## МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ ХАРКІВСЬКИЙ НАЦІОНАЛЬНИЙ ЕКОНОМІЧНИЙ УНІВЕРСИТЕТ ІМЕНІ СЕМЕНА КУЗНЕЦЯ

**ЗАТВЕРДЖЕНО** 

на засіданні кафедри державного управління, публічного адміністрування та економічної політики

Протокол № 2 від 30.08.2024 р.

ПОГОДЖЕНО

Проректор з навчально-методичної роботи

Каріна НЕМАШКАЛО

#### **МАКРОЕКОНОМІКА**

робоча програма навчальної дисципліни (РПНД)

Галузь знань

07 "Управління та адміністрування"

Спеціальність

075 "Маркетинг"

Освітній рівень

перший (бакалаврський)

Освітня програма

"Маркетинг"

Статус дисципліни

Мова викладання, навчання та оцінювання

обов'язкова англійська

Розробник:

к.е.н., доцент

Тетяна ЧЕРКАШИНА

Завідувач кафедри

державного

управління,

публічного адміністрування

та економічної політики

Наталія ГАВКАЛОВА

Гарант програми

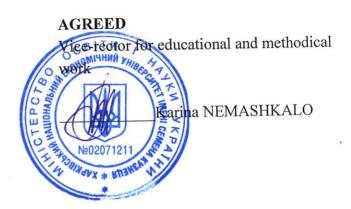
Олена НЕБИЛИЦЯ

Харків 2024

# MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE SIMON KUZNETS KHARKIV NATIONAL UNIVERSITY OF ECONOMICS

#### **APPROVED**

at the meeting of the
Department of State Management,
Public Administration and Economic Policy
Protocol № 2 dated 30.08.2024



## **MACROECONOMICS**

Program of the course

Field of knowledge Speciality

Study cycle

Study programme

07 "Management and administration"

075 "Marketing"

first (bachelor)
"Marketing"

Course status Language Mandatory English

Developers:

PhD (Economics), Associate Professor Head of the Department of State Management, Public Administration and Economic Policy

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Kharkiv 2024

#### INTRODUCTION

The course "Macroeconomics" is a part of the complex of economic disciplines that consists of macroeconomics, microeconomics, economic history, world economic thought, modern economic theories, global economy, regional economy, social economy, environmental economy, etc. It is the basis for other economic disciplines because it helps the future economists to form the market mode of thinking that, in turn, is the component of effective managing in modern macroeconomic processes.

The questions regarded in the course "Macroeconomics" are very important for future economists, managers, business analysts because they allow them to understand the general mechanism of functioning macroeconomic system based on synthesis of microeconomic and macroeconomic theories, concepts, models which are, in turn, proved by world practice and tested by national application.

The purpose of studying the course "Macroeconomics" is to form the system of theoretical knowledge in key terms and concepts about macroeconomics processes, provide fundamental students' preparation needed for the further learning of other economic courses as well as show the role of macroeconomic laws and tendencies to the economic development of country.

The objectives of the course are:

- determination of the essence of main macroeconomics problems and macroeconomics indicators and their relationship;
- analysis of main macroeconomic indicators, their correlation and measurement as well as the problems relating to them;
- investigation of theoretical and methodological problems of modern labor market;
- characteristics of households' income and consumption during modern economic cycle;
  - determination of the functional role of investments in the modern economy;
- determination of equilibrium GDP in the conditions of different levels of employment;
- optimization of economic decisions of business entities taking into account the limitations imposed on their possibilities;
- analysis of the impact of restrictions that impose on the capabilities of business entities and explain the quality of their decision-making.

The object of study of the course is the national economy.

The subject of the course is the mechanism of functioning of the entire national economy without taking into account the specifics of individual industries, as well as factors which determine changes in this mechanism in the short and long term, and the way the state influences the flow of economic processes at the national economic level.

The learning outcomes and competencies formed by the course are defined in table 1.

Table 1

Learning outcomes and competencies formed by the course

Learning outcomes	Competences
LO2	GC6, SC11
LO5	SC14
LO9	SC12
LO11	GC3
LO13	GC14
LO15	GC1

Where LO2. Analyze and forecast market phenomena and processes based on the application of fundamental principles, theoretical knowledge and applied skills in the implementation of marketing activities.

- LO5. Identify key characteristics of marketing systems as well as the peculiarities of their subjects e behavior.
- LO9. Assess the risks of marketing activities, establish the level of uncertainty of the marketing environment when making managerial decisions.
- LO11. Demonstrate the ability to apply an interdisciplinary approach and perform the marketing functions of a market entity.
- LO13. Be responsible for the results of their activities, show skills of entrepreneurial and managerial initiative
- LO15. Act socially responsibly and socially conscious on the basis of ethical principles of marketing, respect cultural diversity and values of civil society in compliance with the rights and freedoms of the individual.
- GC1. Ability to realize their rights and obligations as a member of society, to realize the values of a civil (free democratic) society and the need for its sustainable development, the rule of law, human and civil rights and freedoms in Ukraine.
  - GC3. Ability to abstract thinking, analysis and synthesis.
- GC6. Knowledge and reasoning of the subject region and reason of professional activity.
  - GC14. Ability to act socially responsibly and consciously.
- SC11. The ability to analyze the behavior of market subjects and initiation of special functions of markets.
- SC12. Ability to justify, present and implement results of research in the field of marketing.
- SC14. Ability to offer improvements in terms of features of marketing activities.

#### **COURSE CONTENT**

# Content module 1: The analysis of main markets of the economy Topic 1. Macroeconomics as a science

# 1.1. The role of macroeconomics in the system of economic sciences.

Introduction to macroeconomics. The role of macroeconomics in the economic sciences. Macroeconomics as a theoretical basis for economic policy. The relationship between macroeconomic and microeconomics.

# 1.2. The subject matter, object and subjects of macroeconomics.

The subject matter of macroeconomics. Economic system as an object of macroeconomics. The essence of economic policy and its types. The functions of macroeconomics. The stages of the development of macroeconomics. Main macroeconomic schools: mercantilism, Phisiocrats, classical economics, Marxists, Keynesian economics, Monetarist economics, rational expectations theory, supply-side theory, institutionalizm.

# 1.3. The main problems, key terms and indicators of macroeconomics, their relationship.

The role of the state in the solving of main macroeconomic problems. Macroeconomic policy and its types. Fiscal, monetary, foreign trade and social policies. The effectiveness of policy, its relationship with political factors.

#### 1.4. The main methods of macroeconomics.

The methodology of macroeconomics. The methods of the research of national economy. Macroeconomic modeling. Graphical models, their role and main rules of building. Endogenous Ta exogenous variables of macroeconomic models. Nominal and real variables. The circular flow model. Two sectors model. Revenue (incomes) and spending. Saving and investment in the circular flow model. The government and foreigners in the circular flow model.

# Topic 2. Macroeconomic indicators in the System of National Accounts 2.1. The system of National Accounts.

National accounts as a factor basis of macroeconomics. Methodological principles of building a system of National Accounts (SNA). The main terms of SNA: value added, institution items, sectors, transactions, accounts. The difference between SNA and balance of national economy.

# 2.2. Gross domestic product (GDP) and gross national product (GNP). Approaches of GDP accounting. The underground economy.

The notion of GDP. GDP and GNP, the correlation between them. Measures of GDP and problems related with it. Approaches of GDP accounting: value added approach, distribution approach (or income approach) and expenditure approach. The underground economy. The correlation between potencial and actual GDP. The role of price determinant in the GDP accounting. Nominal and real GDP. Price indexes. Consumer price index (CPI). Producer price index (PPI). GDP deflator. The difference between CPI and GDP deflator. Inflating and deflating.

#### 2.3. Macroeconomic indicators on the net basis.

Net domestic product, national income and the relationship between them. Welfare state.

#### 2.3. Macroeconomic indicators on the net basis.

Net domestic product, national income and the relationship between them. Welfare state.

## **Topic 3. Labor market**

## 3.1. Employment and unemployment.

Full employment, incomplete employment, excessive employment and unemployment rate. The main types of unemployment: frictional, structural, cyclical. The causes of unemployment. Measures of of labor force usage. Full employment, natural unemployment and potential GDP. GDP gap. Okun's law and costs to the economy caused by cyclical unemployment. Social costs of unemployment.

## 3.2. Labor market and mechanism of its functioning.

Demand, supply and equilibrium on the labor market. The classical theory of labor market. The Keynesian theory of labor market. The theory of flexible labor market.

### 3.3. State regulation of employment. State employment policy.

Stimulation policy to decline unemployment and its inflation consequences. Phillips curve about the relationship between inflation and unemployment in the short and long run. Conclusions of Phillips curve for state employment policy. Government programs to stimulate employment.

## **Topic 4. The goods market**

## 4.1. Aggregate demand.

Aggregate demand, its essence and the difference from market demand. Aggregate demand model. Price determinants of aggregate demand. The causes of downward sloping of aggregate demand curve. Nonprice determinants of aggregate demand and their impact on AD curve.

### 4.2. Aggregate supply.

Aggregate supply and its essence. Aggregate supply model. Classical model of aggregate supply and production function. Long-run aggregate supply curve and its shifting. Short run aggregate supply curve. The theories of aggregate supply. Changes in prices and real GDP on the different zones of short run aggregate supply curve. Nonprice determinants of aggregate supply.

## 4.3. The equilibrium of aggregate demand and aggregate supply.

AD-AS model as the basic model of macroeconomic equilibrium. Long-run and long-run macroeconomic equilibrium. The breaking of equilibrium caused by aggregate demand and mechanisms of its recovery. Rachet effect. "Overheating economy". The breaking of equilibrium caused by aggregate supply and mechanisms of its recovery.

# 4.4. The equilibrium of aggregate demand and aggregate supply.

AD-AS model as the basic model of macroeconomic equilibrium. Long-run and long-run macroeconomic equilibrium. The breaking of equilibrium caused by aggregate demand and mechanisms of its recovery. Rachet effect. "Overheating economy". The breaking of equilibrium caused by aggregate supply and mechanisms of its recovery.

### **Topic 5. The money market**

### 5.1. Mechanizm of money market.

Money supply and money aggregates. Money supply schedule. Money demand for money transactions demand for money, asset demand for money and their graphical interpretation. Classical and Keynesian approaches to the money demand function. Interest rate: the essence, main types ans factors impacting on its level. The motivation role of real interest rate to the recovery of equilibrium on the money market. The model of money market. The breaking and recovery on the money market.

## 5.2. Banking system and money supply.

The main functions of commercial banks. Banking reserves. Money creation process based on deposit multiplier. Money supply taking into account deposits and currency. Money base, money multiplier and money supply.

## **Topic 6. Inflation mechanism**

## 6.1. The essence and types of inflation.

Inflation rate and the approaches to its calculation. Types of inflation relatively to their paces. Expected and unexpected inflation according to the rational expectations theory and adaptive expectations theory. Types of inflation relatively to the sources of origin: demand-pull inflation, cost-push inflation and their graphical interpretation. The causes of inflation. Keynesian and Monetarists view to the causes of inflation.

# 6.2. The causes and consequences of inflation. Macroeconomic policy to fight inflation.

Phillips curve as an analitical instrument of stabilization policy in the short and long run. Stagflation. Macroeconomic policy to fight inflation.

# Content module 2: Analysis and structure of the components of economic policy

## Topic 7. Households' consumption

## 7.1. Consumption.

Households' incomes as a source of consumption. Households' incomes and households' spending in the circular-flow diagram. The components and distribution of personal income and disposable income in the closed private economy. Households' saving and households' consumption. The relationship between income and consumption. Income inequality and its measurement. Lorenz curve. Consumption as a function of disposable income. Disposable income and consumption. Consumption function. Consumption schedule. Autonomous and induced consumption. Autonomous consumption and factors impacting on it. Factors impacting on consumption do not related with permanent income.

## 7.2. Keynesian model of consumer behaviour.

Average and marginal propensity to consume. Dynamics of average propensity to consume and marginal propensity to consume. Time consumer's choice. Life cycle hypothesis. The permanent income hypothesis. The features of consumption in Ukraine under market transformations.

## **Topic 8. Private saving**

### 8.1. Saving and investment.

Saving as a disposable income function. Saving schedule. Average and marginal propensity to save. Factors affecting on saving. Consumer's choice of actives. Types of saving. Level of saving. The equilibrium between saving and investment. Classical and Keynesian mechanisms to the equilibrium between saving and investment.

## 8.2. Capital investment.

The role of investment. The economic essence of investment. Keynesian and neoclassical investment functions. Interest rate as a factor affecting on investment demand. Nominal and real interest rate. Corporate income tax and expected rate of net profit. Investment demand curve. Factors affecting on autonomous investment and their impact on investment demand curve. Investment instability. Investment in the Ukrainian economy. Simple accelerator model.

## 8.3. The defining of the profitability of investment projects.

The approaches to the defining of profitability of investment projects: accounting and net present value approaches.

### Theme 9. Aggregate expenditure and GDP

## 9.1. "Aggregate expenditure – output" approach.

Aggregate expenditure and their components. Equilibrium GDP. The determination of equilibrium GDP using "expenditure — output" approach. Actual and planned expenditure. "Keynesian cross" model.

## 9.2. "Leakages – injections" model.

The determination of equilibrium GDP using "leakages – injections" approach. The system of leakages and injections in the circular flow. The role of stocks in achieving of macroeconomic equilibrium in the short run. "Saving – investment" as a simple model of macroeconomic equilibrium. Planned and unplanned investment. The lending market and its role in providing the equilibrium between saving and investment.

## 9.3. Multiplier of government spending.

Autonomous and induced investment. Multiplier mechanism of autonomous investment. Multiplier effect and its graphical interpretation.

## 9.4. Equilibrium GDP under different types of employment.

Aggregate expenditure and potential GDP. Recession gap as a consequence of deficient autonomous investment. Graphical and mathematical interpretation of recession gap. Inflation gap as a consequence of excessive autonomous investment. Graphical and mathematical interpretation of inflation gap.

## Theme 10. Economic dynamics

## 10.1. The sources of economic growth.

The essence and main types of economic growth. Factors impacting on economic growth. Economic growth and economic development. Keynesian and neoclassical growth models. Production function. Transition of production factors into final goods. Contribution of production factors to the economic growth.

"Solow rest". Economic growth in the AD-AS model and production possibilities curve.

### 10.2. The main economic growth models.

Keynesian growth models: Harrod growth model and Domar growth model. Neoclassical growth models. Solow growth model. The fundamentals of Solow growth model. Impact of capital accumulation on economic growth. "Golden rule" as a criteria of consumption maximization. Impact of population growth on economic growth. Impact of technological advance on economic growth. Conclusions of Solow growth model.

## 10.3. Problems of economic growth of Ukraine.

Problems of economic growth in the different group of countries and Ukraine.

### 10.4. Business cycles.

The essence, types and structure of business cycles. The phases of business cycles and their characteristics. The theories explained the causes of business cycles. Multiplier and accelerator model.

# Theme 11. The role of the government in the system of macroeconomic regulation

### 11.1. The role of the government in the economy and its main functions.

Interaction between government and other subjects of market economy. Taxes, expenditure and state borrowing. The main functions of the government as a subject of macroeconomic regulation. The role of government in the major theories of macroeconomic regulation. The main thesis of neoclassical theory. Keynesian theory as a theoretical basis for government regulation. The role of government in the circular flow under mixed economy. The relationship between government and other subjects in the circular-flow diagram. The impact of government on the circular flow. Monetarist economics as a conception of mature market economy. Supply-side theory. Rational expectations theory. The role of information environment.

## 11.2. The essence of fiscal policy.

Discretionary fiscal policy. Marginal tax rate and complex taxes multiplier. Multiplier effect of government purchases and net taxes on real GDP. Balanced budget multiplier. Automatic fiscal policy. Net taxes as a built-in stabilizers. Stabilization impact of automatic fiscal policy on the national economy under increase and decrease in the output. Brake effect of automatic fiscal policy and the need to add it by the instruments of discretionary fiscal policy. Fiscal policy based on aggregate supply. Consequences of fiscal policy in the "aggregate demand - aggregate supply" model. The impact of decrease in the taxes on GDP on the supply-side view. Consequences of fiscal stimulus for state budget. Laffer curve about the relationship between taxes rates and size of taxes. Fiscal policy and state budget. The impact of fiscal policy and fluctuations on state budget.

## 11.3. The essence of monetary policy.

Types, goals and instruments of monetary policy. Monetary policy in the AD – AS model. Consequences of monetary policy in the short and long run.

### Theme 12. Foreign trade policy

## 12.1. International balance of payment.

Current account and its components. Capital account and its essence. The essence and role of autonomous item "Failures and losses". Reserve actives as a regulative item of international balance of payment. International balance of payment model.

### 12.2. Exchange rate.

Currency and its types. Forms of exchange rates. Types of exchange rates relatively to the type of formation. Two side and multiside exchange rates. Nominal and real exchange rate. Purchasing-power parity. Demand and supply impacting on exchange rate. The relationship between exchange rate and international balance of payment. The development of international monetary system.

## 12.3. State regulation of foreign trade policy.

The impact of foreign trade on GDP. The equilibrium in an open economy. Net export as a component of expenditures. Marginal propensity to import. The impact of net export on GDP. Multiplier of government spending in an open economy.

The list of practical (seminar) studies in the course is given in table 2.

Table 2

The list of practical (seminar) studies

Name of the	
topic and/or	Content
task	
Topic 1 Task 1	Determination of the role of the government and foreigners in the
	circular flow model.
Topic 2 Task 2	Calculation of key macroeconomic indicators (gross domestic
	product, gross national product, net national product, national
	income, disposable income)
Topic 3 Task 3	Calculation of GDP gap in consequence of cyclical unemployment
	(according to Okun's Law)
Topic 4 Task 4	Building an aggregate demand curve and aggregate supply curve.
	The determination of equilibrium GDP using AD-AS approach.
Topic 5 Task 5	Calculation the deposit multiplier, money base, money multiplier
	and money supply
Topic 6 Task 6	Calculation of inflation rate and determination of type of inflation
Topic 7 Task 7	Building a consumption schedule. Calculation the average and
	marginal propensity to consume.
Topic 8 Task 8	Determination of the multiplier effect in a closed private economy.
	Calculation of investment multiplier and investment accelerator

Topic 9 Task 9	The determination of equilibrium GDP using "leakages – injections" approach. Calculation the recession and inflation gap in the closed private economy.
Topic 10 Task 10	Determination of the phases of business cycles
Topic 11 Task 11	Calculation of multiplier of government purchases of goods and services, multiplier of balanced budget and tax multiplier in closed economy
Topic 12 Task 12	Calculation of multiplier of government purchases of goods and services, multiplier of balanced budget and tax multiplier in an open economy

The list of self-studies in the course is given in table 3.

# Table 3 List of self-studies

List of sen studies	
Name of the	
topic and/or	Content
task	
Topic 1 – 12	Learning of lecture material, search, selection and review of educational, methodological and scientific literature on a given
	topic
Topic 1 – 12	Preparation to practical studies
Topic 2-3, 8-10,	Doing of creative home tasks
12	
Topic 1 – 12	Preparation to demonstration

The number of hours of lectures, practical (seminar) studies and hours of self-study is given in the technological card of the course.

## **TEACHING METHODS**

In the process of teaching the course, in order to acquire certain learning outcomes, to activate the educational process, it is envisaged to use such teaching methods as:

Verbal (lecture-discussion (Topic 1–12), small group work (Topic 2, Topic 4, Topic 3, 7, 10, 12).

Visual (demonstration (Topic 1–12)).

Practical (practical work (Topic 1–12), group works (Topic 1, Topic 3-7, Topic 9–12), case studies (Topic 12).

#### FORMS AND METHODS OF ASSESSMENT

The University uses a 100-point cumulative system for assessing the learning outcomes of students.

**Current control** is carried out during lectures, practical and seminar classes and is aimed at checking the level of readiness of the student to perform a specific job and is evaluated by the amount of points scored:

- for courses with a form of semester control as grading: maximum amount is 100 points; minimum amount required is 60 points.

The final control includes current control and assessment of the student.

Current control: practical tests (estimated at 5 points (two express tests during the semester – the total maximum number of points – 10)); competence-oriented tasks on topics (maximum score – 5 points (six competence-oriented tasks during the semester, total maximum number of points – 30)); creative home tasks – 5 points (two creative home tasks during the semester, total maximum number of points – 10), control works (maximum score – 10 points) (two control works during the semester, total maximum number of points – 20), colloquims (maximum score – 15 points) (two control works during the semester, total maximum number of points – 30).

More detailed information on the assessment system is provided in technological card of the course.

#### RECOMMENDED LITERATURE

#### Main

- 1. Макроекономіка. Мультимедійний навчальний посібник / М. С. Бріль, О. М. Кліменко, М. А. Мащенко, І. В. Пивавар, Н. О. Степаненко, Н. І. Шифріна. Харків : ХНЕУ ім. С. Кузнеця, 2019. 705 с.
- 2. Макро- та мікроекономіка [Електронний ресурс]: навчальний посібник для студентів усіх спеціальностей першого (бакалаврського) рівня / М. С. Бріль, О. М. Кліменко, А. В. Литвиненко [та ін.]; за заг. ред. М. А. Мащенко; Харківський національний економічний університет ім. С. Кузнеця. Харків: ХНЕУ ім. С. Кузнеця, 2021. 213 с. Режим доступу: http://repository.hneu.edu.ua/handle/123456789/27811
- 3. Abel A. B., Bernanke B. S., Croushore D. Macroeconomics [Tenth Edition]: Global Edition. Boston: Pearson Education Limited, 2021. 680 P.
- 4. Macroeconomics [Electronic resource] : guidelines to students' self-study for Bachelor's (first) degree students of all specialities / compiled by T. Cherkashyna. Kharkiv : S. Kuznets KhNUE, 2021. 54 р. Режим доступу: http://repository.hneu.edu.ua/handle/123456789/24903

- 5. Macroeconomics: textbook / M. Bril, O. Klimenko, I. Lisna et al. Kharkiv: S. Kuznets KhNUE, 2020. 236 р. (English). Режим доступу: http://repository.hneu.edu.ua/handle/123456789/24100
- 6. The Fundamentals of Economics [Electronic resource]: textbook for self-study / L. Ukrainska, M. Mashchenko, I. Lisna [et al.]; under the edit. M. Mashchenko; Simon Kuznets Kharkiv national university of economics. E-text data (910 КБ). Kharkiv: S. Kuznets KhNUE, 2021. 163 р. Режим доступу: <a href="http://repository.hneu.edu.ua/handle/123456789/26379">http://repository.hneu.edu.ua/handle/123456789/26379</a>

#### Additional

- 7. Вергун В. А. Економікс : навчальний посібник / В. А. Вергун, О. І. Ступницький, О. А. Приятельчук, Я. М. Гуменюк. Київ : Вадекс, 2023. 422 с.
- 8. Панчишин С. М. Аналітична економіка: макроекономіка і мікроекономіка. Книга 1. Вступ до аналітичної економіки. Макроекономіка / С. М. Панчишин, П. Островерх. Львів : Апріорі, 2020. 648 с.
- 9. Carlin W., Soskice D. Macroeconomics: Institutions, Instability, and Inequality: Second Edition. Oxford: Oxford University Press, 2024. 802 P.
- 10. Shapiro D., MacDonald D., Greenlaw S. A. Principles of Macroeconomics for AP. 2022 [Online resource]. Access mode: https://openstax.org/details/books/principles-macroeconomics-3e/

#### **Information resources**

- 11. Cea C., Grisales N. 'The Economy 2.0 Macroeconomics. 2024 [Online resource]. Access mode: <a href="https://core-econ.org/the-economy/macroeconomics/0-3-contents.html">https://core-econ.org/the-economy/macroeconomics/0-3-contents.html</a>
- 12. Official site of the Federal Reserve Bank of St. Louis [Online resource]. Access mode: <a href="https://www.stlouisfed.org/">https://www.stlouisfed.org/</a>.
- 13. Official site of the European Union [Online resource]. Access mode: www.ec.europa.eu.
- 14. Official site of Ministry of Finance of Ukraine [Online resource]. Access mode: www.mof.gov.ua.
- 15. Cherkashyna T. S. "Macroeconomics" for Bachelor's (first) degree students of the speciality 075 "Marketing" // S. Kuznets KhNUE PTS website [Electronic resource]. Access mode: https://pns.hneu.edu.ua/course/view.php?id=3534.