

Teaching portfolio

Dirk Kraft

The Maersk Mc-Kinney Moller Institute

SDU Robotics

Email: kraft@mmmi.sdu.dk

Phone: +4565507926

Pedagogical view: Educational practice - Basis / values

My teaching is focused on the engineering discipline. I believe that for an engineer it is essential to be able to apply the concepts we teach the students in the real world. Only being able to talk about the methods is not enough.

As such, I believe that the necessary depth of learning can only be achieved by actually applying the material. Depending on the level of the class, this can be achieved using different tools. I prefer to use the following ones:

- Discussion of relevant case studies.
- Mid-sized projects that apply the academic material to a realistic problem.
- Larger projects that require individual furthering of knowledge beyond what was discussed in class.

2. Teaching experience

| | |
|-----------|---|
| 2014-2019 | RM-ROV12 - Robotics and Computer Vision 2; Co-Teacher |
| 2013-2018 | RM-ROV11 - Introduction to Robotics and Computer vision; Co-Teacher |
| 2010-2016 | RM-VIS3 - Advanced Topics of Computer Vision; Proj. supervision |
| 2014 | VK1-IMG1 - Medical image processing; Co-Teacher |
| 2010-2013 | RM-VIS2 - Computer Vision; Co-Teacher Proj. supervision |
| 2010-2012 | RM-VIS1 - Image Processing; Teacher |
| 2008 | PSI1 - Project System Integration 1; Proj. supervision |
| 2008 | ROBP01- Robotics project; Co-Teacher/Proj. supervision |

Besides the above-mentioned courses, I have given various guest lectures in other courses and supervised multiple Bachelor, Diploma, Master and Ph.D. theses.

Formal pedagogical training

Lecturer Training Program 2011.

- Two focused blocks of courses (3 and 2 days respectively) encompassing the following topics:
 - o Activating teaching
 - o Alignment
 - o Student learning
 - o Basic e-learning qualification
 - o Teaching evaluations: Purpose, methods and consequences
 - o Teaching exercise
 - o Supervision
 - o Teaching in a foreign language
 - o Teaching at SDU
- Participation in educational theory courses for two ECTS.
- Ten hours of peer supervision and discussion.
- 26 hours of supervised teaching activities.

Short courses in educational theory

- Developing Research based Teaching, Mick Healy, SDU Odense, April 2011
- Linking Discipline-Based Research and Teaching to Benefit Student Learning, Mick Healy, SDU Odense, April 2011
- Interactive Lecturing, Birgitta Wallstedt, SDU Odense, May 2011
- Assessment and Feedback, Phil Race, SDU Odense, October 2011
- Assessment Forms, Sally Brown, SDU Odense, October 2011
- Workshop: Design your own e-learning activities, Inger-Marie Christensen, SDU Odense, October 2011
- Teaching in Multicultural Classrooms, Dana Minbaeva, SDU Odense, March 2012

Pedagogical development project

- Pedagogical Development Project (as part of the Lecturer Training Program 2011). Study on Activation in a mixed, mandatory class. Based on experiences while trying to increase student activation in VIS1-F11. Results presented as a poster. SDU Odense. Fall 2011.

Other activities related to teaching and teaching development

Actively participated in the redesign of the master of science program in Engineering (Robot Systems) at The Maersk McKinney Moller Institute, University of Southern Denmark, Fall 2012.