

## MACROECONOMICS, INTERMEDIATE

### 1. MODULE SUMMARY

#### Aims and Summary

This is a preparatory course to Macroeconomics, Intermediate. For this reason the course will review the basic macroeconomic concepts and models. The course will show students how to build **macroeconomic** models on the basis of **micro foundations**. This approach helps to make the text consistent with the way macroeconomic research is conducted today.

#### Module Size and Credits

<b>ECTS points</b>	5
<b>Total student study hours</b>	125
<b>Number of weeks</b>	12
<b>School responsible</b>	Lazarski University, Faculty of Economics and Management
<b>Academic Year</b>	2021/2022

#### Entry Requirements (pre-requisites and co-requisites)

Introductory Microeconomics, Introductory Macroeconomics, Basics in Mathematics.

#### Composition of module mark (including weighting of components)

Final exam, 60%

Midterm exam 40%

#### Pass requirements

To pass the course a student must score at least 40% of the overall weighted average and not less than 35% for each assessment component (i.e. coursework and final exam). Re-assessment: coursework component and/or examination as appropriate.

#### Special Features

None

#### Course stages for which this module is mandatory

MSc in International Business Economics

### 2. TEACHING, LEARNING AND ASSESSMENT

#### Intended Module Learning Outcomes

On completion of this module, a student should be able to:

- Evaluate determinants of long run growth.
- Understand the difference between short- and long-run macroeconomic equilibrium.
- Understand the difference between models with sticky prices and flexible prices/wages.
- Critically analyse the impact of monetary and fiscal policy instruments in the long run.

## Indicative Content

- I. Macroeconomic accounts
- II. Classical theory: the economy in the long run
  1. Determinants of national income (production function), division of national income
  2. Money and inflation, quantity theory of money, causes and consequences of inflation, classical dichotomy
  3. The open economy, trade balance, saving and investment in a small open economy, exchange rates: nominal and real, the effects of trade policies
  4. Demand and supply in the labour market – unemployment
- III. Growth theory: the long run determinants of growth
  1. The Solow model: the steady-state level of capital, the Golden rule, capital accumulation and technological progress, how to promote growth, the Solow residual
  2. Endogenous growth.

### Method of Assessment (normally assessed as follows)

Final comprehensive examination, 60%, i.e. will assess all learning outcomes

Midterm exam 40%, will assess learning outcomes 1 – 5

## 3. MODULE RESOURCES

### TEXTBOOKS:

N. Gregory Mankiw, (2015) Macroeconomics, Worth Publishers.

Stephen D. Williamson (2014), Macroeconomics, Pearson Addison Wesley.

### READING:

C. Chiang, K. Wainwright (2005) , Fundamental Methods of Mathematical Economics.

The Economist, Financial Times, Wall Street Journal, various issues

## 4. MODULE ORGANISATION

### Module leader:

**Name** Joanna Działo, Professor

**Email:** joanna.dzialo@lazarski.pl

**Length and month of examination:** 120 minutes in January

## MATHEMATICS FOR ECONOMICS

## 1. MODULE SUMMARY

### Aims and Summary

The goal of this course is to make students familiar with basic mathematical tools used in economy and business. Topics include sets, functions of one and several variables, matrix algebra, introduction to the derivative and integral. Some basic connections with economics will be presented, e.g. the production function, the logistic function, the Leontief input-output model, consumer surplus, etc.

### Module Size and credits

<b>ECTS points</b>	5
<b>Total student study hours</b>	125
<b>Number of weeks</b>	12
<b>School responsible</b>	Lazarski University, Faculty of Economics and Management
<b>Academic Year</b>	2020-2021

### Entry Requirements (pre-requisites and co-requisites)

N/A

### Excluded Combinations

None

### Composition of module mark (including the weighting of components)

Final exam, 60%

Coursework, 40%, composed of two in-class exams worth 20% each of the final mark

### Pass requirements

To pass the course a student must score at least 40% of the overall weighted average and not less than 35% for each assessment component (i.e., coursework and final exam).

Re-assessment: coursework component and/or examination as appropriate. **Special**

### Features

None

### Course stages for which this module is mandatory

MSc in Business Economics, Year 1

### Course stages for which this module is a core option

None

## 2. TEACHING, LEARNING, AND ASSESSMENT

## Intended Module Learning Outcomes

By the end of the course, students should be able to:

1. Apply the notions of a set and basic operations on sets;
2. Perform matrix operations, reduce matrices to row echelon form, solve systems of linear equations, use the Leontief input-output model to solve real-world problems;
3. Utilize functions, continuity and limit, sketch graphs of elementary functions, such as polynomial, trigonometric and exponential functions;
4. Calculate the derivatives of a function, geometric and physical interpretations of the derivative, calculate and apply derivatives to find extreme points;
5. Utilize economic applications of the derivative such as marginal analysis and elasticity of demand;
6. Apply the concept of the definite and indefinite integral, have mastered basic techniques of integration such as substitution and integration by parts;
7. Utilize the notions of a partial derivative of a function of several variables, gradient, level curves, extreme points and constrained extreme points. **Indicative**

### Content

1. Basic mathematics, Logics, Sets
2. Matrix algebra and systems of linear equations
3. Functions, limits, and continuity
4. The derivative of a function of one and several variables, and its connection with extreme points
5. Introduction to integration

## Teaching and Learning

This module will be taught by means of lectures and workshops and self-directed study. Formative Assessment: Comments will be given on assessments, and tutorial guidance will be provided for coursework and exam. Student activity and time spent on each activity comprises:

<b>Guided</b>	0 hours	(0%)
<b>Lecture</b>	0 hours	(0%)
<b>Self-guided</b>	95 hours	(76%)
<b>Seminar</b>	30 hours	(30%)
<b>Workshop</b>	0 hours	(24%)

**Total** 125 hours

**Method of Assessment (normally assessed as follows)**

The intended learning outcomes will be assessed as follows:

Final exam, 60%, will assess learning outcomes 1-7

Coursework, 40%, two in-class exams – 20% each, will assess learning outcomes 1-7

**Date of last amendment**

15.12.2015

**3. MODULE RESOURCES**

**Essential Reading**

A. Chiang, K. Wainwright, Fundamental Methods of Mathematical Economics

**Required Equipment**

None

**4. MODULE ORGANISATION**

**Module leader**

**Name** Krzysztof Beck, Ph.D.

**E-mail** beckkrzysztof@gmail.com

**Length and month of examination**

120 minutes in January

**Expected teaching timetable slots**

No timetable information available