

ADVANCED MICROECONOMICS, UEC-51806

0. Web page Besides BrightSpace there is the web page pvmouche.deds.nl/advmicro-2023-2024.html which presents some information in a more structured form.

1. Attention This course outline contains up-to-date information on the course. There may be (minor) differences with information from other sources. Please also consult the web page (see 0 above) regularly for the most recent information.

2. Content of the course In a broad sense the course consists out of three parts: General Microeconomic Theory (focus on duality theory for consumers and producers), Non-cooperative Game Theory (focus on games in strategic form and games in extensive form) and Information Economics (focus on expected utility theory and asymmetric information). Lectures cover selected parts from the textbook (see 6 and 12 below). In each part of the course there will be special attention to a practical application: respectively, biofuels, location choice of firms, insurance markets.

3. Target group The course is designed for students in the MID, MME and the Master's programme 'Economics of Sustainability' who wish to attain more profound knowledge in microeconomics. The course is also part of the WASS graduate programme. Also students from other study programmes are very welcome. Students are welcome provided they have the required knowledge (see 4 below).

4. Starting level Required knowledge is an intermediate course in microeconomics and some knowledge of the necessary mathematics. Having the required mathematical skills, the course is self-contained. Some special attention to mathematics will be paid. An indication for whether your economic and mathematical background is sufficient can be obtained by making the test on the web page. Please do it! If the result of the test is not sufficient, it is wise not to participate but first to follow the course Microeconomics DEC-23306. Before the start of the course, participants will have the opportunity to prepare by self study (see the web page).

5. Coordinates All meetings will be on campus on Mondays, Tuesdays and Thursdays. See 12 below for detailed information.

6. Teaching method The language of instruction is English. Each meeting consists of a lecture and/or a tutorial. ('Lecture and/or tutorial' will be decided 'on the fly'.) The teachers (see 10 and 12 below) will inform you in advance about further details. In the lectures the theory in the textbook is dealt with. In the tutorials we do exercises on the theory. Also there are assignments which consist of extensive exercises to deepen knowledge and skills (see 7 below). From an efficiency point of view it is a good idea that students prepare for the lectures and tutorials in advance.

7. Assignments There are three sets of assignments that can be conducted in small groups of 2-3 people; details will be announced. The assignments will be graded (also see 9 below).

8. Study material The textbook used is Advanced Microeconomic Theory, third edition, from G. Jehle and P. Reny, Addison-Wesley, 2011. (But in fact all editions are fine.) Also see <http://free-ebooks.com>. Additional background reading will be provided.

9. Assessment and specification At the end of this course the student should be able to:

- acquire additional knowledge at an advanced level;
- judge the formal correctness of various economic models;
- design micro-economic models for various real-world problems.

There is a written open book exam about the subjects covered in lectures and tutorials. There will be 6 questions (2/lecturer) out of which 5 should be chosen. If A is the mark of assignments and E that of the exam, the final mark F will be $F = \max(\frac{3}{10}A + \frac{7}{10}E, E)$. In order to pass, $E \geq 5.5$ should hold.

10. Lecturers Dr. D. Drabik (room 2105, tel. 484365), Dr. P. v. Mouche (room 0116, tel. 484265), Dr. H.-P. Weikard (room 1118, tel. 482494).

11. Important dates

- First meeting: Monday 04092023, B0529.
- Exam: Friday 27102023, 13:30–16:30, B3016.

12. Study scheme The table below gives an indication of the relevant chapters per week of the text book. (The content of the slides of the teachers will clarify.)

Week	Date	Room / Time	Lecturer	Book chapter	Text book
1	Mon 0409	B0529 / 16:30-18:50	DD	Consumer Theory	1.1 - 1.3
	Tue	B0326 / 14:00–17:10	DD	Consumer Theory	1.3, 1.4
	Thu	B0106 / 14:00-16:20	DD	Consumer Theory	1.4, 1.5
2	Mon 1109	B0529 / 16:30-18:50	DD	Theory of the Firm	3.1 - 3.3
	Tue	B0326 / 14:00–17:10	DD	Theory of the Firm	3.4, 3.5
	Thu	B0211 / 14:00-16:20	DD	Theory of the Firm	3.5
3	Mon 1809	B0529 / 16:30-18:50	PvM	Game Theory	7.1
	Tue	B0326 / 14:00–17:10	PvM	Game Theory	7.2.1, 7.2.2
	Thu	P0635 / 14:00–16:20	PvM	Game Theory	7.3.1
4	Mon 2509	B0529 / 16:30-18:50	PvM	Game Theory	7.3.2-7.3.5
	Tue	B0326 / 14:00–17:10	PvM	Game Theory	7.3.5
	Thu	P0635 / 14:00–16:20	PvM	Game Theory	“Game paradise”
5	Mon 0210	B0529 / 16:30-18:50	H-PW	Expected Utility	2.4
	Tue	B0326 / 14:00–17:10	H-PW	Game Theory	7.2.3, 7.3.6, 7.3.7
	Thu	P0631 / 14:00–16:20	H-PW	Information Economics	8.1
6	Mon 0910	B0529 / 16:30-18:50	H-PW	Information Economics	8.1
	Tue	B0321 / 14:00–17:10	H-PW	Information Economics	8.2
	Thu	B0211 / 14:00–16:20	H-PW	Information Economics	8.3

“Game paradise”: content will be announced.

B0106, B0211, B0321, B0326, B0529, P0631, P0635: Forum.

B0316: Orion.