

Undervisningserfaring

TEACHING EXPERIENCE

I have been teaching both pre- and postgraduate students including PhD students at three different universities during more than 70 course programmes covering 20 different courses (Table 1).

Table 1

Course Year, semester	Level (module)	Points	Course activities and responsibility	Department, university, country
Basic Biochemistry and Microbiology	2010F, 2011F, 2012F, 2013F, 2014F, 2015F, 2016F, 2017F, 2018F, 2019F	Fundamental course	5 ECTS Lectures	Responsible teacher Chemical Engineering, Biotechnology and Environmental Technology, University of Southern Denmark, DK
Biotechnological processes	2017E, 2018E	Fundamental course	10 ECTS Practical project/exercises	Chemical Engineering, Biotechnology and Environmental Technology, University of Southern Denmark, DK
Protein Technology	2016E, 2017E, 2018E	Academic profile course	5 ECTS Lectures, practical exercises, and colloquia	Responsible teacher Chemical Engineering, Biotechnology and Environmental Technology, University of Southern Denmark, DK
Technical Microbiology	2010F, 2011F, 2012F, 2013F, 2014F, 2015F, 2016F, 2017F, 2018F, 2019F	Academic profile course	10 ECTS Lectures and practical exercises	Chemical Engineering, Biotechnology and Environmental Technology, University of Southern Denmark, DK
Responsible Conduct of Research	2018F, 2018E, 2019F	Ph.D. course	2 ECTS Lectures	Faculty of Engineering, University of Southern Denmark, DK
Advanced Natural Product Chemistry	2010E, 2011E, 2012E, 2013E, 2014E, 2015E	Academic profile course	10 ECTS Lectures and practical exercises	Chemical Engineering, Biotechnology and Environmental Technology, University of Southern Denmark, DK
Methods in Science	2010E, 2011E, 2012E, 2013E, 2014E, 2015E, 2016E	Master student course	5 ECTS Lectures, theoretical exercises, workshops	Responsible teacher Chemical Engineering, Biotechnology and Environmental Technology, University of Southern Denmark, DK
Master Thesis	(XC-SP30-U1, XC-SP40-U1)	2010, 2011, 2012, 2013, 2014, 2015	Master student course	30 or 40 ECTS Coordinating master thesis course/project and supervision. Responsible teacher Chemical Engineering, Biotechnology and Environmental Technology, University of Southern Denmark, DK
Individual student activity projects	2016F, 2017F, 2019F	5 ECTS	Supervisor	Chemical Engineering, Biotechnology and Environmental Technology, University of Southern Denmark, DK
Bachelor Project Chemistry (BAP-KE6-U1)	8 students (2011-2019)	Bachelor student course	15 ECTS	Supervision Chemical Engineering, Biotechnology and Environmental Technology, University of Southern Denmark, DK
Master Thesis	(XC-SP30-U1, XC-SP40-U1)	19 students (2012-2019)	Master student course	30 or 40 ECTS Supervision Chemical Engineering, Biotechnology and Environmental Technology, University of Southern Denmark, DK
Afgangsprojekt, Diplomuddannelsen i Bioteknologi, Processteknologi og Kemi	3 students (2012-2016)	15 ECTS	Supervision	Chemical Engineering, Biotechnology and Environmental Technology, University of Southern Denmark, DK
General Biochemistry (Molekylærbiologi Intro)	1998E, 1999E, 2001E, 2003E	Fundamental course	2 points (10 ECTS)	Practical exercises Theoretical exercises Molecular Biology, Aarhus University, DK
Physical chemistry (Kemi F)	2000E	Fundamental course	2 points (10 ECTS)	Theoretical exercises Biology, Aarhus University, DK
Nucleic Acids Structure and Function	2001F, 2002F	B-module	2 points (10 ECTS)	Colloquia and theoretical exercises Molecular Biology, Aarhus University, DK
Proteomics	Summer 2004, Summer 2005, Summer 2006, Summer 2009	B-module	10 ECTS	Lectures, theoretical exercises, colloquia, and practical exercises Molecular Biology, Aarhus University, DK
Bionanotools and Protein Structure	2005E, 2006E, 2009E	Ph.D. course	5 ECTS	Lectures Nanotechnology, Aarhus University, DK
Nanocharacterization	2005E	Fundamental course	5 ECTS	Lectures Nanotechnology, Aarhus University, DK
Experimental exercises in nanoscience	2004F, 2005F, 2006F	Fundamental course	5 ECTS	Practical exercises Nanotechnology, Aarhus University, DK
Molecular Biotechnology	2004F, 2005F, 2006F	A-module	10 ECTS	Lectures Molecular Biology, Aarhus University, DK
Cell Biology	2007E	Practical exercises	BMC, Lund University, Sweden	a F, spring semester; E, fall semester

Evaluations and internal exams:

I have evaluated numerous reports from the practical exercises of the courses "Biotechnological processes", "Technical Microbiology", "Methods in Science", "Advanced Natural Product Chemistry", "Bachelor Project Chemistry", "Master Thesis", and "Afgangsprojekt (Diplomuddannelsen)", "Organic chemistry", "General Biochemistry", "Proteomics", and "Experimental exercises in nanoscience". In addition, I have been examiner at oral exams and tests in "Biotechnological processes", "Advanced Natural Product Chemistry", "Technical Microbiology", "Bachelor Project Chemistry", "Master Thesis", and "Afgangsprojekt (Diplomuddannelsen)" (Table 1).

EXPERIENCE FROM PEDAGOGICAL FUNCTIONS

Supervision of students:

I have supervised more than 35 pre- and postgraduate students in laboratory work and writing of scientific manuscripts and reports within analytical chemistry, protein chemistry, biochemistry, and biotechnology.

Educational committee:

2013 -Member of the Education Committee, Department of Chemical Engineering, Biotechnology and Environmental Technology, Faculty of Engineering, University of Southern Denmark.

Accreditation work:

2012:Member of the Steering Committee for accreditation of the study programmes BSc.Eng. in Chemistry and Biotechnology and MSc.Eng. (cand. polyt.) in Chemistry, Department of Chemical Engineering, Biotechnology and Environmental Technology, University of Southern Denmark.

FORMAL PEDAGOGICAL EDUCATION AND OTHER RELEVANT ACTIVITIES

2009:"Kursus i almen universitetspædagogik for adjunkter" (University Pedagogy for Assistant Professors), Aarhus University.

2013:"Kursus for ph.d.-vejledere", University of Southern Denmark.

2014:"Teaching in English at SDU", University of Southern Denmark.

FUNDAMENTAL PEDAGOGICAL VIEW AND PHILOSOPHY

During my time as researcher, I have obtained significant experience with research-based teaching at the university-level (Table 1). I think that the most important tasks as a teacher and instructor within chemistry and biotechnology are to teach students about the specific subjects at a high level, explain to them why the subjects are important to learn, and what it can be used for in applied science, answer their questions, and demonstrate the different techniques and methods (instruments and equipment). In addition, it is very important for me that my teaching is interesting and can motivate and inspire the students to learn more and get absorbed in their studies.

I use different teaching methods including lectures, colloquia, theoretical, and practical exercises (Table 1). I often integrate different activities in my teaching to stimulate the students learning and motivation.

In the more fundamental courses, it is essential to me that the students learn and understand the fundamental principles of the subjects. In the postgraduate courses, it is important that the students learn techniques that are more advanced, become familiar with the details within the specific subject, and train "problem-solving".

OTHER ACTIVITIES WITH TEACHING AND PEDAGOGICAL RELEVANCE

Appointed examiner:

2013 -Appointed examiner in CensorNet (a Danish corps of examiners).

External examination and evaluation committees:

2012:Member of the evaluation committees for the qualifying exam (PhD programme, part A) by Charlotte Skovgaard Sørensen; Aarhus University, Denmark (27.03.2012).

2013:Chair of evaluation committee for the Ph.D. dissertation by Elise Iversen; University of Southern Denmark (26.02.2013).

2013:External examiner at the master thesis exam (MSc.Eng.) by Jakob James Jensen; Aarhus University, Denmark (12.04.2013).

2013:External examiner at the master thesis exam (MSc.Eng.) by Rune Clausen; Aarhus University, Denmark (07.06.2013).

2013:Chair of evaluation committee for the Ph.D. dissertation by Cuong Hung Pham; University of Southern Denmark (09.12.2013).

2014:External examiner, written examination and re-examination in Protein Biotechnology course, Department of Engineering, Aarhus University, Denmark (June-September).

2016:Member of the evaluation committees for the qualifying exam (PhD programme, part A) by Nadia Sukusu Nielsen; Aarhus University, Denmark (05.02.2016).

2016:Chair of evaluation committee for the Ph.D. dissertation by Yulia Radko, University of Southern Denmark (30.03.2016).

2017:External examiner at the master thesis exam (MSc.Eng.) by Lasse Kryger Rasmussen; Aarhus University, Denmark (10.03.2017).

2017:External examiner at the master thesis exam (MSc.Eng.) by Bjarke Haagensen; Aarhus University, Denmark (25.04.2017).

2017: External examiner at the master thesis exam (MSc.) by Kasper Langgaard; Aarhus University, Denmark (14.08.2017).

Textbook chapters:

Henrik Karring, Torben Møller-Pedersen, Jan J. Enghild, Gordon K. Klintworth. 2008. Ocular Proteins and Proteomics (Chapter 36). In: Garner and Klintworth's Pathobiology of Ocular Disease, third edition, Informa Healthcare, 793-832.

Organize courses and give lectures for external participants (high school teachers and students):

2010: Bioteknologidag Workshop/seminar (For lærere i den syddanske region, der underviser eller påtænker at undervise i bioteknologi, HTX og STX), 29. April (Faculty of Engineering, Odense, Denmark), Co-organizer Henrik Karring.

2010: BIOTEK - Introduktion og arbejde med aktive organiske stoffer (Efteruddannelseskursus for gymnasielærere), 6-8 December (Faculty of Engineering, Odense, Denmark), Organizer Henrik Karring.

2011: BIOTEK - Introduktion og arbejde med aktive organiske stoffer (Efteruddannelseskursus for gymnasielærere), 5-7 December (Faculty of Engineering, Odense, Denmark), Organizer Henrik Karring.

2014: Fra DNA til Protein - Gensplejsning og Proteinteknologi (Inspirationsdag på SDU, Odense Tekniske Gymnasium), 2. April, (Faculty of Engineering, Odense, Denmark), lecturer Henrik Karring.