

# SYLLABUS

## REGARDING THE QUALIFICATION CYCLE FROM 2026 TO 2029 ACADEMIC YEAR 2027/2028

### 1. BASIC COURSE/MODULE INFORMATION

Course/Module title	Basics of Economics
Course/Module code *	
Faculty (name of the unit offering the field of study)	Faculty of Exact and Technical Sciences
Name of the unit running the course	Institute of Mathematics
Field of study	Mathematics
Qualification level	First-cycle studies
Profile	General academic
Study mode	Full-time
Year and semester of studies	Year 2, semester 3
Course type	Specialisation course
Language of instruction	English
Coordinator	Anna Barwińska-Małajowicz, PhD, DSc
Course instructor	

\* - as agreed at the faculty

### 1.1. Learning format – number of hours and ECTS credits

Semester (no.)	Lectures	Classes	Laboratories	Seminars	Practical classes	Internships	others	ECTS credits
3	30	30						5

### 1.2. Course delivery methods

- conducted in a traditional way  
 involving distance education methods and techniques

### 1.3. Course/Module assessment (exam, pass with a grade, pass without a grade)

Classes – pass with a grade

Lectures – pass without a grade

## 2. PREREQUISITES

General knowledge of economic issues.
---------------------------------------

## 3. OBJECTIVES, LEARNING OUTCOMES, COURSE CONTENT, AND INSTRUCTIONAL METHODS

### 3.1. Course/Module objectives

O1	To convey knowledge in the field of economics.
O2	To familiarize students with the mechanisms of a market economy.
O3	To familiarize students with economic processes in contemporary economies.

### 3.2. COURSE/MODULE LEARNING OUTCOMES (TO BE COMPLETED BY THE COORDINATOR)

Learning Outcome	The description of the learning outcome defined for the course/module	Relation to the degree programme outcomes
LO_01	The student knows and understands basic economic categories, market behaviour of consumers and producers, and determination of decision optima.	K_W09
LO_02	The student knows and understands the functioning of financial institutions, factors of economic growth, and the impact of business activities on economic development.	K_W10
LO_03	The student can interpret microeconomic and macroeconomic processes.	K_U22
LO_04	The student can apply economic concepts to make economic decisions.	K_U22
LO_05	The student is ready to act in an entrepreneurial manner, being aware of the importance of economic knowledge in running a business, and to determine economic priorities in actions undertaken by themselves or others.	K_K04,K_K05,K_K07

### 3.3. Course content (to be completed by the coordinator)

#### A. Lectures

Content outline
Introduction to economics: subject and methods of economic research, positive and normative economics, micro- and macroeconomics, economic laws, needs, goods, services, production.

The concept of economic management. Factors of production, scarcity of resources, opportunity cost, rationality of economic management and economic calculation.
The mechanism of a market economy: the concept of the market, market division, economic sectors, types of economies.
Analysis of the market mechanism: demand, supply, prices, market equilibrium, surplus and shortage. Reactions of demand and supply to changes in prices and income.
Enterprise and economic calculation.
The role of the state in the economy
Introduction to macroeconomics.
Labour market.
Human capital.
Inflation.
Inflation and unemployment.

#### B. Classes, laboratories, seminars, practical classes

Content outline
Measuring changes in economic quantities.
Demand, supply and market equilibrium.
Consumer and producer optimum.
Potential output and aggregate demand.
Inflation and interest rate.
Basic measures of economic development.

### 3.4. Methods of Instruction

Classes: analysis of economic data with discussion / group work / problem solving / discussion.

Lectures: lecture with multimedia presentation.

## 4. Assessment techniques and criteria

### 4.1 Methods of evaluating learning outcomes

Learning outcome	Methods of assessment of learning outcomes (e.g. test, oral exam, written exam, project, report, observation during classes)	Learning format (lectures, classes,...)
LO-01	test	lectures
LO-02	test	lectures
LO-03	test / quiz	classes
LO-04	test / quiz	classes
LO-05	observation during classes	classes

#### 4.2 Course assessment criteria

Class credit is awarded on the basis of quizzes and activity during classes. The condition for passing the classes is scoring at least 50% of the points on each test. The final grade is then determined according to the following scale:

Below 50% of points – Fail (no credit)

[50 – 60%) of points – Satisfactory

[60 – 70%) of points – Satisfactory plus

[70 – 80%) of points – Good

[80 – 90%) of points – Good plus

[90 – 100%] of points – Very good

Active participation during classes may raise the final grade by a maximum of half a grade.

Lecture credit is awarded on the basis of a test during the lecture. The condition for passing the test is scoring at least 50% of the points. The final grade is then determined according to the following scale:

Below 50% of points – Fail

[50 – 60%) of points – Satisfactory

[60 – 70%) of points – Satisfactory plus

[70 – 80%) of points – Good

[80 – 90%) of points – Good plus

[90 – 100%] of points – Very good

#### 5. Total student workload needed to achieve the intended learning outcomes – number of hours and ECTS credits

Activity	Number of hours
Course hours	60
Other contact hours involving the teacher (consultation hours, examinations)	5
Non-contact hours - student's own work (preparation for classes or examinations, projects, etc.)	60
Total number of hours	125
Total number of ECTS credits	5

\* One ECTS point corresponds to 25-30 hours of total student workload

## 6. Internships related to the course/module

Number of hours	<i>Not applicable</i>
Internship regulations and procedures	<i>Not applicable</i>

## 7. Instructional materials

Compulsory literature:  1. N. Gregory Mankiw, Mark P. Taylor, Economics, Cengage Learning, 2023.  2. Paul Samuelson, William Nordhaus, Economics, McGraw-Hill Education, 2009.  3. Karl E. Case, Ray C. Fair, Sharon E. Oster, Principles of Economics, Pearson, 2019.
Complementary literature:  1. Daron Acemoglu, David Laibson, John List, Economics, Pearson, 2021.  2. Campbell McConnell, Stanley Brue, Sean Flynn, Economics: Principles, Problems, and Policies, McGraw-Hill Education, 2020.

Approved by the Head of the Department or an authorised person