## Teaching portfolio

1. Teaching CV: A list of teaching and supervision tasks, including specification of academic fields, scope, level (bachelor, master, continuing education, PhD). Please state the teaching method used (e.g. lecture, class teaching, exercises, supervision, examination, coexamination, distance teaching, internet-based teaching and evaluation of teaching). Please also indicate the language of instruction.

I am able to teach and supervise the following courses and projects:

- 1. Data Structures and Algorithms (course)
- 2. Advanced Algorithms (course)
- 3. Algorithms and Computability (course)
- 4. Algorithms and Satisfiability (course)
- 5. Specialized in Data Technology (course)
- 6. Object Oriented Analysis and Design (project)
- 7. Software Development 1: Introduction to Programming (project)
- 8. Software Development 5: Spatio-Temporal Data Analytics (project)
- 9. Software Development 6: Bachelor thesis (project)
- 10. Software Development 8: Master thesis (project)
- 2. Study/programme administration and management: Experience in programme management and coordination. A list of study administration tasks, e.g. study board membership, chair of study board, semester or course coordinator, accreditation tasks, etc. Experience in planning teaching activities. Experience in programme development. Participating in committees and commissions etc. on education issues.

I am a member of UPU group. UPU tasks are

- 1. Appoint semester coordinators.
- 2. Allocate teachers according to requisitions
- 3. Allocate project supervisor according to requisitions.
- 3. Formal pedagogical training: A list of completed courses in university pedagogy, PBL courses, workshops, academic development projects, collegial guidance and supervision, etc. Written assessment from the course in university pedagogy for assistant professors. Participation in conferences on pedagogy and didactics. Please enclose any documentation of the above, such as course certificates, references, etc

### **Compulsory Courses**

Five theoretical courses are provided as supplemental materials for the pedagogical training. These courses are designed as modules, where each module provides a specific theoretical aspect. Due to the COVID-19 pandemic, half of the courses are conducted online. In these courses, the lecturers always design group activities where some discussions between members are conducted. We share our current challenges in teaching and we try to solve the problem together. I am happy with the group activities because I have received much valuable advice from my group mates. I have taken all five courses, which are listed as follows.

- 1. Teaching at a PBL University.
- 2. Planning and Implementation of Group Instruction.
- 3. The Use of IT and Media for Learning and Teaching.
- 4. The PBL Group Collaboration, Process, and Supervision.
- 5. Planning, Development and Quality Assurance of Study Program.

Elective Courses

Besides these courses, I have finished several elective courses as follows.

- 1. PBL in Engineering and Science.
- 2. Facilitating Student Activity.
- 3. Introduction to the Case Study Method.

Further, I finished several courses when I was a Ph.D. student at AAU. The courses provide basic information and useful techniques, which can be applied to teaching. The relevant courses I have chosen are listed as follows.

- 1. Problem-based Learning.
- 2. Management of Research and Development.
- 3. Academic Searching, Publishing and Information Management.

4. Other qualifications: Conference contributions and attendance, contributions to debates, scientific articles on pedagogical issues etc. Peer supervision, editorials, mentoring experience or other types of competence development activities.

Pedagogical Final Report.

5. Pedagogical development and research: Development of new courses, teaching materials, teaching methods, examination types or other types of pedagogical development. Didactic and pedagogical research. Cooperation with external collaboration partners.

Pedagogical Final Report.

# 6. References on your teaching skills from superiors or colleagues. Teaching evaluations and any teaching awards received.

From Prof. Christian Thomsen

I have been supervisor for Tung Kieu in the course University Pedagogy for Assistant Professors at Aalborg University in 2022. Tung has handed in his final report, and I expect him to successfully pass the course. During the year, I have observed Tung's teaching several times. In connection with the observations, we have had good discussions about teaching. Tung has been open to suggestions and has reflected on his role as a supervisor in relation to problem-based learning. He has thus made good progress during the pedagogy course and is capable of teaching and supervising From Prof. Xiangyun Du

This is a reference to the teaching capability of Tung Kieu from Department of Computer Science. I worked as Tung's pedagogical supervisor during his participation in the University Pedagogical Development Program Aalborg University (UP-AAU). In the past 2-3 months, I have had a few meetings including both formal and informal conversations regarding teaching issues. Some of the conversations were about his general views about teaching and learning, while other conversations were related to feedback on observation of his PBL supervision.

In general, I observe Tung as a communicative colleague who is engaged to improving his teaching. Having around 5 years' experiences of working as a PBL supervisor, he was keen to learn about the PBL knowledge and good practices. Coming from an Asian cultural context, he was eager to reflect on AAU teaching and learning experiences relating to his prior study and work experiences.

Through our conversations, I found him easily communicable. He was frank to me about his concerns regarding student reaction to his supervision work and was eager to search for solutions to try out. He was also open-minded to my suggestions and applied them to his new practices, which were followed by feedback seeking from his students and me as an observer. With the awareness of his non-English speaking background, Tung took various strategies in his meetings with students

As an observer of several meetings, I found he successfully managed daily communication with students through straightforward way of expressing himself and double-checking student reactions all the way along. The communication channels seemed to be clear in a two-way mode.

As a pedagogical professional learning developer, I found Tung a highly engaged supervisor in the AAU PBL environment, not only through his responsible actions to support student learning, but also through his own eagerness to learn and improve

While our collaboration in UP-AAU program is still ongoing, and potentials to improve remain, I look forward to seeing Tung's further growth in pedagogical development.

7. Personal reflections and initiatives: Here you may state any personal deliberations as regards teaching and supervision, any wishes and plans for further pedagogical development, plans for following up on student feedback/evaluations, etc. Personal reflections on your own pedagogical practice, including objectives, methods and implementation. This should include an analysis and a reasoned description of your pedagogical activities in relation to your pedagogical understanding and student learning. Thoughts on the teaching method at Aalborg University (which is largely based on grouporganised project work and problem-based learning)

#### STUDENT-CENTERED TEACHING

So far, the teaching at the university is almost only one direction, which is from lecturer to students. There is no dialogue from students and lecturers. This process is not effective because successful teaching needs communication between lecturers and students in both directions. In other words, students should be involved in the teaching process by continually providing feedback and ideas throughout the course. Involving students in the teaching process can increase their concentration and motivation. For example, the students need to concentrate on answering some open questions or quizzes in the lecture. It also makes students have more energy in the lecture when they can successfully solve the quizzes. The lecturers also have benefits when they can evaluate or at least estimate the student's knowledge. However, it is a challenge for both the lecturers and students due to the condition of online teaching. Furthermore, it is difficult to

prepare attractive questions because too simple or too difficult questions may yield negative effects. For example, a simple question can make students belittle the lecture, whereas a difficult question can make students be very tired and feel confused.

#### **CREATIVE THINKING**

I aim to create a set of questions that are in a large range from easy to difficult to make students be active in the lecture over time. Further, I plan to use multimedia and game to visualize the problem and the solution for students. For example, I can show a video of the Bubble Sort algorithm to students; then, they can easily understand how the algorithm works. In addition, I would like to open their mind and course lecture with daily/natural phenomena (e.g., what are the real-world applications of queues, stacks, and graphs), which can be served as a fundamental idea for brain storming. BETTER COURSE PREPARATION

The next problem is to handle and support a large group in teaching. In some fundamental courses, there are a large number of students take part in. A large number of students can consist of many types of students, and they can have different basic knowledge and different expectation. For example, a student may have a strong background and expertise in related topics of the courses, and he/she expects to learn the latest methods in a specific domain. Another student may have only a very basic background before enrolling on the course, and he/she also expects to earn basic knowledge from the course. Focusing on only one kind of student may make the other students feel unfair and uncomfortable. Further, unfocused students may not receive what they require from the lecture and the course. I aim to carefully design the course material to cover only basic knowledge. Advanced knowledge will be contained in the supplemental material. If a student wants to have a strong understanding of a course, he/she can look at the supplemental material.

# 8. Any other information or comments.

Type your answer here...