

Undervisningsportefølje

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Undervisningserfaring

2021	ST4-SCFS Softwareteknologi i Cyber-fysiske Systemer
2020	SI1-OOP Object-orienteret Programmering
2020	ITI4-AUT Informationsteknologi i en automationskontekst
2019	SI1-OOP Object-orienteret Programmering
2018	SI1-OOP Object-orienteret Programmering
2017	RD1-POP PLC og Objekt-orienteret Programmering
2016	SI1-OOP Object-orienteret Programmering

Underviseruddannelse

2019	Universitetspædagogikum
2019	Forskningsbaseret undervisning
2019	Studerende som de lærende
2019	Opsætning af kurser i Blackboard
2019	Vejledning - roller og relationer
2019	Video i undervisningen
2019	Brug student response systems i din undervisning

Vejledning - Ph.D.

2020	Ph.D. medvejleder - Jonas Vedsted Sørensen
2020	Ph.D. medvejleder - Christian Skafte Beck Clausen
2019	Ph.D. medvejleder - Ying Qu
2016-2019	Ph.D. medvejleder - Newsha Ghoreishi
2016-2018	Ph.D. medvejleder - Aisha Umair

Vejledning - Bachelorprojekter

2019	Vejleder - Christian Skafte Beck Clausen og Jonas Vedsted Sørensen
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Undervisningsadministration

2019-	Medlem, Undervisningsudvalget ved det Tekniske Fakultet, Softwareuddannelserne
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Undervisningsfilosofi

My overall teaching philosophy is problem-oriented, project-based teaching, where students are provided with a project subject early in the semester

The project is closed in the beginning, in the sense that problems are clearly described towards the students and the level of abstraction is low.

This provides the students with an easy entry into the project work, and yields a feeling of success early on which in turn yields motivation among the students.

As the project progresses, the abstraction level in the lectures increases and so does the tasks in the project. Students are increasingly asked to identify problems themselves, and argue for (and demonstrate) solutions to these.

This helps students attain a more inquiry-based approach to learning, as they themselves start to understand the problem-domain, the solution-domain and how the two relate to each other.

In terms of Healey's four quadrants, this means that as the course progresses the students go from taking on the role of an audience (only "pure" audience in the very beginning) to becoming participants. Indeed, the students are eventually capable of working almost autonomously, which means that the role of the project supervisor also changes as the course progresses. The supervisor goes from being a guide giving students ideas to next steps to being a peer who gives feedback on student discoveries.

in the Didactical triangle, the course then navigates on all three sides with lectures being on the Teacher<->Content-side, project work residing (ultimately) on the Student<->Content-side, and supervision on the Teacher<->Student-side.

With my lectures I want to generate student interest, make them understand the purpose of the field being taught in relation to other courses as well as in their future careers, make them understand the core principles of the course and have the students apply these principles to actual problems.

In this context, I think it is crucial that my lectures:

- a) Enable reflection so that students test what they have been taught and learn to reflect on the limitations on the approaches they take, to go back and learn of (and relate to) other approaches
- b) Stimulate interest since I believe that interest is a key enabler in making students perform to their potential
- c) Are focused on practical application in order to enable students to understand theory in a practical context
- d) Yield successes by enabling the students to solve actual problems
- e) Go from abstract (theory) to concrete (application to actual problems)
- f) Introduce the basics of the profession

I do not believe that a lecture should be used to make the student confirm (or the opposite) of their chosen study. I will assume that everyone are there of interest, and the few that aren't, I'll try to win over.

Neither do I believe that lectures should act as a filter of students. Lectures should hit broad and hit everyone who chose to invest time in participating in the course.

Finally, I believe that we are dealing with young grown-ups. We are not there to teach them manners.

Øvrige aktiviteter relateret til undervisning og undervisningsudvikling

ST4-SCFS - Software Technology in Cyber-Physical Systems

Responsible for designing and teaching the course on Software Technology in Cyber-Physical Systems. Spring 2021.

ITI4-AUT - Information Technology in an Automation Context

Responsible for co-designing and teaching the course on Information Technology in an Automation Context. Spring 2020.

SI1-OOP Object Oriented Programming

Responsible for creating the new course description, co-designing course contents and teaching. Spring 2019

RD1-POP PLC and Object Oriented Programming

Responsible for designing and running the Object Oriented Programming part of the course. Fall 2017

SI1-OOP Object Oriented Programming

Co-responsible for designing and running the Object Oriented Programming part of the course. Fall 2016