

## Course Descriptions None 2024-2025

Course Title Neuroeconomics: Decision Making and the Brain  
 Course Code EBC2166  
 ECTS Credits 6,5  
 Assessment Whole/Half Grades

Period	Start	End	Mon	Tue	Wed	Thu	Fri
4	3-2-2025	30-3-2025	X		X		

Level Intermediate/Advanced  
 Coordinator Arno Riedl For more information: a.riedl@maastrichtuniversity.nl  
 Language of instruction English

Goals Students will recognize different disciplinary approaches to understand human decision-making and compare these to the interdisciplinary approach of Neuroeconomics. They will summarize different models within the area of Neuroeconomics and apply them to various decision-making domains. Students will also learn to critically evaluate existing studies.

Description Neuroeconomics, sometimes also known as Decision Neuroscience, is a relatively young field of research combining insights from economics, psychology, and neuroscience to understand how (healthy) humans make decisions and how these are related to underlying cognitive and neural processes. The ultimate goal of Neuroeconomics is to integrate knowledge from the different parent disciplines to answer the fundamental question of how our brain makes us decide. This course provides an introduction to this exciting endeavor and a critical discussion and reflection on some of the most important results achieved so far. The course will introduce the general idea behind Neuroeconomics by discussing seminal studies showing the limitations of viewing decision-making merely through the lens of the traditional fields of economics, psychology, and neuroscience. The course will review various methods used in Neuroeconomics research for measuring and influencing brain activity. An essential part of the course will be devoted to learning about the foundations and models of Neuroeconomics such as the basics of neuroscience. Equipped with these tools and background, we will read, discuss, and critically evaluate seminal and recent studies in Neuroeconomics. Possible topics include: \* Subjective value and decision making: how does our brain evaluate, compare and make us choose between different options? \* Decision-making under risk: what are the neural mechanisms underlying our decisions to gamble in the casino and buy insurance contracts? \* Decision-making over time: what are the brain areas that make us patient or impatient and how is their neural activity related to procrastination? \* Social decisions: what brain mechanisms make us humans be nice or nasty to other people? Are we intrinsically selfish or generous, and how can we find out about it? This interdisciplinary and challenging course consists of lectures and group work. It will use formal concepts from economics and neuroscience. Students should therefore not be afraid of mathematics and statistics. The course is ideal for students who are open-minded toward methods and models from other disciplines and have a genuine interest in interdisciplinary thinking.

Literature Selected chapters from Glimcher, P. W. and Fehr E. (eds.) 'Neuroeconomics: Decision Making and the Brain', Academic Press, London, UK, 2nd edition, 2014.  
 Selected research articles.

Prerequisites Sufficient quantitative skills and basic knowledge of microeconomics.

Keywords

Teaching methods PBL / Presentation / Lecture / Papers / Groupwork

Assessment methods Attendance / Participation / Written Exam / Presentation

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

Bachelor Economics and Business Economics - Economics	Year 3 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 Elective Course(s)
Bachelor Economics and Business Economics - International Business Economics	Year 3 Economics Elec(s) - Maj Accounting
Bachelor Economics and Business Economics - International Business Economics	Year 3 Economics Elec(s) - Maj Finance
Bachelor Economics and Business Economics - International Business Economics	Year 3 Economics Elec(s) - Maj Inf Mgmt
Bachelor Economics and Business Economics - International Business Economics	Year 3 Economics Elec(s) - Maj Marketing
Bachelor Economics and Business Economics - International Business Economics	Year 3 Economics Elec(s) - Maj Org
Bachelor Economics and Business Economics - International Business Economics	Year 3 Economics Elec(s) - Maj SCM
Bachelor Economics and Business Economics - International Business Economics	Year 3 Economics Elec(s) - Maj Strategy
Bachelor International Business	Year 3 Economics Elec(s) - Maj Accounting
Bachelor International Business	Year 3 Economics Elec(s) - Maj Finance
Bachelor International Business	Year 3 Economics Elec(s) - Maj Inf Mgmt
Bachelor International Business	Year 3 Economics Elec(s) - Maj Marketing
Bachelor International Business	Year 3 Economics Elec(s) - Maj Org
Bachelor International Business	Year 3 Economics Elec(s) - Maj SCM
Bachelor International Business	Year 3 Economics Elec(s) - Maj Strategy
SBE Exchange Bachelor	Bachelor Exchange Courses
SBE Exchange Master	Bachelor Exchange Courses
SBE Non Degree Courses	Bachelor Courses
Pre-master Human Decision Science	Disciplinary Course(s)