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 have extensive experience as class-room teacher and supervisor of student groups at the Bachelor Sc., Master Sc., and Ph.D. level. I lecture and supervise on topics that are closely related to my research areas of interest (Rehabilitation technologies, Neurorehabilitation, Motor Control) but also on more basic topics (Signal acquisition and processing, Biomedical instrumentation).
I am currently course responsible for the course:
- Methods for System Development in Biomedical Engineering (BSc in Engineering - Biomedical Engineering and Informatics)
I teach/thought in the following courses:
- Rehabilitation technology (MSc. in Engineering - Biomedical Engineering and Informatics)
- Robotic sensing (BSc. in Robotics)
- Robots in the healthcare system (MSc. in Robotics)
- Health care technology (MSc. in Clinical Science and Technology)
I co-organize the Ph.D. course:
- Aalborg symposium on the advances in neurophysiology and neural rehabilitation engineering of movement (ANRES)
I contribute with one lecture to the Ph.D. course:
- Nociception and motor control
I (have) supervise(d) and co-supervise(d) student projects in the:
- BSc. in Engineering - Biomedical Engineering and Informatics
- MSc. in Engineering - Biomedical Engineering and Informatics
- MSc. in Clinical Science and Technology
- BSc. in Robotics
- BSc. in Electronic Engineering
I (have) supervise(d) and co-supervise(d) multiple Ph.D. Students researching in the following areas: rehabilitation, assessment, and assistive technologies, gait training of stroke patients, biofeedback, robotics and electrical stimulation technologies. I served as opponent (evaluator) of several Ph.D. defenses abroad.
Language of instruction: Danish, English, and Spanish

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.

I am the semester coordinator for:
- MSc. in Clinical Science and Technology (2nd semester, since 2009)
- BSc in Engineering - Biomedical Engineering and Informatics (3rd semester, since 2009)
I have been the semester coordinator for:
- MSc. in Clinical Science and Technology (4th semester, 2010-2015)
- BSc in Engineering - Biomedical Engineering and Informatics (4th semester, 2007)
I am an elected member of the Study Board for Health and Technology (and its predecessor) since 2012.
I participate actively in curriculum development. I developed lecturing content and implemented practical classes (exercises and laboratory activities) for the diverse courses I teach. I have also taken part in working groups that revised the curriculum of particular courses and entire Study Programs (e.g., MSc. in Clinical Science and Technology, BSc. and MSc. in Engineering - Biomedical Engineering and Informatics, BSc. and Msc. in Robotics).
I (have) participate(d) also in diverse Academic institution accreditation activities.

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

Curses and workshops - examples:
- Working cross-culturally – Cultural Intelligence (CQ) competence development, International Staff Unit, AAU, 2019
- PHD supervision course, AAU, 2018
- Intercultural supervision/work, AAU, 2017
- "University teaching day" and workshops for teachers, at HST, AAU, 2007 to present
- "University Pedagogy for Assistant Professors" Course (Adjunktpædagogikum), AAU, 2005-2007. Served afterward as supervisor of colleagues participating in the Pedagogic Course.
- Introduction to Problem Based Learning, Aalborg University (2005)

Webinars - examples:
- Various about Digital teaching, AAU, since 2020
- Inspiration and guidance on how to design digitally supported teaching, AAU, 2020

- How to flip your classroom when the world is flipping out - by Eric Mazur for Pearson, 2020

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

- Invited speaker (in Spanish): "Aprendizaje basado en problemas en carreras tecnológicas: el modelo de la Universidad de Aalborg", Congreso Nacional de Educación Tecnológica Universitaria, Buenos Aires, Argentina, 2022.
- Webinar presenter (in Spanish): "Aprendizaje Basado en Problemas (ABP): Competencias Relacionadas a ABP y su Progresión", International Federation of Engineering Education Societies, Nov 10 2020.
- Keynote speaker (in Spanish): "Problem based learning. The Aalborg University Model: principles, implementation, and experiences", Latin American Engineering Conference (CLADI), Parana, Argentina, 2017.
- Served as supervisor of 2 Assistant Professors participating in the "University Pedagogy for Assistant Professors" Course.
- Other teaching activities: chairman of the PhD Assessment Committee of various dissertations and Moderator of several Ph.D. defenses at AAU.

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.

- Development of material for new/revised courses in the MSc. in Clinical Science and Technology, BSc. and MSc. in Engineering - Biomedical Engineering and Informatics, BSc. and Msc. in Robotics.
- Development of contents for digital teaching (MSc. in Clinical Science and Technology, BSc. in Engineering - Biomedical Engineering and Informatics).
- Participation in Workshop about the MSc. in Clinical Science and Technology program (analysis of challenges and experiences to further develop the program) and Workshops about PBL learning goals and progression in study plans.
- Participation in Work-meetings about PBL in the study plans for BSc. and MSc. in Engineering - Biomedical Engineering and Informatics, and MSc. in Clinical Science and Technology.
- Meetings with diverse external collaboration partners to discuss project proposals for different semesters of the MSc. in Engineering - Biomedical Engineering and Informatics and MSc. in Clinical Science and Technology programs

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

Nominated for Teacher of the Year in 2020, Study Board for Health and Technology.

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.

What is good teaching?
With the fast and ever-changing field of medical technologies in mind, I think that good teaching is the one that manages to help the students understand the principles behind basic and applied sciences, encourages the development of logical thinking, allows acquiring and developing new and more complex knowledge and thereby expands the students' abilities. Good teaching refers also to well-prepared and knowledgeable teachers.

The role of the teacher
In my view, the role of the teacher is to facilitate the acquisition of knowledge by the students by providing them with the tools they must use to develop their understanding. The teacher should "inspire" the students, so they feel the need of exploring/generating new ways of solving problems. The teacher/student's relationship is very important and favors/discourages the learning process. Respect for each other "role" and effort, and a positive attitude are the basis for such a relationship.

Relation between teaching and research activities
When teaching at the University level, I think the ideal situation is to perform research-based teaching. This has in many cases been possible when courses were closely related to my research field or when students choose to work on a project related to my research activities. The basic courses, more removed from my research, are though very interesting by themselves because they are cornerstones in the education of the students and the base for acquiring more complex knowledge in the future.

Teaching form at Aalborg University (problem-based learning)
It never stops to surprise me the ability the students develop to identify what they need to learn to solve a particular problem and how after a period of mere 4 months, most of the groups solved the problem at hand. The majority of the students are engaged and quickly learn to focus on the identified problem and its solution. This is undoubtedly a strength of the PBL teaching method. Furthermore, the fact that the students work in groups, allows them to learn from each other, complement their abilities, develop their strong sides, exercise working in and leading a group, and carry out a project. These are basic transverse skills that everybody needs once graduated and that can be progressively trained at the

University.

8. Any other information or comments.