

## Macroeconomics (F000083)

**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 2024-2025**

A (semester 1)

Dutch

Gent

seminar

independent work

lecture

**Lecturers in academic year 2024-2025**

Heylen, Freddy

EB21

lecturer-in-charge

**Offered in the following programmes in 2024-2025**

**crdts**

**offering**

Bachelor of Science in Business Economics

6

A

Bachelor of Science in Business Engineering

6

A

Bachelor of Science in Economics

6

A

Master of Science in Electrical Engineering (main subject Communication and Information Technology )

6

A

Master of Science in Electromechanical Engineering(main subject Control Engineering and Automation)

6

A

Master of Science in Electromechanical Engineering(main subject Electrical Power Engineering)

6

A

Master of Science in Electrical Engineering (main subject Electronic Circuits and Systems)

6

A

Master of Science in Industrial Engineering and Operations Research(main subject Manufacturing and Supply Chain Engineering)

6

A

Master of Science in Electromechanical Engineering(main subject Maritime Engineering)

6

A

Master of Science in Electromechanical Engineering(main subject Mechanical Construction)

6

A

Master of Science in Electromechanical Engineering(main subject Mechanical Energy Engineering)

6

A

Master of Science in Industrial Engineering and Operations Research(main subject Transport and Mobility Engineering)

6

A

Master of Science in Chemical Engineering

6

A

Master of Science in Chemical Engineering

6

A

Master of Science in Civil Engineering

6

A

Master of Science in Civil Engineering

6

A

Master of Science in Engineering Physics

6

A

Master of Science in Engineering Physics

6

A

Master of Science in Fire Safety Engineering

6

A

Master of Science in Industrial Engineering and Operations Research

6

A

Master of Science in Materials Engineering

6

A

Master of Science in Mathematics

6

A

Master of Science in Sustainable Materials Engineering

6

A

Linking Course Master of Science in Economics

6

A

Preparatory Course Master of Science in Economics

6

A

**Teaching languages**

Dutch

**Keywords**

business cycle, economic growth, standard of living, employment and

unemployment, price level and inflation, interest rate, exchange rate, budget balance of the government, public debt, income inequality, consumption, investment, government spending, taxes, fiscal policy, money market, monetary policy, balance of payments, labour market, labour market policy, wage formation, price setting, sustainability

### Position of the course

This course studies the evolution of the macroeconomic environment in which firms and households operate. It aims at clarifying the evolution of macroeconomic activity (GDP, in the short and the long run), employment and unemployment, inflation, the interest rate, the exchange rate, the government's financial balance and public debt, the current account of the balance of payments, and the development of prices on financial markets (stock and bond prices). In doing so, we also study the mutual influence between all these variables.

Special attention is paid to the relationship between theory and facts (in different countries) as elaborated in more than 30 applications. The applications also allow to touch upon the most important macroeconomic developments and (policy) discussions of the last decades. These developments include i.a. the sharp decline of the interest rate and 'secular stagnation', the falling labour share in national income and increased inequality, and the recent return of high inflation. Policy discussions relate to the very expansionary monetary policies pursued after the 2008 financial crisis, optimal fiscal policy and public debt sustainability, ageing and the debate on working longer, the macro impact of policies aimed at ecological sustainability, and the debate on economic growth as a policy priority, etc.

### Contents

- 1 Macroeconomics and macroeconomic relations (production, income and expenditures): an introduction
- 2 Determinants of macroeconomic expenditures (demand for goods and services)
  - components of total spending: household consumption, private investment, government spending and fiscal policy, net exports of goods and services.
  - the influence of the monetary sector: the money market, monetary policy and the determination of the interest rate
  - the influence of the balance of payments: international capital movements, exchange markets
  - the Mundell-Fleming model (IS-LM-BP-model)
  - the derivation of the aggregate demand curve (AD-curve) in an open economy
- 3 Determinants of aggregate supply of goods and services: the production function, the labour market and labour market policy, taxes on labour, wage formation, the use and cost of energy, price setting and the derivation of the aggregate supply curve (AS-curve).
- 4 Equilibrium of demand and supply and the explanation of macroeconomic activity, (un)employment and inflation in the short and medium run (business cycle, Phillips curve,...), with a lot of attention to the impact of macroeconomic policy.
- 5 Explanation of economic growth and income per head of countries in the long-run (Solow growth model, introduction to endogenous growth theory). Reflection on long-term developments and problems in developed economies: the declining labour share in national income and rising inequality, the discussion of economic growth as policy priority (sustainability debate).

### Initial competences

- Understand and be able to explain basic concepts of economics and economic behaviour (cost/benefit analysis, marginal principle,...)
- Have basic knowledge of relevant mathematics (optimisation, algebra,...)

### Final competences

- 1 Define and explain the core concepts and variables of macroeconomics. Define and describe the instruments of macroeconomic policy: fiscal policy, monetary policy, foreign exchange policy, labour market policy, product market competition policy. Define the important macroeconomic relations and curves (e.g. Okun's law, IS-curve, AD-curve,...) and explain the underlying causal patterns.
- 2 Outline the core of basic theories about the behaviour of households and firms

(e.g. permanent income hypothesis for private consumption, households' money demand, firm's demand for labour, wage bargaining,...) and explain the underlying causal relationships.

Explain the determinants of key variables relating to the government and the international economy (e.g. the government's financial balance, the evolution of public debt, net exports of goods and services, net inflow of capital).

- 3 Master, select and adequately use relevant macroeconomic models of increasing complexity to analyse presented questions. Those questions may concern the impact of exogenous developments (e.g. an energy price increase) or policy interventions (monetary policy, fiscal policy, labour market policy,...) on various macroeconomic variables (GDP, employment, interest rates, exchange rate, government budget balance and public debt, inflation, real wages,...). See and explain the relations between the evolution of those variables.

Depending on the imposed complexity the intended models are basic models for equilibrium on the goods market, the money market or the exchange market, the IS-LM model, IS-LM-BP model, WS-PS model for the labour market, AD-AS model, Solow model of economic growth. Present the analysis using those models also graphically.

- 4 Express basic macroeconomic relations formally. Understand and interpret intuitively the mathematical formulation of discussed theories and important relationships, e.g. conditions for optimum. Interpret simple econometric test results regarding theories studied.
- 5 Be aware of the most remarkable macroeconomic developments during the last two decades, in particular in Belgium and Europe (but for some developments also the US, Japan, China). On the basis of cases studies in class / in the textbook, apply the theories that you studied to explain these developments or their consequences.
- 6 Understand and explain the importance of macroeconomic developments and macroeconomic policy choices for the welfare of society (including aspects of social and environmental sustainability). Clarify the often conflicting interests (winners and losers) and tradeoffs involved (e.g. employment or price stability). Starting from the course and provided supplementary articles from economic daily and weekly newspapers (e.g. De Tijd, The Economist), reflect on current macro developments in society and follow up on macroeconomic news.

#### **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, Independent work

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

- \* Ex cathedra lectures in which theory is explained
- \* Seminar: elaboration of applications and real case studies, solution of small exercises and multiple-choice questions, guided and interactive training of the theory in the two main chapters 10 and 13.
- \* Independent work: Students can monitor their progress by solving multiple choice questions provided for each chapter via Ufora/Curios.

#### **Study material**

Type: Handbook

Name: Macroeconomics

Indicative price: € 55

Optional: no

Language : Dutch

Author : Freddy Heylen

ISBN : 978-9-46478-816-7

Number of Pages : 600

Oldest Usable Edition : 5th (unless students themselves incorporate updates into an older edition)

Online Available : No

Available in the Library : Yes  
Available through Student Association : Yes  
Usability and Lifetime within the Course Unit : intensive  
Usability and Lifetime within the Study Programme : one-time  
Usability and Lifetime after the Study Programme : occasionally  
Additional information: \* 'Mandatory' or 'optional'? Nothing is "mandatory," but the handbook contains the quasi complete content of the course. \* Number of pages: +/- 550 to 600 pages are part of the course material. \* Lifetime within the programme: once for business economics/engineering, several times for economics. \* Lifetime after the programme: 'occasionally' on the assumption that many students later work in an environment where macroeconomic developments are the order of the day..

Type: Slides

Name: Macroeconomics

Indicative price: € 10

Optional: yes

Language : Dutch

Available on Ufora : Yes

Online Available : Yes

Available in the Library : No

Available through Student Association : No

Additional information: Slides are made available via Ufora the day before class. The listed price only applies to those who print the slides. Moreover, a lot depends on how many slides are printed on a page.

## References

Blanchard, O.J., 2021, Macroeconomics, Pearson, 8th edition.

Mankiw, N.G., 2019, Macroeconomics, Worth Publishers, 10th edition

## Course content-related study coaching

Students can get help, explanation and coaching from an assistant. If necessary the responsible teacher can also be contacted for additional explanation.

Interactive support via Ufora (forum, online discussion). A large set of multiple choice questions (in Dutch) can be solved by students independently. This set of multiple choice questions is provided on Ufora (Curios).

## Assessment moments

end-of-term and continuous assessment

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

Oral assessment, Written assessment

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

Oral assessment, Written assessment

## Examination methods in case of permanent assessment

Written assessment with multiple-choice questions

## Possibilities of retake in case of permanent assessment

examination during the second examination period is not possible

## Extra information on the examination methods

*Continuous assessment*, around mid november: multiple choice test on important parts of chapters 1, 4, 6, 7 and 8 (3/20 points). The points obtained here are valid for the first examination period, not for the second.

*End-of-term evaluation, first examination period:*

\* Written exam (17/20 points) or combination of written exam (11/20 points) and oral exam (6/20 points). Students must reveal via Ufora their preference for one of the two options before the exam. The oral exam can be prepared in writing.

\* Part of the written exam concerns applications of the theory. Another part (2 to 3 points) consists of multiple choice questions.

*End-of-term evaluation, second examination period:*

\* Written exam (20/20 points) or combination of written exam (14/20 points) and oral exam (6/20 points). Students must reveal via Ufora their preference for one of the two options before the exam. The oral exam can be prepared in writing. Now +/- 5 points of the written exam will concern multiple choice questions.

## Calculation of the examination mark

End-of-term evaluation: first examination period 85% / second examination period 100%.

Continuous assessment : 15% (only for the first examination period)