

## Teaching Portfolio

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Matematik

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### 1. Formal educational training

### 2. Administrative tasks related to education

2019 Chair of the working group for restructure of curriculum in Mathematics

2015 and 2018 Coordinator of semester teaching load in Mathematics

2013- Member of the Teaching Committee at IMADA

2013- Mathematics PhD program coordinator

2012-2014 Member of the panel for reform of curriculum in Mathematics

2012-2013 Member of the working group for the semester structure reorganization at the Faculty of Science

2011-2012 Erasmus coordinator

2011 Member of the panel for accreditation of the Bachelor and Masters programs in Mathematics and Applied Mathematics

2008-2012 Member of the PhD Committee

### 3. Experience with teaching, supervision and examination

Lecturer and course-coordinator for Algebra and Linear Algebra (B.Sc. in Mathematics, 5 ECTS)

Lecturer and course-coordinator for Linear Algebra (B.Sc. in Mathematics, 5 ECTS)

Lecturer and course-coordinator for Algebra 1 (B.Sc. in Mathematics, 5 ECTS)

Lecturer and course-coordinator for Measure, Integration and Banach Spaces (B.Sc. in Mathematics, 10 ECTS)

Lecturer and course-coordinator for Hilbert and Banach Spaces (B.Sc. in Mathematics, 5 ECTS)

Lecturer and course-coordinator for Differential Equations (B.Sc. in Mathematics, 5 ECTS)

Lecturer and course-coordinator for Complex Analysis (B.Sc. in Mathematics, 5 ECTS)

Lecturer and course-coordinator for Measure and Integration (B.Sc. in Mathematics, 5 ECTS)

Lecturer and course-coordinator for Topology 2 (B.Sc. in Mathematics, 5 ECTS)

Lecturer and course-coordinator for Topology (B.Sc. in Mathematics, 5 ECTS)

Lecturer and course-coordinator for Introduction to Operator Algebras (M.Sc. in Mathematics, 5 ECTS)

Lecturer and course-coordinator for Banach Algebras (M.Sc. in Mathematics, 5 ECTS)

Lecturer and course-coordinator for Symbolic Dynamics (M.Sc. in Mathematics, 5 ECTS)

Lecturer and course-coordinator for Von Neumann Algebras (M.Sc. in Mathematics, 5 ECTS)

Lecturer and course-coordinator for Introduction to Noncommutative Dynamics (M.Sc. in Mathematics, 10 ECTS)

Lecturer and course-coordinator for K-Theory (M.Sc. in Mathematics, 10 ECTS)

Lecturer and course-coordinator for Calculus and Linear Algebra, Newcastle, Australia (B.Sc. in Mathematics, 20 ECTS)

Lecturer and course-coordinator for Advanced Calculus and Linear Algebra, Newcastle, Australia (B.Sc. in Mathematics, 20 ECTS)

Lecturer and course-coordinator for Algebra, Newcastle, Australia (B.Sc. in Mathematics, 10 ECTS)

Lecturer and course-coordinator for Topology, Newcastle, Australia (B.Sc. in Mathematics, 10 ECTS)

Lecturer and course-coordinator for Differential Equations, Newcastle, Australia (B.Sc. in Mathematics, 10 ECTS)

Lecturer and course-coordinator for Partial Differential Equations, Newcastle, Australia (B.Sc. in Mathematics, 10 ECTS)

Lecturer and course-coordinator for Ordinary Differential Equations, Newcastle, Australia (B.Sc. in Mathematics, 10 ECTS)

Lecturer and course-coordinator for Advanced Engineering Mathematics, Newcastle, Australia (B.Sc. in Mathematics, 10 ECTS)

Lecturer and course-coordinator for  $C^*$ -Algebras, Newcastle, Australia (M.Sc. in Mathematics, 10 ECTS)

Lecturer and course-coordinator for Calculus 1,2,3, Cincinnati, USA (B.Sc. in Mathematics, 15 ECTS)

Lecturer and course-coordinator for Introduction to Statistics, Warsaw, Poland (B.Sc. in Mathematics, 10 ECTS)

Supervisor of 7 Ph.D. dissertations in Mathematics in Denmark and Australia.

Supervisor of 5 M.Sc. theses in Mathematics at SDU and Newcastle (Australia).

Supervisor of 4 Honours theses in Newcastle (Australia).

Supervisor of 12 B.Sc. projects in Mathematics at SDU.

Censor for Mathematics, 2009-. Examination of B.Sc. and M.Sc. at Aarhus University and the University of Copenhagen.

Examination of Bachelor projects and M.Sc. theses in Denmark and Sweden.

Member of 10 committees evaluating PhD theses in Denmark and Australia.

#### **4. Methods, materials and tools**

Teaching of mathematical subjects requires many different approaches since the background, the needs and the expectations of the students we teach are many and diverse. I have taught across a whole range of mathematics courses, from small or medium size classes of primarily mathematics students to very large classes in primarily service courses, from first year undergraduate to PhD level. I apply different teaching methods and techniques depending on what is needed. In most of my lectures I rely on the teaching-discussion method as the main vehicle. I try to keep my lectures as interactive as possible, with the students actively engaged in the discussion. I encourage student/student interactions relevant to the subject and promote cooperative learning when practicable. Recently, Blackboard has been used in all of the courses I coordinated.

I always try to show and generate enthusiasm and create a friendly, supportive learning environment. I have found it very important to convince my students that I sincerely care about their success. As the main goal of instruction I see development of conceptual understanding of the subject matter and not merely improvement in mechanical skills.