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Formal educational training

2013	Course on holding "MUS" with PhD students
	Conference on exam forms, feedback and learning
2012	Course "Interactive lecturing"
	Workshop "The oral exam in practice"
2010	"Facultas docendi" by TU Darmstadt

Administrative tasks related to education

2019-2022	State approved censor in mathematics, physics and social science for "civil engineers"
2019-2022	State approved censor in mathematics, physics and social science for "diplom engineers"
2015-present	Member of the Study Board for Economy at the Faculty of Business and Social Sciences
2015-present	Education responsible for the master degree in Mathematics-economy
2015-2017	Semester responsible for Mathematics
2014-2018	State approved censor in mathematics for engineers
2013-present	Member of IMADA's teaching committee
2013-2014	Member of a planning committee for a revision of the Math Econ programme
2013-2017	Semester responsible for Applied Mathematics
2012-2014	Member of IMADA's PhD committee
2011-present	Responsible for hiring TA's in math

Teaching experience

At the University of Southern Denmark

Autumn 2022	Stochastic differential equations I (10 ECTS)
	Mathematical applications (5/2 ECTS)
	Molecular Data Science (5/4 ECTS)
Spring 2022	Computational option pricing, part I (5 ECTS)
	Computational option pricing, part II (5 ECTS)
	Applications of mathematics in life sciences (5/2 ECTS)
Autumn 2021	Stochastic differential equations I (10 ECTS)
	Mathematical applications (5/2 ECTS)
Spring 2021	Computational option pricing, part I (5 ECTS)
	Computational option pricing, part II (5 ECTS)
	Applications of mathematics in life sciences (5/2 ECTS)
Autumn 2020	Stochastic differential equations I (10 ECTS)
Spring 2020	Computational option pricing, part I (5 ECTS)
	Computational option pricing, part II (5 ECTS)
	Applications of mathematics in life sciences (5/2 ECTS)
	Mathematical methods in Chemistry and Nanoscience (5/2 ECTS)
Autumn 2019	Stochastic differential equations I (10 ECTS)
Spring 2019	Differential equations (5 ECTS)
	Applications of mathematics in life sciences (5/2 ECTS)
	Mathematical methods in Chemistry and Nanoscience (5/2 ECTS)
Autumn 2018	Partial differential equations: Theory, numerics, and computation (10 ECTS)

Spring 2018	Computational option pricing (10 ECTS)
	Applications of mathematics in life sciences (5/2 ECTS)
	Mathematical methods in Chemistry and Nanoscience (5/2 ECTS)
Autumn 2017	Stochastic differential equations I (10 ECTS)
Spring 2017	Computational option pricing (10 ECTS)
	Applications of mathematics in life sciences (5/2 ECTS)
Autumn 2016	Stochastic differential equations I (10 ECTS)
	Differential equations II (5 ECTS)
	Mathematical methods in Chemistry and Nanoscience (5/2 ECTS)
Spring 2016	Mathematical and numerical analysis (10 ECTS)
	First year project Numerical solution of stochastic differential equations (10 ECTS)
Autumn 2015	Ordinary differential equations: Theory, Modelling and Simulation (5 ECTS)
Spring 2015	Computational option pricing (10 ECTS)
Autumn 2014	Partial differential equations and numerics (10 ECTS)
	Mathematical methods in Chemistry and Nanoscience (5/2 ECTS)
Spring 2014	First year project Numerical solution of stochastic differential equations (10 ECTS)
	Differential equations, computing and modelling (10 ECTS)
Autumn 2013	Mathematical and numerical analysis (10 ECTS)
	Mathematical methods in Chemistry and Nanoscience (5/2 ECTS)
Spring 2013	First year project Numerical solution of stochastic differential equations (10 ECTS)
	Differential equations, computing and modelling (10 ECTS)
Autumn 2012	Mathematical and numerical analysis (10 ECTS)
Spring 2012	Convex analysis (5 ECTS)
	Differential equations (5 ECTS)
Autumn 2011	Calculus I (5 ECTS)

At the University of Mannheim

Spring 2011	Functional Analysis (4+2)
	Seminar Geometric numerical integration (2 seminar hours per week)

At the University of Darmstadt

WS 2008/09	Finite elements (block course equivalent to (2+1))
SS 2008	Numerical solution of ordinary differential equations (2+2), with assistant
WS 2007/08	Advanced seminar for degree candidates: Iterative solution of linear systems of equations (2 seminar hours per week)
	LaTeX for secretaries (12 teaching hours)
SS 2007	Stochastic differential equations: Numerical solution and modelling (50% of (3+1))
WS 2006/07	Numerical solution of reaction-diffusion equations (block course equivalent to (2+0))
WS 2004/05	Modelling with partial differential equations (2+2)

(WS=winter semester, SS=summer semester)
Here, (x+y) means that the corresponding course consisted of x teaching hours per week and y supervised exercise hours per week during the semester, which typically consists of 13 to 15 weeks with teaching.

Methods, materials and tools

Usually I mix lectures with activating elements such as plenum discussions, pair discussions and group work. In some courses, my teaching sessions are based on the “flipped classroom”- principle. In courses directed to students from biochemistry, molecular biology and chemistry, there is considerable focus on relevant examples from the respective sciences.
For most of the courses I teach, I prepare accompanying lecture notes.