Undervisningsportfolio

1. Undervisnings-CV: Oversigt over undervisnings- og vejledningsopgaver med angivelse af fagområder, omfang, undervisningsniveau (bachelor, kandidat, efter-/videreuddannelse, ph.d.). Type af undervisningsform angives, f.eks. forelæsning, holdundervisning, øvelse, vejledning, eksamination, censur, fjernundervisning, internetbaseret undervisning og evaluering af undervisning. Undervisningssprog angives.

Giulio's teaching mainly occurred within the Master program in automotive engineering (MPAUT)/mobility engineering (MPMOB) at Chalmers University of Technology. Giulio taught in the courses Active Safety (course code TME192, taught in English) during period 2014 – 2023, the course Vehicle and Traffic Safety (course code TME202, taught in English) during the period 2016 – 2022, the course Engineering of Automotive Systems (course code TME121, taught in English) during the period 2017 – 2020, and the course Automotive Engineering Project (course code TME180, taught in English) during the period 2018 – 2021. Giulio was also involved in the Massive Open Online Course (MOOC) Road Traffic Safety in Automotive Engineering within the micromaster in Emerging Automotive Technologies taught in English during 2018 at Chalmers University of Technology and in the PhD course on Analysis and Modelling Road User Behaviour delivered for the IDEA League during 2020 – 2022, taught in English. Giulio's teaching focuses on human factors in the context of traffic safety, with a focus on the analysis and modelling of road user behaviour. With respect to supervision, Giulio has supervised 5 students in Bachelor's theses, 21 students in Master's theses and been involved in the supervision of 3 PhD students.

2. Administration og ledelse af uddannelse: Erfaring med uddannelsesledelse og –koordinering. Oversigt over studieadministrative opgaver, eksempelvis medlem af studienævn, studieleder, semesterkoordinator, fagkoordinator, akkreditering m.v. Erfaringer med planlægning af uddannelsesafvikling. Erfaring med udvikling af uddannelser. Deltagelse i udvalg, kommissioner m.m. vedr. uddannelse.

Director of MPAUT (2019 – 2022) and director of MPMOB (2020 – 2023): in these roles, I have been responsible for developing and planning the Master programmes, ensuring that they meet the predetermined objectives, for monitoring the quality (e.g., evaluation of courses) and for enabling possibilities for students to influence. The number of students in each academic year has been between 50 and 60 for MPAUT and between 70 and 90 for MPMOB.

3. Formel pædagogisk uddannelse: Oversigt over gennemførte universitetspædagogiske kursusforløb, PBL-kurser, workshops, udviklingsprojekter, kollegial supervision o.l. Udtalelse fra universitetspædagogikum. Deltagelse i konferencer om pædagogik og didaktik. Dokumentation i form af kursusbeviser, udtalelser m.m. vedlægges.

Writing for publication and for constructive alignment, 3 ECTS (2015), to learn about the different steps of the writing process and on the tools to facilitate the writing process for students; University Teaching and Learning, 3 ECTS (2016), to obtain insight on the different approaches to teaching, on the methods to increase students' participation and to receive feedback about my lectures; Supervision of research, 3 ECTS (2016), to gain knowledge on the recruitment of students, on the improvement of communication with students and on the promotion of students' independence; Enhancing learning through writing, 5 ECTS (2018), to master the use of constructive alignment for all the aspect of my teaching (e.g., definition of learning outcomes, conception of final assessment); Diversity and inclusion for learning in higher education, 2 ECTS (2018), to understand the needs of different students (e.g., students with special needs) and on how to address them during my lectures; Coaching - an approach in supervision of doctoral students (2020), to receive an introduction about the different methods for coaching; Basic course with focus on PBL (2023), to get introduced to the Project Based Learning teaching at Aalborg University. In 2019, I received the Diploma of Higher Education from the division of Engineering Education Research.

4. Andre kvalifikationer: Bidrag til konferencer, debatindlæg, videnskabelige artikler om pædagogiske emner m.v. Kollegasupervision, redaktørarbejde, erfaring som mentor og anden kompetenceudvikling.

Skriv dit svar her...

5. Pædagogisk udvikling og forskning: Udvikling af nye kurser, undervisningsmateriale, undervisnings- og eksamensformer eller andet udviklingsarbejde. Didaktisk og pædagogisk

forskning. Samarbejde med eksterne samarbejdspartnere.

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6. Udtalelser om undervisningskompetencer fra foresatte og kolleger. Undervisningsevalueringer og eventuelle udmærkelser for undervisningsvaretagelse.

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7. Evt. personlige refleksioner og initiativer: Personlige overvejelser knyttet til undervisning og vejledning, ønsker til og planer for pædagogisk videreudvikling, planer for opfølgning på undervisningsevalueringer m.v. Refleksioner over eget pædagogiske arbejde, dets målsætninger, metoder og gennemførelse. I refleksionen analyseres og motiveres dine pædagogiske aktiviteter i forhold til din pædagogiske forståelse og de studerendes læring. Tanker om undervisningsformen på Aalborg Universitet, der har et stort indhold af gruppeorganiseret projektarbejde og problembaseret læring (PBL).

During the development of a course, a whole teaching module or a lecture, I consider the constructive alignment theory as a guide (Biggs, 1996): constructive alignment aims to ensure that the material taught supports the students in meeting the objectives of a course/module/lecture. The constructive alignment materializes in several aspects of the course/module/lecture, including the definition of the learning objectives, the preparation of the lecture, the construction of the assignments and the creation of the final assessment. For the definition of the learning objectives of a course/module/lecture, I use the Bloom taxonomy (Bloom, 1956) as inspiration. The Bloom taxonomy provides a hierarchical structure for the levels of learning and supports the teacher in the development of the learning objectives, the material for the course and the final assessment.

Looking at the six stages of teaching described by Kugel (1993), my aim as a teacher is to plan and organize my teaching and supervision to support the students to become independent learners. This aim implies that students should become active learners rather than passive recipients of the material taught. During my lectures, I attempt to boost the interest of the students by ensuring an interactive environment through videos, drawing diagrams, and writing important concepts on the blackboard, anecdotes about my professional experience and questions. Besides, I support the reflection and learning process of the students through online quizzes every 45-minutes lectures (using the software Mentimeter), 5-minutes group exercises during the 90-minutes lectures and recap at the end of the lecture to summarize the most important concepts described in the lecture.

The development of my teaching requires reflection on the teaching practice, and students' feedback is a necessary element of this reflection process (McLean, 2007). To receive feedback, I ask the students to answer some questions, using the "minute paper" at the end of lectures. As well, in the final survey for the evaluation of the course, I include some questions about the overall impression of my lecture, about how I encouraged questions from the students and their participation, as well as the appropriateness of my teaching style to reach the learning outcomes. During the pedagogical course University Teaching and Learning, I also had the opportunity to receive feedback about my teaching from peers through one colleague attending one of my lectures.

As part of teaching development, I also support the internationalization of the curricula of courses where I teach. The internationalization of the curricula is an important step to achieve enhanced interactions between home and international students in university campuses (Leask, 2009).

8. Andet.

References: Biggs, J. (1996). Enhancing teaching through constructive alignment. Higher education, 32(3), 347-364; Bloom, B. S. (1956). Taxonomy of educational objectives: The classification of educational goals. Cognitive domain; Kugel, P. (1993). How professors develop as teachers. Studies in higher education, 18(3), 315-328; Leask, B. (2009). Using formal and informal curricula to improve interactions between home and international students. Journal of studies in international education, 13(2), 205-221; McLean, J. (2007). Reflecting on your teaching. Teaching at the University of Manitoba: A handbook, 5-9.