TEACHING SUMMARY

Johannes Kepler University, 2015–2017

- *Supervision:* Bachelor Thesis of Florian Pötzelsberger entitled "Bewertung von Barrier Optionen" (Pricing of Barrier Options).
- Instructor/Examiner: Vorbereitung auf die Ergänzungsprüfung Mathematik (Preparation for the equivalency examination in mathematics). I taught calculus and precalculus topics as well as elementary probability theory. The course consisted of 13 lectures and a final examination (the Ergänzungsprüfung).
- *Teaching Assistant:* I lead weekly tutorials for the the course 521THEOALGU13, Algebra für Informatiker/Innen (Algebra for computer scientists) and 420GMATDM2016, Diskrete Mathematik (Discrete Mathematics).

York University, 2010-2013

Teaching assignments I completed during my M.A. and Ph.D. degrees. Note I did not teach during 2014 because I received a scholarship and chose to live oversees. Detailed role descriptions follow.

Semester	Hours	Course	Description	Director	Role
Fall 2010	40.5	MATH 1021	Linear Algebra I	Richard Ganong	Marker & Invigilator
Fall 2010	54	MATHLAB	N/A	N/A	Tutor
Winter 2011	40.5	MATH 1300	Differential Calculus with Applications	Robert Burns	Marker & Invigilator
Winter 2011	40.5	MATHLAB	N/A	N/A	Tutor
Summer 2011	27	MATHLAB	N/A	N/A	Tutor
Fall 2011	54	MATH 2030	Elementary Proba- bility	N.R. Shieh	Marker & Invigilator
Fall 2011	16	MATH 2030	Elementary Proba- bility	N.R. Shieh	Teaching Assistant
Fall 2011	40.5	MATHLAB	N/A	N/A	Tutor
Winter 2012	67.5	MATH 2030	Elementary Proba- bility	Eli Brettler	Marker & Invigilator
Winter 2012	54	MATHLAB	N/A	N/A	Tutor
Summer 2012	27	MATH 1300	Differential Calculus with Applications	Hans Joshi	Marker & Invigilator
Summer 2012	27	MATHLAB	N/A	N/A	Tutor
Fall 2013	54	MATH 1131	Introduction to Statistics	Hélène Massam & Yuejiao Fu	Marker & Invigilator
Fall/Winter 2013	48	MATH 1200	Problems, Conjec- tures & Proofs	Eli Brettler & Juris Steprans	Teaching Assistant
Winter 2013	54	MATH 1013	Applied Calculus I	Anthony Szeto	Teaching Assistant

Teaching Assignments

Semester	Hours	Course	Description	Director	Role
Winter 2013	27	MATH 2030	Elementary Proba- bility	Joerg Grigull	Marker & Invigilator
Summer 2013	27	MATH 2030	Elementary Proba- bility	Iouldouz Raguimov	Marker & Invigilator
Total Hours	698.5				

Role Descriptions

Marker \mathcal{C} Invigilator: The primary duty is to correct student assignments and tests. Usually the answer key and suggested grading scheme are provided by the director of the course, but not always. In cases where they are not, the marker solves the problems from the test or assignment him/herself and decides how to award marks. In some courses the marker is also responsible for designing quizzes. Invigilation consists of organizing and observing written examinations which are typically between 1 and 3 hours in length. Class sizes can range from 10 to 200 students.

MATHLAB Tutor: The primary duty is to work in the MATHLAB which is a center that is dedicated to helping undergraduate students with problems from their mathematics and statistics courses. At any time, the center is staffed by approximately 5 Tutors who are tasked with helping students with their questions. This usually means that tutors work in a one-on-one setting with students for brief periods until the student can proceed with the problem on his/her own. Officially, students can expect help with practically any first or second year course from either mathematics and statistics, although students from upper year courses also occasionally seek help.

Teaching Assistant (TA): The primary duty is to lead tutorial sessions. Tutorials are generally 1 to 1.5 hours in length and are typically attended by between 10 and 20 students. The format of the tutorial depends quite heavily on the course. At the very least, the tutorial is a drop-in session where students can receive additional help with their problems by working with the TA in a one-on-one manner for brief periods. In other tutorial assignments the TA is expected to discuss specific problems at the suggestion of the course director. In these cases there is usually a short lecture component, and then the students are encouraged to solve the problems on their own or in a group. The TA then supports the students in their efforts. A final possibility is that the TA prepares a lecture that compliments the director's lecture, and uses the tutorial exclusively to speak about specific problems, or certain aspects of the course at greater depth.