses with the working method and make visible the roles and needs of different stakeholders. The group assignments are examined through an oral presentation, demonstrator, a written report and a poster presentation where the students orally present their project results.

Literature. Valid from Spring 2022 Sp 3

Lewrick, M., Link, P. & Leifer, L. (2018). The Design Thinking Playbook, Verlag Vahlen GmbH, München

Wärnestål, P. (2021) Design av AI-drivna tjänster, Studentlitteratur, Lund

Course offered by

Department of Computer Science, Electrical and Space Engineering

Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0001	Group assignments	U G VG *	7	Mandatory	A15	
0002	Individual assignments	U G VG *	8	Mandatory	A15	

Study guidance

Study guidance for the course is to be found in our learning platform Canvas before the course starts. Students applying for single subject courses get more information in the Welcome letter. You will find the learning platform via My LTU.

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Last revised

by HUL Jonny Johansson 2022-06-17

Syllabus established

by Jonny Johansson, HUL SRT 2015-02-16