Room K 513
Tilburg University
+31 13 466 89 08
+49 176 644 702 89
c.hambel@tilburguniversity.edu
www.christoph-hambel.de

Dr. Christoph Hambel

Teaching Statement

This teaching portfolio contains a complete description of my teaching philosophy, methods, learning material, experience, and related information. Detailed course descriptions, lecture evaluations, and sample learning material are available upon request.

1. General Philosophy and Teaching Methods

My primary goal in teaching is conveying knowledge in the best possible manner such that each student gains a clear picture of the content and is able to apply the learned methods both in practice and in theory. In all of my courses I am constantly motivating my students to ask me questions and to actively participate in class.

By teaching a combination of theoretical basics and practically relevant examples I aim at optimally preparing students for their career. Conveying the underlying theoretical principals is especially important to prepare students for a potential career in academia and ensures a deeper understanding of the theoretical foundation behind the learned techniques. Realistic examples and case studies are however equally important since they provide access to practically relevant problems. Consequently, my lectures typically involve tutorial sessions, which enable the students to practice the techniques, to gain a deeper understanding of the foundation, and to clarify open questions.

My teaching strategy involves the usage of lecture slides, which I typically complement with hand-written notes. These complements include, but are not limited to, analytical examples, details on mathematical derivations, graphical illustrations, and answers to student's questions. I always provide these hand-written complements such that the students do not have to write them down in class such that the students can spend their attention on the lecture.

2. Learning Material

I generally provide the learning material on the e-learning platform. This includes, but is not limited to, the lecture slides (both plain and with my hand-written annotations), problem sets along with sample solutions, Excel sheets and codes (if applicable), and additional readings such as scientific articles. To avoid any frustration with the learning material, I also provide additional video content such as short book reviews, which summarize what parts of a textbook are important for the lecture. A sample set of lecture slides can be found on my personal webpage.

3. Teaching Principles

To reach my teaching goals I follow three main principles which aim at keeping students motivated, interested, and engaged. These principles are:

1. Intuitiveness
2. Practical relevance
3. Theoretical foundation

I am used to illustrating technical problems with intuitive and practically relevant examples or brief case studies. This allows me to separate theoretical details from economic intuition. The latter is especially important for gaining the big picture of a specific lecture and to successfully attend the course. Putting emphasis on the practical relevance of the problems also involves the implementation of the learned

techniques and methods in Excel or a programming language (depending on the level and the learning goal of the course).

However, I do not equate intuitiveness and simplicity. Teaching technical and complicated material in a too simplified manner can create avoidable misunderstandings and confusion. By contrast, understanding a technical problem in finance often requires deep theoretical and mathematical knowledge, which sometimes cannot be abstracted from. Thus, it also depends on whether I teach a graduate or an undergraduate course.

To illustrate this issue in an example, one can consider the well-known Black-Scholes formula for option pricing: This formula can be derived in several different ways. Some of them avoid too technical arguments and allow to grasp the intuition behind the result. Nevertheless, they are mathematically sound and do not oversimplify things. Others are mathematically involved and require deep mathematical knowledge (e.g., partial differential equations, stochastic calculus, change of measure) which cannot be presupposed from bachelor students, but are being taught at the master's or Ph.D. level in order to strengthen the students' theoretical and mathematical abilities.

4. Availability and Criticism

To improve the quality of my lectures and tutorials, I take evaluations from students seriously and reflect on both positive and negative aspects. Analyzing my own performance in the lecture hall is a matter of course. I always appreciate constructive criticism about my lectures and tutorials and adopt it to enhance the quality of my teaching. For this purpose, I have set up a feedback form on my personal webpage, where students can give me feedback on my courses, preferably before the teaching evaluations, either by name or anonymously.

Although it is not always possible to get personally in touch with all students—more than 200 students attended my bachelor's course on financial derivatives in the previous summer term—I usually set up a forum on the e-learning platform. Students are expected to make use of this offer and put their questions into the forum so that an interactive discussion in between the lectures materializes. I typically comment on the students' questions within 24 hours. In case a question requires a quite lengthy answer, I am used to recording an additional explanatory video and upload it to the e-learning platform.

5. Teaching Experience

During the last decade I have collected a lot of teaching experience being it as a tutor or a lecturer. The following list goes back to 2010 when I started academic teaching at Department of Mathematics of the University of Kaiserslautern.

Lectures at the Tilburg School of Economics and Management:

Spring 2024	*Asset Liability Management* (graduate level, TiSEM)
	Life Insurance (undergraduate level, TiSEM)
Fall 2023	*Valuation and Risk Management* (graduate level, TiSEM)
Spring 2023	*Asset Liability Management* (graduate level, TiSEM)
	Life Insurance (undergraduate level, TiSEM)
Fall 2022	*Valuation and Risk Management* (graduate level, TiSEM)

Lectures at the Goethe University Frankfurt, its Graduate School for Economics, Finance, and Management (GSEFM) and the Goethe Business School (GBS):

Summer 2022	*Capital Markets and Asset Pricing* (graduate level, GBS)
Winter 2021	*Advanced Financial Economics I* (PhD level, GSEFM)
Summer 2021	*Financial Derivatives and Risk Management* (undergraduate level, Goethe University), taught in German, Winner of the best teaching award of the student council (*Student Council Award for Excellent Teaching*)

Winter 2020 *Advanced Financial Economics I* (PhD level, GSEFM)
Winter 2019 *Advanced Financial Economics I* (PhD level, GSEFM)

Teaching Assistant / Tutor at the Goethe University, Goethe Business School (GBS), and Graduate School for Economics, Finance, and Management (GSEFM):

Winter 2020 *Financial Decisions and Markets*, master seminar, Goethe University
Summer 2020 *Credit Risk*, graduate course, Goethe University
Winter 2019 *Financial Decisions and Markets*, master seminar, Goethe University
Summer 2019 *Capital Markets and Asset Pricing*, graduate course, GBS
Winter 2018 *Financial Decisions and Markets*, master seminar, Goethe University
Summer 2018 *Capital Markets and Asset Pricing*, graduate course, GBS
Winter 2017 *Capital Markets and Asset Pricing*, graduate course, Goethe University
Winter 2016 *Advanced Financial Economics I*, PhD course, GSEFM
Winter 2015 *Advanced Financial Economics I*, PhD course, GSEFM
Summer 2015 *Capital Markets and Asset Pricing*, graduate course, GBS
Winter 2014 *Capital Markets and Asset Pricing*, graduate course, Goethe University
Summer 2014 *Dynamic Asset Allocation and Applications*, PhD course, GSEFM
Summer 2013 *Master Thesis Seminar*, Goethe University

Teaching Assistant / Tutor at the Department of Mathematics of the University of Kaiserslautern (all taught in German):

Summer 2012 *Statistics II for Economists*, undergraduate course
Summer 2012 *Higher Mathematics I*, undergraduate course
Winter 2011 *Higher Mathematics III*, undergraduate course
Summer 2011 *Higher Mathematics II*, undergraduate course
Summer 2011 *Preparation Class for Mathematics*, undergraduate course
Winter 2010 *Applied Mathematics: Stochastic Methods*, undergraduate course
Summer 2010 *Preparation Class for Mathematics*, undergraduate course