

Course Descriptions Exchange 2023-2024

Course Title Game Theory and Economics
 Course Code EBC2110
 ECTS Credits 6,5
 Assessment Whole/Half Grades

| Period | Start | End | Mon | Tue | Wed | Thu | Fri |
|--------|------------|------------|-----|-----|-----|-----|-----|
| 2 | 30-10-2023 | 15-12-2023 | X | | X | | X |

Level Advanced

Coordinator Marc Schröder For more information: m.schroder@maastrichtuniversity.nl

Language of instruction English

Goals Knowledge of the main concepts in cooperative and non-cooperative game theory; skills in applying these concepts in economic models.

Description This course discusses the main concepts from non-cooperative and cooperative game theory. The following topics will be discussed:

* Non-cooperative game theory: Nash equilibrium, subgame perfect equilibrium, Bayesian and perfect Bayesian equilibrium.

* Cooperative game theory: core, Shapley value, nucleolus.

The emphasis will be on understanding and proving properties of the solutions concepts and some applications. Applications range from oligopoly theory to job market signalling, auctions and cost allocation.

Literature Game Theory: A multi-leveled approach, author: Hans Peters/Springer 2015 2nd edition.

Prerequisites 1. The course is open for all students, although Economics students should be aware of the challenging technical level of this course. The course Thinking strategically could be a proper alternative.
 2. This course is compulsory for 2nd-year students Econometrics and Operations Research.
 3. Exchange students need to follow a Bachelor in economics, not in business and must have a decent level in mathematics, especially calculus. Some prior knowledge about microeconomics would be helpful.
 An advanced level of English.

Teaching methods PBL / Lecture / Groupwork

Assessment methods Written Exam / Assignment

Evaluation in previous academic year For the complete evaluation of this course please click <http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM>

This course belongs to the following programme / specialisation

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|---|---|
| Bachelor Economics and Business Economics - Economics | Year 3 Quantitative Economics Elective(s) |
| Bachelor Economics and Business Economics - Emerging Markets | Year 3 Elective Course(s) |
| Bachelor Economics and Business Economics - Economics and Management of Information | Year 2+3 Quantitative Economics Elective(s) |
| Bachelor Economics and Business Economics - International Business Economics | Year 3 QE Elec(s) - Maj Accounting |
| Bachelor Economics and Business Economics - International Business Economics | Year 3 QE Elec(s) - Maj Finance |
| Bachelor Economics and Business Economics - International Business Economics | Year 3 QE Elec(s) - Maj Inf Mgmt |
| Bachelor Economics and Business Economics - International Business Economics | Year 3 QE Elec(s) - Maj Marketing |
| Bachelor Economics and Business Economics - International Business Economics | Year 3 QE Elec(s) - Maj Org |
| Bachelor Economics and Business Economics - International Business Economics | Year 3 QE Elec(s) - Maj SCM |
| Bachelor Economics and Business Economics - International Business Economics | Year 3 QE Elec(s) - Maj Strategy |
| Bachelor Econometrics and Operations Research | Year 2 Compulsory Course(s) |
| Bachelor Fiscal Economics | Transition Elective Course(s) |
| Bachelor International Business - Emerging Markets | Year 3 Elective Course(s) |
| Bachelor International Business | Year 3 QE Elec(s) - Maj Accounting |
| Bachelor International Business | Year 3 QE Elec(s) - Maj Finance |
| Bachelor International Business | Year 3 QE Elec(s) - Maj Inf Mgmt |
| Bachelor International Business | Year 3 QE Elec(s) - Maj Marketing |
| Bachelor International Business | Year 3 QE Elec(s) - Maj Org |
| Bachelor International Business | Year 3 QE Elec(s) - Maj SCM |
| Bachelor International Business | Year 3 QE Elec(s) - Maj Strategy |
| SBE Exchange Bachelor | Bachelor Exchange Courses |
| SBE Exchange Master | Bachelor Exchange Courses |
| SBE Non Degree Courses | Bachelor Courses |