GAME THEORY, UEC-52803

0. Web page `http://pvmouche.deds.nl/gametheory.html`. Of course, also accessible via BrightSpace.

1. Attention This course outline contains some general information on the course. There may be (minor) differences with information from other sources. For up-to-date information, consult the web page or Brightspace (see 0 above) regularly.

2. Content of the course This course provides a short introduction to game theory. It consists out of two parts: non-cooperative game theory (first two weeks) and cooperative game theory (third week).

3. Target group The course is designed for all students interested in decision-making in strategic situations.

4. Starting level There is no required specific knowledge.

5. Coordinates Meetings are on Mondays and Fridays, 14:00–16:20. Dates/Rooms: 10-02/B0411, 14-02/B4014, 17-02/B0629, 21-02/B4014, 24-02/B0629, 28-02/B4014.

6. Teaching method The language of instruction is English for the first part of the course (if there is at least one student who cannot understand Dutch), and English for the second part of the course. Meetings consists of Lectures and Tutorials.

7. Study material 1. Compulsory: Slides.
2. Very recommended: K. Binmore, Game Theory, a Very Short Introduction, 2007, ISBN 978-0-19-921846-2.

8. Assessment and specification After successful completion of this course students are expected to be able to:

a. have a first impression on the usefulness of game theory;

b. understand the structure, basics and concepts of games in strategic, in extensive and in characteristic function form;

c. should be able to apply these concepts to various concrete games and to various (simple) real world problems.

There is a short exam (multiple choice) and an assignment; the exam counts for 70% and the assignment for 30%. The mark for the exam should be ≥ 5.5. The assignment may be conducted also with 2 people. For this assignment one can choose between 1. questions provided by the teachers; 2. a short essay in which one describes a problem and set up and solve a game theoretic model for this problem.

Official resits concern only the exam. Assignments with a mark < 5 can be redone (one time) on request.

9. Lecturers Dr. P. v. Mouche (Leeuwenborch, room 0116, tel. 484265, email `pierre.vanmouche@wur.nl`).

Dr. H.-P. Weikard (Leeuwenborch, room 1118, tel. 482494, email `hans-peter.weikard@wur.nl`).

10. Important dates
– First meeting: Monday 10-02-2025, 14:00–16:20 in B0411 (Forum).
– Exam: Friday 07-03-2025, 13:30–15:15 in B0435 (Forum).