

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.

Course Activities Fulltime M.Sc. Course: Development of Quality, Risk, and Project Management Systems, 5 ECTS. Department of Mechanical and Manufacturing Engineering, Aalborg University. M.Sc. in Operations and Supply Chain Management, Management in the Building Industry, Building Informatics, and Mathematics-Economics as target groups. Teaching experience since autumn 2012. Danish and English lecturing language. One third of the course is risk related. Following lecture themes and teaching styles are applied: - Lecture One: Managing Risk in Projects, 2 x 45 minutes' lecture with 2 x 45 minutes' exercises. - Lecture Two: Identifying Risk in Estimating and Budgeting, 2 x 45 minutes' lecture with 2 x 45 minutes' exercises. - Lecture Three: Risk Assignment and Management of Project Execution and Control, 2 x 45 minutes' lecture with 2 x 45 minutes' exercises. - Lecture Four: Risk Modelling and Decision Analysis, 2 x 45 minutes' lecture with 2 x 45 minutes' exercises. Fulltime M.Sc. Course: Development of Advanced Quality, Risk, and Project Management Systems, 5 ECTS. Department of Mechanical and Manufacturing Engineering, Aalborg University. M.Sc. in Operations and Supply Chain Management and Management in the Building Industry as target groups. Teaching experience since spring 2013. Danish and English lecturing language. One third of the course is risk related. Following lecture themes and teaching styles are applied: - Lecture One: Risk Filtering, Ranking, and Management, 2 x 45 minutes' lecture with 2 x 45 minutes' exercises. - Lecture Two: Risk of Extreme Events and the Fallacy of the Expected Value, 2 x 45 minutes' lecture with 2 x 45 minutes' exercises. - Lecture Three: Multiobjective Trade-Off Analysis, 2 x 45 minutes' lecture with 2 x 45 minutes' exercises. - Lecture Four: Practical Risk Management Workshop, 1 x 45 minutes' lecture, 2 x 45 minutes' workshop exercise, and 1 x 45 minutes' student presentation. Fulltime M.Sc. Course: Management of the Construction Process, 5 ECTS. Department of Mechanical and Manufacturing Engineering, Aalborg University. M.Sc. in Building Informatics and Management in the Building Industry as target groups. Teaching experience since autumn 2012. Danish and English lecturing language. Following lecture themes and teaching styles are applied: - Lecture One: Production Philosophies in the Construction Sector, 2 x 45 minutes' lecture, 1 x 45 minutes' exercises, and 1 x 45 minutes' exercise discussion and reflection in plenum. - Lecture Two: Facilities Management, 2 x 45 minutes' lecture with 2 x 45 minutes' student presentation. Supervision Activities Fulltime M.Sc. Project Course: Design and Construction of Buildings, 15 ECTS. Department of Civil Engineering, Aalborg University. M.Sc. in Management in the Building Industry as target group. Supervision experience, spring 2013. Danish report language. Fulltime M.Sc. Project Course: Project Management and Production in Construction, 15 ECTS. Department of Mechanical and Manufacturing Engineering, Aalborg University. M.Sc. in Management in the Building Industry as target group. Supervision experience since autumn 2012. Danish and English report language. Fulltime M.Sc. Project Course: Management of Construction Industry Companies, 15 ECTS. Department of Mechanical and Manufacturing Engineering, Aalborg University. M.Sc. in Management in the Building Industry as target group. Supervision experience since spring 2013. Danish report language. Fulltime M.Sc. Project Course: Master's thesis, 30 ECTS. Department of Mechanical and Manufacturing Engineering, Aalborg University. M.Sc. in Management in the Building Industry as target group. Supervision experience, autumn 2012 and autumn 2015. Danish report language. Fulltime M.Sc. Project Course: Products and Production, 15 ECTS. Department of Mechanical and Manufacturing Engineering, Aalborg University. M.Sc. in Production with specialization in Production Systems as target group. Supervision experience, spring 2016. Danish report language. Examiner Activities Fulltime M.Sc. Project Course: Design and Construction of Buildings, 15 ECTS. Department of Civil Engineering, Aalborg University. M.Sc. in Management in the Building Industry as target group. Examiner experience, spring 2014. Danish and English exam language. Fulltime M.Sc. Project Course: Project Management and Production in Construction, 15 ECTS. Department of Mechanical and Manufacturing Engineering, Aalborg University. M.Sc. in Management in the Building Industry as target group. Examiner experience, spring 2015. Danish and English exam language. Fulltime M.Sc. Project Course: Management of Construction Industry Companies, 15 ECTS. Department of Mechanical and Manufacturing Engineering, Aalborg University. M.Sc. in Management in the Building Industry as target group. Examiner experience, spring 2014. Danish exam language. Fulltime M.Sc. Project Course: Academic Internship, 30 ECTS. Department of Mechanical and Manufacturing Engineering, Aalborg University. M.Sc. in Management in the Building Industry as target group. Examiner experience, autumn 2012 and autumn 2013. Danish exam language. Fulltime M.Sc. Project Course: Products and Production, 15 ECTS. Department of Mechanical and Manufacturing Engineering, Aalborg University. M.Sc. in Production with specialization in Production Systems as target group. Examiner experience, spring 2016. Danish exam language.

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 Department of Mechanical and Manufacturing Engineering, Aalborg University. M.Sc. in Production with specialization in Production Systems, 1 semester as target group, spring 2017. Department of Mechanical and Manufacturing Engineering, Aalborg University. M.Sc. in Production with specialization in Production Systems, 3 semester as target group, spring 2017.

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

and supervision, etc.

Basic Course in Pedagogy for University Teachers 2 ECTS, AAU Learning Lab, Aalborg University, Denmark, autumn 2014, English lecturing language. The course gave a general understanding of teaching pedagogy in relation to student's learning process. The most important learning outputs were basic understanding of the learning processes itself and assessment of students. Both learning outputs were applied into planning activities of lectures and exams. Seminar - Principles in Higher Education Teaching in the Context of a PBL University Part of University Pedagogy for Assistant Professors, AAU Learning Lab, Aalborg University, Denmark, autumn 2016, English lecturing language. The seminar gave insight into what teaching principles I as teacher can apply to ensure the best learning outcome for my students. Particularly, I as teacher makes the differences of how students interpret the literature by apply the six principles. "We do not learn from experience ...we learn from reflecting on experience" - John Dewey. The learning process for students thus is a process that's involve interpretation and construction of cognitive structures. For that reason, my role as teacher is to facilitate their learning. Active student involvement during the lectures, using problem based learning therefore is highly important to develop conditions where learning takes place. Seminar - University Teaching Day Independent seminar focusing at inspiring university teachers to prepare students for the future. AAU Learning Lab, Aalborg University, Denmark, spring 2016, English lecturing language. Participating in the university teaching day was a good experience. The topics were very interesting and beneficial in relation to future teaching goals and strategies. Workshops were supporting the Adjunkt-pædagogikum workshops and in some cases, extend my existing knowledge. The workshop on flipped classroom with podcast inspired me to consider if I could use such tools to improve students learning outcome. Workshop in Bringing Principles of PBL into Teaching and Learning Practices in Projects and Courses Part of University Pedagogy for Assistant Professors, AAU Learning Lab, Aalborg University, Denmark, autumn 2016, English lecturing language. This workshop gave inspiration on how principles of PBL can be applied into my supervision and lectures. Moreover, it made me realize to get student reflection on a higher level (relational and extended abstract) on the cases I presented them with, they themselves should construct data required to solve the case. By doing so they are forced to create, argue, and compare different data instead of data are part of the case. Lastly, I learned to refocus my lectures to cases instead of covering the planned literature for the lecture. The advantage is students are stimulated to read the literature beforehand to participate in the case and in the end, get a larger learning outcome. Workshop in Enhancing Feedback and Facilitating Student Reflections in Groups Part of University Pedagogy for Assistant Professors, AAU Learning Lab, Aalborg University, Denmark, spring 2016, English lecturing language. This workshop gave an in-depth understanding of how I can facilitate the learning process for a project group. Furthermore, it provided me with various implements for not being too involved in the project as a member of the group, which I previously have found challenging. Lastly, active listening among other tools I learned, to be able to identify a problem and ask questions to students instead of giving them "consultant" answers and solutions. Workshop in Lecturing Part of University Pedagogy for Assistant Professors, AAU Learning Lab, Aalborg University, Denmark, spring 2016, English lecturing language. This workshop gave an understanding of how I as a teacher should plan, prepare, and execute lectures to ensure students are focused. Furthermore, different learning styles and strategies to fit the learning strategy up against the intended learning outcome was learned. Most importantly I realized, I as a teacher can affect and improve the learning outcome for my students significantly by applying the presented tools. A lecture can be so much more than two 45 minutes' lectures with a break followed by exercises. Workshop in Digital Tests – Experience and Tools School of Engineering and Science, Aalborg University, Denmark, autumn 2016, Danish lecturing language. The context of this workshop was quite interesting from a professional point of view. However, there was not that much I not already have done and tried out in my own teaching and supervision. But the workshop still gave me a very important learning point in relation to teaching in general. Whatever I do to improve my teaching performance, the most important is to be curious, look for new teaching techniques, and to be open minded to new methods and suggestions. For that reason, it is significant important that I participate in workshops and seminars after the adjunkt-pædagogikum is over, to ensure the newest knowledge is applied in my teaching and supervision.

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

Seminar - University Teaching Day Plan to participate in the University Teaching Day the 4th of May 2017. AAU Learning Lab, Aalborg University, Denmark, spring 2017, English lecturing language.

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 teaching material Full time M.Sc. Course: Development of Quality, Risk, and Project Management Systems, 5 ECTS. Department of Mechanical and Manufacturing Engineering, Aalborg University. M.Sc. in Operations and Supply Chain Management, Management in the Building Industry, Building Informatics, and Mathematics-Economics as target groups. Teaching experience since autumn 2012. Danish and English lecturing language. One third of the course is risk related. I restructured the risk part of the course, found literature and secondary literature, made exercises, planned the lectures, adjusted the moodle course-room in relation to the risk part, and finally prepared the exam set. Full time M.Sc. Course: Development of Advanced Quality, Risk, and Project Management Systems, 5 ECTS. Department of Mechanical and Manufacturing Engineering, Aalborg University. M.Sc. in Operations and Supply Chain Management and Management in the Building Industry as target groups. Teaching experience since spring 2013. Danish and English lecturing language. One third of the course is risk related. I restructured the risk part of the course, found literature and

secondary literature, made exercises, planned the lectures, adjusted the moodle course-room in relation to the risk part, and finally prepared the exam set. Full time M.Sc. Course: Management of the Construction Process, 5 ECTS. Department of Mechanical and Manufacturing Engineering, Aalborg University. M.Sc. in Management in the Building Industry and Building Informatics as target groups. Teaching experience at course since autumn 2012. Danish and English lecturing language. I restructured my part of the course, found literature and secondary literature, made exercises, planned the lectures, adjusted the moodle course-room in relation to my part, and finally prepared exam questions.

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

No teaching awards etc.

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 achieved the goals established in section seven by applying the feedback my pedagogic (external) and de-partment (internal) supervisors gave me. Furthermore, I participated in workshops that could support me to achieve my three established goals. Lastly, I promised myself to participate in the workshops, read the literature, try my new skills out in my daily supervision and lectures, and to be open-minded for changes and new perspectives. I think the most important aspect in my learning process was I quickly realized my learning out-come only would be possible if I laid down my objections, barriers, and frustration to the pedagogical theories and tools – “If you can’t fight them, join them”. The changes I have implemented are thus a complete restructure of my lectures to the 30/30 model with Kahoot quiz and structured questionnaire feedback. Furthermore, I realized the most important aspect of my adjunktpædagogikum journey is not what I as lecture say and do. But to give the students a chance to participate and take control of their learning process. For that reason, it is significant important that I continue my journey myself after adjunktpædagogikum is over. Where I go, I don’t know. But I will follow the winds and the tech-niques I face on the way. As long I have a vision on continuous teaching improvement and development. Autumn 2016: In regards to future development of my teaching, I plan to apply the software Kahoot, Socrative and Quizlet in my teaching to keep the students focused and active. Furthermore, I have planned to test podcast teaching in complex areas of the literature to give students a further possibility to understand the most complex parts of the literature. If the podcast approach become a success, I will begin to work with my structure of the lectures again to implement flipped classrooms. Spring 2017: Future development for the upcoming semester, I plan to work with podcasts. I planned to work with podcasts during the autumn 2016. But the quiz and lecture questionnaire feedback were taking my focus instead. For that reason, I plan to work with the podcasts during the spring. Furthermore, I plan to try workshop / cases a bit more as lecture model, so the podcast itself is the lecture, and the workshop / cases then facilitate the learning outcome. A controlled flip classroom teaching, I suppose.

8. Any other information or comments.

To understand how I can improve my teaching performance. I conducted an explorative principal component analysis based on the received questionnaire feedback I got from my students. The purpose is to see which latent factors my students find important for a lecture. I found two latent variables which indicate a “lecture performance component” and “lecture support service component”. Explaining 48.5 % and 17.6 % of the statistical variance, respectively (see table below). Therefore, I will for the upcoming semester (spring 2017) take the necessary steps to incorporate these focus points. Whatever students have had a larger learning outcome does the results not tell. But if the students experience a better lecture than they used to, a positive effect on the learning output is most likely (from my point of view).