

Teaching portfolio

1. Teaching CV: A list of any lecturing and supervision tasks, including specification of academic fields, scope, level (bachelor, master, continuing education, PhD) as well as any external examiner tasks.

I am a passionate researcher motivated to apply engineering tools and principles to improve human health. My research focus has always been at the interface between engineering and biology. I am also an experienced problem-based learning (PBL) lecturer with a strong commitment to quality education. My teaching experience spans a variety of courses and programs, and I have also supervised numerous student projects at both the undergraduate and graduate levels. I also serve as an external examiner at various levels. The following is an overview of my teaching experience as well as my responsibilities as a supervisor and examiner: Teaching Experience: •Lecturer for several courses at the Faculty of Medicine, including the Bachelor and Master programs in Medicine, Medicine with Industrial Specialization (MedIS), and Biomedical Engineering and Informatics (BMEI). •Lecturer for PhD courses in the program of Biomedical Science and Engineering, at the Faculty of Medicine Facilitation of cases: •Case facilitator at the Bachelor in Medicine / MedIS (since 2011) Supervision Experience: •Student projects at the Bachelor in Medicine / MedIS (50+ students) •Student projects at the Master in MedIS (30+ students) •Student projects at the Master in BMEI (5+ students) •Bachelor thesis in Medicine / MedIS (30+ students) •Master Thesis in MedIS (15+ students) •Master Thesis in Nanobiotechnology, Department of Materials and Production (5 students) •Master Thesis in BMEI (2 students) •Student projects / thesis of international exchange students (Erasmus, International Medical Cooperation Committee (IMCC)) (10+ students) •Ph.D. Thesis in Biomedical Science and Engineering (2 students) External examiner tasks: •Member of the Bachelor of Engineering Corps of External Examiners •Member of the Civil Engineering Corps of External Examiners •Member of assessment committees of qualifying PhD exams •Member of assessment committees of PhD thesis (Denmark and abroad)

2. Study administration: A list of any study administration tasks, e.g. study board membership, head of studies or semester or course coordinator, accreditation, etc.

•Course coordinator: Nutrition and the digestive system 2, Bachelor in Medicine (2013-present) •Course coordinator: Molecular and Cellular Methods in Biomedicine, Master in MedIS (2013-present) •Semester coordinator: 5th semester Bachelor in Medicine (2013-2021) •Course coordinator: Methods in Cellular Diagnostics and Biomedicine, Master in MedIS (2011-2012) •Course co-coordinator: Biocompatibility and Bioelectrical Modelling, Master in BMEI (2009-2010) •Course coordinator: Biocompatibility, Master in BMEI (2009)

3. University pedagogy qualifications: A list of any completed courses in university pedagogy, PBL courses, workshops, academic development projects, collegial guidance and supervision, etc.

•Course in University Pedagogy (Adjunkt pedagogicum) AAU Learning Lab (2011-2013) •Basic course with focus on Problem Based Learning, the AAU-model (2012) •Supervisor of Emil Kofod Olesen. Course in University Pedagogy (Adjunkt pedagogicum) AAU Learning Lab (2015-2017)

4. Other qualifications: Conference attendance, editorials, presentations, etc. relating to education, 'University Teaching Day', etc.

•Participation in the AAU learning day (2012, 2014, 2017, 2022) •Participation in the workshop "7-trinsskalaen" Danmarks Evalueringsinstitut (2018) •Participation in the workshop "MedIS opportunities" (2021)

5. Teaching activity development and teaching materials: A list of any contributions to the development of new modules, teaching materials, study programmes, e-learning, collaboration with external business partners, etc.

Curriculum development: I have participated in the revision of the different curricula of the educations I participate or participated as teacher, including Master in BMEI, Master in MedIS and Bachelor in Medicine/MedIS. For the 2015 revision of the Bachelor curriculum in MedIS I have coordinated the contents related to Physiology. Development of teaching materials: •Contribution and updating of the clinical compendium for 5th semester Bachelor in Medicine (2015-2021) •Elaboration of the 4 guides for "Resource Sessions" in Nutrition and the digestive system 2, Bachelor in Medicine. •Elaboration of the guide for laboratory exercises in Nutrition and the digestive system 2, Bachelor in Medicine. •Elaboration of the module assignment in Nutrition and the digestive system 2, Bachelor in Medicine. •Elaboration of 5 guides with assignments for the course Molecular and Cellular Methods in Biomedicine, Master in MedIS •Formulation of protocols and exercises for the PhD course Techniques in Histology and Immunohistochemistry (2014) •Formulation of assignments for the PhD course Advances in Skeletal Muscle Research (2020)

6. Teaching awards you may have received or been nominated for.

Nominated to teacher of the year (2021)

7. Personal reflections and initiatives: Here you may state any personal deliberations as regards teaching and supervision, any wishes and plans for further pedagogic development, plans for following up on feedback/evaluations from students, etc.

My teaching principles include creating an effective and stimulating learning environment, using a variety of didactic tools and teaching methods, fostering students' critical thinking and problem-solving skills, and promoting values beyond the specific learning objectives of the course. I believe that it is important for the success of the teaching process to clearly articulate the objectives and expected outcomes, to motivate students by sharing personal experiences, and to engage in constructive dialogue with students. I recognize the challenges of measuring teaching success and teaching students with diverse backgrounds, expectations, and motivations. I teach primarily using a problem-based learning approach and continually focus on improving teaching effectiveness, understanding different types of students, improving competencies related to the problem-based learning approach, and implementing student assessment methods that are consistent with learning outcomes.

8. Any other information or comments.

Type your answer here...