

МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ

ХАРКІВСЬКИЙ НАЦІОНАЛЬНИЙ ЕКОНОМІЧНИЙ УНІВЕРСИТЕТ
ІМЕНІ СЕМЕНА КУЗНЕЦЯ



"ЗАТВЕРДЖУЮ"
Заступник керівника
(проректор з науково-педагогічної роботи)

М.В. Афанасьєв
М.В. Афанасьєв

Макроекономіка

робоча програма навчальної дисципліни

| | |
|------------------|------------------------|
| Галузь знань | усі |
| Спеціальність | усі |
| Освітній рівень | перший (бакалаврський) |
| Освітня програма | усі |

| | |
|---|------------|
| Вид дисципліни | базова |
| Мова викладання, навчання та оцінювання | англійська |

Завідувач кафедри
Економічної теорії
та економічної політики

Машенко

к. е. н., доц. Машенко М. А.

Харків
ХНЕУ ім. С. Кузнеця
2019

The syllabus has been approved by the department of economic theory and economic policy

Protocol № 1 on 02.09.2019

Compilers:

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Letter of renewal and re-approval of the syllabus of the academic discipline

| Academic year | Date of the session of the department – compiler of syllabus | Protocol number | The signature of the head of the department |
|---------------|--|-----------------|---|
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1. Introduction

Annotation of the discipline:

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

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

| | | |
|--------------------------------|--------------------------------|-----------|
| Year of study | 1 | |
| Semester | 2 | |
| Number of credits ECTS | 4 | |
| Contact hours | lectures | 30 |
| | classes | 30 |
| Students' self-study | | 60 |
| Form of final/semester control | semester module control | |

Structural and logic scheme of the learning of the academic discipline:

| Prerequisites | Following disciplines |
|---------------------------------------|------------------------------|
| Political economy | Microeconomics |
| Fundamentals of higher mathematics | Statistics |
| Fundamentals of economics (at school) | International Economics |
| | Global Economics |
| | Economics of Labor |
| | Econometrics |
| | Finance |

2. Professional competences which students get mastered the academic discipline "Macroeconomics":

| Competences | Learning outcomes |
|---|--|
| The ability to analyze the key macroeconomic indicators | To calculate key macroeconomic indicators, in particular gross domestic product, gross national product, national income, disposable income, and determine the relationship between them |
| The ability to analyze and solve actual problems related to the major markets of the economy | To compare the problems of unemployment in Ukraine and other post-socialist countries, analyze the structure of goods market in the mixed economy, solve actual problems of money market in the macroeconomic system under institutional transformations |
| The ability to analyze the role of principal macroeconomic agents in the private closed economy | To determine factors impacting on consumption, saving and investment and profitability of investment projects in the private closed economy |
| The ability to analyze the role of principal macroeconomic agents in an open economy | To determine trade deficits and trade surpluses, advantages and disadvantages of them, calculate marginal propensity to import and multiplier of government spending in an open economy |

3. The syllabus of the academic discipline

Content module 1. The analysis of main markets of the economy

Theme 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 macroeconomics 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, Physiocrats, classical economics, Marxists, Keynesian economics, Monetarist economics, rational expectations theory, supply-side theory, Institutional economics.

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 modelling. Graphical models, their role and main rules of building. Endogenous and 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.

Classes. Considering the subject matter, object, subjects, major issues, key terms and indicators of macroeconomics. Determination of the role of the government and foreigners in the circular flow model.

Theme 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 definition 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 potential 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.

Classes. Considering the approaches of GDP accounting: value added approach, income approach and expenditure approach. Calculation the key macroeconomic indicators (gross domestic product, gross national product, national income, disposable income) and determination the relationship between them.

Theme 3. Labor market

3.1. *Employment and unemployment.* Full employment, incomplete employment, excessive employment and unemployment rate. The main types of unemployment: frictional unemployment, structural unemployment, cyclical unemployment. 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 decrease 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.

Classes. The causes and types of unemployment. Measures of labor force usage. Calculation GDP gap. Building a Phillips curve in the short run. Analysis of government programs to fight unemployment in Ukraine.

Theme 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 aggregate demand 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. Short-run and long-run macroeconomic equilibrium. The breaking of equilibrium caused by aggregate demand and mechanisms of its recovery. Ratchet effect. "Overheating economy". The breaking of equilibrium caused by aggregate supply and mechanisms of its recovery.

Classes. Building an aggregate demand curve and aggregate supply curve. Distinguishing between short and long run aggregate supply curve. Examination of ratchet effect in the Ukrainian economy.

Theme 5. The money market

5.1. Mechanism 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 and 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.

Classes. Analysis the structure of money aggregates in Ukraine and other post-socialist countries. Considering the approaches to building of money demand function. Calculation the deposit multiplier, money base, money multiplier and money supply.

Theme 6. Inflation mechanism

6.1. The essence and types of inflation. Inflation rate and 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 analytical instrument of stabilization policy in the short and long run. Stagflation. Macroeconomic policy to fight inflation.

Classes. Considering the essence, causes and types of inflation. Calculation of inflation rate. Building a Phillips curve in the long run. Macroeconomic policy to fight inflation in advanced economies.

Content module 2. Analysis and structure of the components of economic policy

Theme 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.

Classes. Analysis of the factors impacting on consumption in the closed private economy. Building a consumption schedule. Income inequality and its measurement. The features of Lorenz curve in the developed and developing countries. Calculation the average and marginal propensity to consume.

Theme 8. Private saving

8.1. Saving and investment. Saving as a disposable income function. Saving schedule. Average and marginal propensity to save. Factors influencing 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 influencing 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.

Classes. Calculation the average and marginal propensity to save. Calculation the investment multiplier in the closed private economy. The causes of investment instability in Ukraine. The defining of the profitability of investment projects based on net present value approach.

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.

Classes. The determination of equilibrium GDP using "leakages – injections" approach. The determination of equilibrium GDP under different types of employment. Calculation the recession and inflation gap in the closed private economy. The defining of the role of lending market in providing the equilibrium between saving and investment in Ukraine.

Theme 10. Economic dynamics

10.1. *The sources of economic growth.* The essence and main types of economic growth. Factors influencing 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 in 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.

Classes. Considering the essence, sources and main types of economic growth. Calculation economic growth pace based on Keynesian and neoclassical growth models. Analysis of the factors influencing on economic growth in Ukraine. The features of modern

business cycles.

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 in the 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 tax rate 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.

Classes. The essence, components and types of fiscal policy. Multiplier effect of net taxes on real GDP. Calculation the marginal tax rate and complex taxes multiplier. The features of Laffer curve in the post-socialist economies. The characteristic of major instruments 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 multyside exchange rates. Nominal and real exchange rate. Purchasing-power parity. Demand and supply influencing 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 expenditure. Marginal

propensity to import. The impact of net export on GDP. Multiplier of government spending in an open economy.

Classes. The essence, components and types of exchange rates. The analysis of impact of net export on GDP in Ukraine. Calculation the marginal propensity to import and multiplier of government spending in an open economy.

4. Methods of control

The system of evaluation of competences formed by students takes into account the types of studies which include lectures, practical studies and implementation of self-study according to the syllabus of the academic discipline. Evaluation of competences formed by students is carried out on a 100-point system.

Control measures include:

current control which is carried out during a semester at lectures and classes and evaluated as a sum of the gained points (the maximum sum is 100 points; the minimum sum, that allows a student to be examined is 60 points);

module control which is conducted taking into account current control for the proper content module; the purpose of this form of control is integrated assessment of the academic performance of a student after the study of the material of a logically completed part of the academic discipline;

total/semester control which is conducted in the form of module control in accordance with the schedule of the educational process.

Current control on this academic discipline is conducted in such forms:

- active work at the lectures;
- doing different practical tasks;
- answering on practice tests;
- active participation in solving of case-study;
- conducting current writings;
- doing home assignments.

Module control on this academic discipline is conducted in the form of a colloquium.

A colloquium (a mid-term test) is a form of control and evaluation of knowledge of students in the system of higher education. A colloquium is conducted as an intermediate mini-exam on the initiative of a lecturer.

Final/semester control is conducted in the form of semester module control.

Evaluation of students' knowledge during seminars and practical studies and execution of individual tasks is conducted on a 100-point scale by such criteria:

understanding, the degree of mastering the theory and methodology of problems which are considered;

the degree of mastering the actual material of the academic discipline;

the ability to combine theory with practice when considering real economic situations, doing tasks, conducting calculations in the process of implementation of individual tasks;

logic, structure, style of expounding material in written works and appearances in front of the audience, the ability to ground the position, carry out generalization of information and draw conclusions.

The general criteria for evaluation of self-study work of students are: profound and thorough knowledge, the level of thought, the ability to systematize knowledge after separate themes, the ability to draw grounded conclusions, the ability to find necessary information.

The final assessment on the academic discipline accounts marks got during a semester. The total result for a semester makes: "60 and more points: passed", "59 and less points: failed".

Table 4.1

Distribution of points after weeks

| Theme | | | Lectures | Tasks | Practice tests | Case-study | Current writings | Colloquium | Home assignments | Total |
|------------------|----------|---------|----------|-------|----------------|------------|------------------|------------|------------------|-------|
| Content module 1 | Theme 1 | Week 1 | 1 | 2 | | | | | 1 | 4 |
| | Theme 2 | Week 2 | 1 | 2 | 2 | | | | | 5 |
| | | Week 3 | 1 | 2 | | | | | 1 | 4 |
| | Theme 3 | Week 4 | 1 | 2 | 2 | | | | 1 | 6 |
| | Theme 4 | Week 5 | 1 | 2 | | | | | | 3 |
| | Theme 5 | Week 6 | 1 | 2 | 2 | | 6 | | | 11 |
| | | Week 7 | 1 | 2 | 2 | | | | | 5 |
| | Theme 6 | Week 8 | 1 | | | | | 12 | | 13 |
| Content module 2 | Theme 7 | Week 9 | 1 | 2 | | | | | 1 | 4 |
| | Theme 8 | Week 10 | 1 | 2 | 2 | | | | 1 | 6 |
| | Theme 9 | Week 11 | 1 | 2 | | | 6 | | | 9 |
| | Theme 10 | Week 12 | 1 | 2 | 2 | | | | | 5 |
| | Theme 11 | Week 13 | 1 | 2 | | 3 | | | 1 | 7 |
| | Theme 12 | Week 14 | 1 | 2 | 2 | | | | | 5 |
| | | Week 15 | 1 | | | | | 12 | | 13 |
| Total | | | 15 | 26 | 14 | 3 | 12 | 24 | 6 | 100 |

Evaluation scale: national and ECTS

| The sum of points for all of the types of the educational activity | ECTS mark | Assessment on the national scale | |
|--|-----------|---|------------|
| | | for the examination, course project (works), practice | for a test |
| 90 – 100 | A | excellent | passed |
| 82 – 89 | B | good | |
| 74 – 81 | C | | |
| 64 – 73 | D | | |
| 60 – 63 | E | satisfactory | not passed |
| 35 – 59 | FX | unsatisfactory | |
| 1 – 34 | F | | |

5. Recommended literature

Main literature

1. Гронтковська Г. Е. Макроекономіка : Навчальний посібник / Г. Е. Гронтковська, І. Ф. Косик. – К. : ЦУЛ, 2019. – 672 с.
2. 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.
3. Клименко Е. Н. Макроэкономика : учебное пособие для самостоятельного изучения дисциплины / Е. Н. Клименко, О. Н. Крюкова, М. С. Бриль. – Х. : ХНЭУ им. С. Кузнеця, 2015. – 244 с.
4. Boyes W. Fundamentals of Economics / W. Boyes, M. Melvin. – Mason: South-Western, Cengage Learning, 2014. – 464 P.
5. Evans M. K. Macroeconomics for managers / M. K. Evans. – Blackwell Publishing, 2016. – 838 p.
6. Garn J. Intermediate Macroeconomics / J. Garn, R. Lester, E. Sims, 2018. – 1018 p.
7. Principles of Macroeconomics. – Houston: OpenStax College Press, 2014. – 611 P. – Electronic resource: <https://www.amazon.com/Principles-Macroeconomics-OpenStax/dp/1680920081>.

Additional literature

8. Калініченко О. В. Макроекономіка. Практикум : Навчальний посібник / О. В. Калініченко, О. Д. Плотник. – К. : Центр учбової літератури, 2017. – 656 с.
9. Практикум з навчальної дисципліни "Макроекономіка" для студентів всіх спеціальностей усіх форм навчання / О. М. Крюкова, О. М. Кліменко, М. С. Бріль, Т. С. Черкашина. – Х. : Вид. ХНЕУ, 2010. – 108 с.
10. Lipsey R. G. Economics / R. G. Lipsey, K.A. Chrystal. – Oxford: Oxford

University Press, 2015. – 507 P.

11. McConnell C. R. Economics: principles, problems, and policies / C. R. McConnell, S. L. Brue. – Boston : McGraw-HillIrwin, 2015. – 818 p.

Information resources

12. Official site of State Statistics Committee of Ukraine. – Access mode : www.ukrstat.gov.ua.

13. Official site of National Bank of Ukraine. – Access mode : www.nbu.ua.

14. Official site of the U.S. Bureau of Labor Statistics'. – Access mode: www.bls.gov.

15. Official site of the U.S. Census Bureau. – Access mode: www.census.gov.

16. Official site of the U.S. Federal Reserve System. – Access mode: www.federalreserve.gov.

17. Official site of the St. Louis Federal Reserve Bank. – Access mode: www.research.stlouisfed.org.

18. Official site of the World Bank. – Access mode: www.worldbank.org.

19. Official site of the European Union. – Access mode: www.ec.europa.eu.

Methodological support

20. Cherkashyna T. S. Personal education system of the academic discipline "Macroeconomics" [Electronic resource] / T. S. Cherkashyna. – Access mode : <https://pns.hneu.edu.ua/course/view.php?id=3534>.