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.

Information as of August 2022

Courses (energy technology):
•Electromagnetic Transients in Power Systems, Analysis and Simulation Studies (PhD Course: 2011, 2013, 2014, 2016, 2018, 2020, 2021)
•Power System Protection (PhD course: 2014; partly teaching)
•Underground and Submarine Power Cables (PhD course: 2017; partly teaching)

•Advance Course on Electrical Power Systems (Master Course: 2012-)
•Harmonics in Power Systems (Master Course: 2009-2010)
•Fundamentals of Underground and Submarine Power Cables (Master Course: 2009)

•Electric Power Systems and Digital Electronics (Bachelor Course: 2012-)
•Introduction to Electrical Engineer (Bachelor Course: 2012-)
•Electrical Transmission Line Parameters and Power and Energy Transmission in Electrical Power Systems (Bachelor Course: 2009-2010)
•Introduction to safety procedures (General course: 2014 -)

Supervision (energy technology):
•PhD: 14 PhD students have been supervised/co-supervised, plus 4 guest PhD students
•Master: 64 projects have been supervised
•Bachelor: 63 projects have been supervised

External Examiner:
Part of censorkorps
Censor of project and courses at DTU, Århus University and University of Agder.

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.

Semester coordinator of the master program in electrical power systems and high voltage engineering (EPSH) 2, 3 and 4, since 2014

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

Adjunktpædagogikum course
PBL in Engineering and Science - Development of Supervisor Skills

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

CISPEE 2016 - International Conference of the Portuguese Society for Engineering Education

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.

Teaching materials, both slides and exercises, were developed for all courses (see point 1 for list). These have been highly praised by the students that often state to prefer them to the recommended literature.

Participation in the curriculum development for education in Energy Technology. Contributions and decisions regarding the contents of the courses Elektriske Grundfag, Elektriske Anlæg and Advance Course in Electrical Power Systems

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

Award of best lecturer on 2017/2018 - Faculty of Engineering and Science
Award of best lecturer on 2017/2018 - Department of Energy Technology
Award of best lecturer on spring 2014 - Department of Energy Technology
Nominated for best lecturer by the students every year since 2012 - Department of Energy

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.

I use a variety of learning strategies such as lectures, practical exercises and mini projects, because I believe that the engineering fundamental concepts and theories are better learned when combined with lectures, real examples and practical exercises. As a result, I prepare specific exercises for each course module. These exercises cover most of the courses' topics and allow me to assess the students' understanding of the concepts. Sometimes, I also prepare a mini project in order to test students' knowledge.
Even though I strongly emphasise the importance of knowledge in engineering fundamentals, I also recognize that engineering education is something more. I try to go beyond the engineering knowledge by promoting the development of skills related with engineering analysis and practice, such as problem analysis, solving skills, communication and team work.

AAU engineering education system is based in PBL, which allows the students to develop skills related with engineering analysis, modelling and practice, as well as to develop soft skills such as communication, team work and lifelong learning. Recently, these competences were claimed as being necessary in engineering education, in order to educate a new generation of engineers to address new challenges posed to their profession. Moreover, this learning environment promotes critical thinking, self-directed learning, problem analysis and problem solving skills in students.
It is my personal opinion that PBL has the advantage of giving the students some of the engineering practice skills that they will continue to use after finishing their education. I try to enhance this experience by preparing projects in collaboration with the industry, which allows the students to have a glimpse of how is to work outside the university.
PBL promotes not only the mobilization and application of theoretical knowledge in real life contexts, but also the understanding of more complex concepts of engineering fundamentals. I always try to emphasise the relevance of these concepts as part of the students' project work, final report and/or learning outcomes assessed.
I believe that students are the best evaluators of a teacher. For that reason, I ask the students to do an anonymous evaluation of my teaching at the end of each course/supervision. I try to adapt my teaching methods to address their motivations and needs, based on their feedback.
answer here...

8. Any other information or comments.

Type your answer here...