

Advanced Microeconomics

MAGKS Ph.D. Programme

Prerequisites: Admission to Ph.D. program (or advanced Master level) at one of the participating universities

Required course work: active participation in class and completion of exercise questions or presentation of (parts of) seminal journal articles or presentation of a microeconomic model from your own thesis to be discussed in class. To be decided on first or second day of course.

Time: Monday, March 2 – Friday, March 6, 2026 (negotiable in case the time is a problem, please send an e-mail to: g.wangenheim@uni-kassel.de)

Place: University of Kassel, Nora-Platiel-Straße 6, Room 0210

Structure of course: Based on the textbook “Microeconomics” by Hugh Gravelle and Ray Rees, the course will deepen the students’ knowledge of microeconomic theory. This textbook is a bridge between intermediate knowledge on microeconomics and the really advanced textbooks like the one by Mas-Colell, Whinston and Green, which is rather a handbook than a textbook suitable for a one-week intensive course. During the course, we will work through the following chapters of the book:

Consumer theory (chapters 2–4), production, cost and supply (ch. 5–7), competitive, monopoly and oligopolistic markets (ch. 8, 9, 16), welfare economics, market and government failure (ch. 13–14), uncertainty (ch. 17–18)

Hal Varian’s textbook “Microeconomic Analysis” will complement Gravelle and Rees.

Depending on participants’ interests, we will either concentrate on the textbook or use it as a starting point to discuss seminal journal articles in the topics of the respective chapters. Please e-mail your preferences to g.wangenheim@uni-kassel.de

Morning sessions (2 x 90 minutes or a little more) will be used for lectures, afternoon sessions are reserved for student group work on exercises or journal articles and their discussion.

Literature:

Gravelle, Hugh and Ray Rees (2004). *Microeconomics*. Harlow, England et al.: Prentice Hall.

Varian, Hal (1992). *Microeconomic Analysis*. New York, NY et al: Norton

For further reference:

Mas-Colell, Andreu, Michael D. Whinston, and Jerry R. Green (1995). *Microeconomic Theory*. New York, NY: Oxford University Press.

Yes, the books are old. But the basics in microeconomic theory change as little as the basics in math.

Schedule

Chapters refer to the textbook by Gravelle and Rees.

Monday 2-3-2026 10:30–12:15 h 13:15–14:30 h	1. Decisions a. Introduction (Chap. 1) b. Consumer theory (Chap. 2 – 4)
Tuesday 3-3-2026 9:00–10:45 h 11:15–13:00 h	c. Production and Costs (Chap. 5 – 7)
Wednesday 4-3-2026 9:00–10:45 h 11:15–13:00 h	2. Markets a. Competitive markets (chap. 8) b. Monopoly and Oligopoly markets (Chap. 9, 16)
Thursday 5-3-2026 9:00–10:45 h 11:15–13:00 h	3. Market effects a. Welfare economics (Chap. 13) b. Market failure and government failure (Chap. 14)
Friday 6-3-2026 9:00–10:45 h 11:15–13:00 h	4. Uncertainty a. Decisions under Uncertainty (Chap. 17) b. Production under Uncertainty (Chap. 18)

Student work and discussion: every afternoon, class discussion starting three hours after end of morning session.

Exercises for Day 1

Chapter 2:

Section 2A, Exercise 2 and 3 (P. 22) [10 Minutes]

Section 2 Appendix 1, Exercise 4 (P. 43) [5 Minutes]

Section 2B, Exercise 2 (P. 25) [5 Minutes]

Section 2C, Exercise 2 (P. 29) [15 Minutes; distribute examples!]

Section 2D, Exercise 6 (P. 36) [30 Minutes]

Further questions: Suppose a good is inferior in the relevant range. Compare income compensated demand curves (Hicks and Slutsky compensation) and Marshallian demand [10 Minutes].

Chapter 3:

Section 3A, Exercise 1 (P. 51) [20 Minutes]

Section 3B, Exercises 2 and 3 (P. 57) and 5 (P.58) [15 + 10 + 10 Minutes]

Section 3C, Exercise 2 (P. 65) [15 Minutes]

Chapter 4:

Section 4A, Exercise 1 (P. 76) [10 Minutes]

Section 4B, Exercise 1 (P. 81) [20 Minutes]

Exercises for day 2:

Section 5B, 4 and 6 (P.100)

6B, 4 (Remark: For deriving the cost function, assume the production function has constant returns to scale.)

6C, 1 and 2 each without the last sub-question. Consider in addition: “How does the cost curve look like for very large output?”

6D 2 (*Read* Section 6D lesen)

7A 2 and 3

7B 3

Exercises for day 3

8A) Exercises 4 and 5

8B) Exercise 2

8C) Exercise 4

9B) Exercise 6 (Assume that nobody bids for the monopoly right to make losses.)

9C) Exercise 1 (Assume that academic societies aim at maximizing the circulation of their journal.)

[time permitting: 9C Exercise 8]

16B) Exercise 3 with an extension: which distributions of production quantities q^m could be enforced by threatening to fall back to the Cournot equilibrium? (with and without side payments) Are time preferences of the duopolists relevant?

16C) Exercises 1 and 2

Exercises for day 4 and 5 (?): tba