

## Microeconomics: Decision Theory (F000628)

**Course size** *(nominal values; actual values may depend on programme)*

**Credits 6.0**

**Study time 180 h**

### Course offerings and teaching methods in academic year 2025-2026

A (semester 1)	Dutch	Gent	lecture seminar
B (semester 1)	English	Gent	lecture seminar

### Lecturers in academic year 2025-2026

Van de gaer, Dirk	EB21	lecturer-in-charge
Vieider, Ferdinand	EB21	co-lecturer

### Offered in the following programmes in 2025-2026

	crdts	offering
<a href="#">Master of Science in Teaching in Economics(main subject Economics)</a>	6	A
<a href="#">Master of Science in Teaching in Science and Technology(main subject Mathematics)</a>	6	A
<a href="#">Master of Science in Business Engineering(main subject Data Analytics)</a>	6	B
<a href="#">Master of Science in Business Engineering(main subject Operations Management)</a>	6	B
<a href="#">Master of Science in Complementary Studies in Economics</a>	6	A
<a href="#">Master of Science in Economics</a>	6	B
<a href="#">Master of Science in Economics (Double Degree)</a>	6	B
<a href="#">Master of Science in Mathematics</a>	6	A
<a href="#">Exchange programme in Economics and Business Administration</a>	6	B

### Teaching languages

English, Dutch

### Keywords

Microeconomics, consumer behaviour, uncertainty, information economics, Markowitz expected utility and its dual, prospect theory, ambiguity aversion, intertemporal choice

### Position of the course

The course aims at broadening and extending the skills acquired in an intermediate course in Microeconomics, such that the student becomes familiar with a range of concepts and techniques used frequently in economic analysis. These tools will be used and developed in the courses advanced micro-economics: game theory and asymmetric information, social economics and public economics.

### Contents

Part 1. The course first deals with specific topics in consumer behavior: aggregation across goods, aggregation across consumers and welfare evaluation of price- and income changes. Next expected utility theory is introduced. After that we discuss information economics: moral hazard and adverse selection.

Part 2. The second part of the course starts with a critical evaluation of expected utility theory, followed by a discussion of alternative approaches: Markowitz expected utility and its dual, prospect theory and ambiguity aversion. We end with a discussion of different models of intertemporal choice. During the first class experimental data will be collected that will be used to illustrate the concepts and theories covered.

For the students of the educational master EW the first chapter of part 1 (about

consumer behaviour) is not part of the material.

### **Initial competences**

Students should have followed the course "Microeconomics", or otherwise acquired the following competences:

- Being able to analyse and to explain the theory of consumer behaviour, the theory of producer behaviour and the theory of pricing of final products.
- Being able to define and understand the common basic microeconomic concepts and models.
- Being able to apply simple microeconomic analysing techniques to simple economic problems.

### **Final competences**

- 1 be able to use micro economic techniques
- 2 analyse economic situations and problems using micro economic techniques
- 3 propose realistic solutions for micro-economic situations and problems.
- 4 Critical attitude towards expected utility theory, knowledge of alternatives and empirical testing of decision theoretic models.

### **Conditions for credit contract**

Access to this course unit via a credit contract is determined after successful competences assessment

### **Conditions for exam contract**

Access to this course unit via an exam contract is unrestricted

### **Teaching methods**

Seminar, Lecture

### **Extra information on the teaching methods**

Formal lecture.

### **Study material**

Type: Slides

Name: Decision theory, part 2  
Indicative price: Free or paid by faculty  
Optional: no  
Language : English  
Number of Slides : 280  
Available on Ufora : Yes  
Online Available : No  
Available in the Library : No  
Available through Student Association : No

Type: Slides

Name: Decision theory, part 1  
Indicative price: Free or paid by faculty  
Optional: no  
Language : English  
Number of Slides : 200  
Available on Ufora : Yes  
Online Available : No  
Available in the Library : No  
Available through Student Association : No

### **References**

Part 1:

- Cowell, F.A. (2006), Microeconomic Principles and Analysis, Oxford University Press.
- Mas-Colell, A., Whinston, M.D. and J.R. Green (1995), Microeconomic theory, Oxford: Oxford University Press.
- Perloff, J.M. (1999), Microeconomics, Addison-Wesley Publishing Company.
- Gravelle, H. and R. Rees (2004), Microeconomics, third edition, Prentice Hall.
- Varian, H.R. (1992), Microeconomic Analysis, third edition, Norton.
- Varian, H.R. (1999), Intermediate Microeconomics, fifth edition, Norton.

Part 2:

- Schoemaker, Paul J.H. (1982). The Expected Utility Model: Its Variants, Purposes, Evidence and Limitations. Journal of Economic Literature, Vol. XX, pp. 529-563.

- Rabin, Matthew, & Richard H. Thaler (2001). Anomalies: Risk Aversion. *Journal of Economic Perspectives* 15(1), 219-232.
- Markowitz, Harry (1952). The Utility of Wealth. *Journal of Political Economy* 60, 151-158.
- Gneezy, Uri, & Jan Potters (1997). An experiment on risk taking and evaluation periods. *Quarterly Journal of Economics* 112, 631-646.
- Abdellaoui, Mohammed (2000). Parameter-Free Elicitation of Utility and Probability Weighting Functions. *Management Science* 46(1), 1497-1512.
- Ellsberg, Daniel (1961). Risk, Ambiguity and the Savage Axioms. *Quarterly Journal of Economics* 75(4), 643-669.
- Bryan, Gharad (2018). Ambiguity Aversion Decreases the Impact of Partial Insurance: Evidence from African Farmers. *Journal of the European Economic Association*, forthcoming.
- Loewenstein, George & Richard Thaler (1989). Anomalies: Intertemporal Choice. *Journal of Economic Perspectives* 3, 181-193.
- Frederick, Shane, George Loewenstein, & Ted O'donoghue (2002). Time Discounting and Time Preference: A Critical Review. *Journal of Economic Literature* 40(2), 351-401.

#### **Course content-related study coaching**

Coaching will be done by the professor.

#### **Assessment moments**

end-of-term assessment

#### **Examination methods in case of periodic assessment during the first examination period**

Written assessment

#### **Examination methods in case of periodic assessment during the second examination period**

Written assessment

#### **Examination methods in case of permanent assessment**

#### **Possibilities of retake in case of permanent assessment**

not applicable

#### **Extra information on the examination methods**

Written examination.

Students who follow the course for 6 credits: evaluation of all topics covered.

Students who follow the course for 5 credits (educational master): evaluation of the topics as described in content. No questions are asked about chapter 1 topics for consumer behavior.

#### **Calculation of the examination mark**