

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.

- Development and course responsible of a former DTU master course on "Fish capture Technology" (5 ects, DTU course 25308). A description of the course is found below.
- Development and course responsible for a DTU Ph.D. course on "Fish capture Technology" (2.5 ects, DTU course 25608).
- Teacher at the DTU master course "Design of survey- og monitoring systems" (5 ects, DTU course 25309).
- Guest teacher at the DTU bachelor course "An Introduction to Ocean Science and Technology" (5 ects, DTU course 25104).
- Development of an extended Ph.D. course in Fisheries Technology (2.5 ects).
- Responsible for the special master course "experimental methods for assessing survival of plaice in Nephrops fishery" (5 ects, DTU special course).
- Co-supervisor on the master course "Cruise leader on R/V Dana" (5 ects, DTU special course).
- Main supervisor for 2 master students 2015 and 2016 (30 ects, DTU MSc in Aquatic Science and Technology).
- Main supervisor for 6 Ph.D. students (Aalborg University and DTU).
- First opponent for a Ph.D. defence at Tromsø University, 2010.
- Censor for Fisheries Technology education at Aalborg University.
- Several invited lectures on courses for industry, ministries and universities.
- Chairman of Ph.D. defence by Lotte Kindt-Larsen, 2015.
- Responsible for the course in "marine biology", 6th semester bachelor in biology (5 ects), AAU.
- Semester coordinator for the master project, 9-10th semester in biology (60 ects).
- Teacher on the course Danish Nature Habitats, AAU.
- Guest teacher at the DTU master course "Design of survey- og monitoring systems" (5 ects, DTU course 25309), 2017.
- Supervisor for 2 project groups at 6th semester in biology, AAU.
- Supervisor for 1 project group at 8th semester in environmental engineering, AAU.

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 for semester 9-10 on biology.

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

I have taken DTUs "Ph.D. supervisor course (www.learninglab.dtu.dk/english/kurser/phd_vejledere/PhD-Supervision)."

I have taken the Aalborg University course: "basic course for university teachers".

I have taken the Aalborg University course: "basic course in problem based learning and project work."

Type your answer here...

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

Lectures for potential students at DTU Aquas Master education in "Aquatic Science".

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.

I have developed a master and Ph.D. course in "Fish Capture Technology".

I am guest lecturer at DTU Aqua in "Aquatic Science and Technology".

I am in the board of Aalborg Zoological Conservation Foundation, that fund student projects.

I have initiated a cooperation with the North Sea Oceanarium in Hirtshals to be able to use their aquarium facilities for student projects.

I have contacted the local authorities working in the marine environment, particularly in the "Limfjord area" to identify relevant student projects.

I have initiated a cooperation with the marine "hjemmeværns" navy to be able to use their ships for student projects.
Type your answer here...

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

Type your answer here...

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 frequently attend other persons lectures to learn and get inspiration. I regularly consult and discuss with other teachers that are full time engaged with DTU Aquas Master education. In the future I will aim at taking more relevant pedagogical courses.

The concept of problem based learning (PBL) and group work used by Aalborg University is in many ways comparable to the way I work in research teams. The starting point is the formulation of a problem, defining and analysing the problem. Furthermore, interdisciplinary and group work is a cornerstone in my research projects. In the PBL concept the role of the teacher is to act as initiator and facilitator in the collaborative process of transferring knowledge to the students. This is comparable to the way I work with Ph.D. students. I will give high priority to expanding my knowledge by courses and internal supervision on using the PBL concept in practice at Aalborg University when teaching.

In relation to teaching at Aalborg University, in the area of marine biology and technology, I believe my role is to establish a large network particularly within in the region. It is important to link the teaching to possible employment opportunities in the private as well as the public sector. This should be reflected in the teaching and particularly project based education.

For the announced position I find it of high importance to find good relevant study locations in the nearby area for field exercises and for training students in experimental field work in marine biology. Limfjorden is a perfect location also in terms of logistics (harbour facilities etc.) and is sheltered making experimental work less weather dependent. It is also important to find relevant case stories nearby area, which I intend doing by building up a network to local private and public organizations. I will also find locations and relevant cases related to freshwater biology, ecology and fish/fisheries and in relation to aquaculture (fish and shell fish).

I will be able to conduct teaching in general marine biology, ecology, technology, oceanography and management; Field work using electronic devices relevant for marine experimental work (CTDs, underwater cameras, acoustic sensors etc.); marine surveys (survey nets etc.); fisheries biology and fish biology; general aquatic ecology, including freshwater; development of technology for surveys and sustainable management of marine resources; general data analysis and modelling. Particularly in the research areas that I am less familiar with. It is of importance for me obtain state-of-art and use the most relevant scientific papers and knowledge in the teaching. I intend to use my network particularly within DTU, Southern Danish University, Roskilde University, Copenhagen and Århus University.

A course description of my Ph.D. course "Fish capture Technology" (DTU course 25608; <http://www.kurser.dtu.dk/25608.aspx?menulanguage=en-gb>) is found below. The course is a combination of lectures, visits to the fishing industry and stakeholders, practical exercises in the flume tank of Hirtshals, exercises in modelling, dissemination of relevant scientific papers and active student presentations. I also offer additional lectures for example on "writing scientific papers" and "extended modelling". I take the majority of lessons (around 15) and invite external lectures for general lectures and Ph.D. students and post-docs for specific lectures on their research projects. Learning objectives are formulated following the principles of Bloom's taxonomy and evaluation of students is based on fulfilment of the learning objectives. Learning objectives are clearly formulated in the public course description in advance of the course. The course is evaluated by the students and recommendations are afterwards assessed by me which is a useful tool for further improvements. I always make space for new lessons that covers highlighted relevant on-going research areas and projects.

I frequently use illustrations such as pictures, figures, film and animations since this catch attention and often explain better than words. I often edit the illustrations to make them easily understandable. I aim at using relevant scientific papers in the lessons as far as possible. I find use of physical items important, for example demonstration of electronic equipment used for experimental field work.

When making student exercises I pick out cases from my own research. Particularly cases where students can reach results that can be compared directly with results from scientific publications.

When using guest lecturers I plan the overall subject together with the guest lecturer, to ensure it is within the learning objectives. I use younger scientists (post-docs and Ph.D.s) for my course to present case studies of their own research. I see this as a part of their education and I discuss the presentation and the approach with them before and after the lesson.

When making invited lectures for the private and public sector I am very specific on the lecture and plan together with the course responsible. Such lectures are very directed towards professional issues and very often with a practical element that should be highlighted.

In the Master Thesis projects I supervised I have linked the work to ongoing research projects. This ensures very relevant work and the possibility for participating in teamwork and using advanced experimental platforms. Designing experiments, field work and data analysis. Learning objectives are an integrated part of the supervision. They are formulated in cooperation with the student. This ensures a prudent approach and help describing the basis on which they are assessed but also describes what is learned and acquired of knowledge that is useful when applying for jobs.

For Ph.D. students I spend effort to make and revise study plans regularly (at least every half year) in accordance to progress. I have fixed meetings in the calendar every second weeks to assess progress and pickup problems early in the process. I use the principle that my door is always open. However, if I am busy we put a meeting into the calendar immediately.

I have the responsibility for the AAU master course in "Marine Biology". My aim is to develop the course over the years. I intend to include more learning related to skills expected in marine biology jobs. In addition, I would like to introduce more field excises where equipment is used and collected data are species identified and quantified.

I have contacted the local authorities working in the marine environment, particularly in the "Limfjord area" to identify relevant studies for projects in aquatic science. There is a high local interest in the involvement of Aalborg University in the local area.

8. Any other information or comments.

Type your answer here...