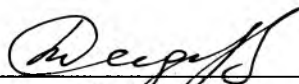


Educational Establishment «Belarus State Economic University»

**APPROVED**

Vice-Rector for Scientific and  
Methodological Work of Educational  
Establishment «Belarus State  
Economic University»

  
21.06. 2023 г. T.V. Sadovskaya

Registration No. УД 5598-23 /уч.

## **MACROECONOMICS**

The curriculum of the establishment of higher education  
in the academic discipline for the specialty  
1-25 01 03 «World economy»

The curriculum of the establishment of higher education is based on the typical educational plan for the specialty 1-25 01 03 «World economy», registration number E 25-1-003/пр-тип. dated 30.06.2021

**COMPILED BY:**

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**RECOMMENDED FOR APPROVAL:**

Department of economic policy of the Educational Establishment «Belarus State Economic University»

(Minutes № 10 dated 11.05.2023);

Scientific - methodical Council of the Educational Establishment «Belarus State Economic University»

(Minutes № 7 dated 21.06.2023 )

## EXPLANATORY NOTE

The syllabus on the academic discipline "Macroeconomics" has been developed in accordance with the requirements of educational standards of higher education. It is aimed at teaching students in English for the specialty 6-05-0311-03 World economy.

The goal of studying the discipline is to develop economic thinking and to gain knowledge about the rules of functioning of the economy of a country as well as the policy of organs of state administration aimed at the developing of the national economy.

The objectives of the discipline are:

- to form knowledge about the functioning rules of national economy on the macrolevel;
- to teach how to analyze current state of the economy and predict its development;
- to develop skills of defining consequences for the economy development of different economic policies.

Within this course, a student must not only acquire theoretical and practical knowledge, professional skills and competences, but also develop personal and spiritual potential, develop such qualities as patriotism and civic engagement to be ready to actively participate in economic, industrial, sociocultural and public life of the country.

The studying process of the discipline "Macroeconomics" is based on the knowledge, skills and competences, acquired by studying such academic disciplines as "Economic theory" and "Microeconomics". Mathematical instrumentation is actively used.

Academic discipline "Macroeconomics" is a theoretical and methodological basis for other academic disciplines, which study functioning of national economy and implementation of economic policy.

Studying of the discipline "Macroeconomics" will help to form the following basic professional competence:

understanding of the mechanisms of functioning of the aggregative markets and tools of fiscal and monetary policy, analyzing of macroeconomic processes that take place in the Republic of Belarus and other countries, assessing the results of macroeconomic policy.

After studying the academic discipline, a student must:

*know:*

- basic macroeconomic concepts;
- the rules of functioning of the economy of the country;
- the mechanism of the influence of external (exogenous) factors on the state of the national economy;
- the mechanism of the influence of the macroeconomic policy tools on the state of national economy;

*to be able:*

- to search and interpret macroeconomic data;
- to analyze macroeconomic processes happening in the country;
- to predict the development of the economy of a country taking into account the state of external environment and macroeconomic policy that is being carried out;
- to use macroeconomic analysis to make reasonable managerial and behavioural decisions;
- to defend one's point of view with reason in discussions on current problems of macroeconomics;

*to master:*

- basic instrumentation for conducting macroeconomic analysis.

In accordance with the requirements of the educational standard of higher education in the specialties of the field of education 6-05-0311-03 "World economy", the syllabus is designed for 216 hours, including 86 classroom hours. Approximate division of classroom hours: 44 hours of lectures, 42 hours of seminars.

The form of current assessment for the academic discipline is an examination in 3rd semester.

## **CONTENT OF EDUCATIONAL MATERIAL**

### **Topic 1. Introduction to macroeconomics**

The subject of macroeconomics. Basic macroeconomic problems and goals of macroeconomic regulation. Macroeconomic policy. Disputes among economists.

Microeconomic basis of macroeconomic analysis. Particularities of macroeconomic analysis. Macroeconomic (aggregative) subjects, markets, variables. Macroeconomic models. Exogenous and endogenous variables. Real and nominal value. Flow and stock variables. The role of expectations in economy. Closed and open economy. Periods in macroeconomics.

The circular flow model showing the relationship between microeconomic agents and markets. Basic macroeconomic equations.

### **Topic 2. Product market equilibrium**

Subjects of product market. Components of aggregate expenditures. Product market in a closed economy without government's participation.

Consumption. Factors behind consumption rate. Consumption function. Average and marginal propensity to consume. Savings. Saving function. Average and marginal propensity to save.

Investments. Investment types. Factors behind investment volume. Investment demand function. Instability of investments.

Determining of equilibrium volume of national output by comparing total income and total expenditure. Investment multiplier.

Determining of equilibrium volume of national output by comparing investments and savings. Paradox of thrift.

### **Topic 3. Money market equilibrium**

Money demand. Money demand motives. Factors behind money demand. Nominal and real money demand. The function of money demand.

Money supply. Monetary aggregates. Required reserves. Reserve requirements ratio. Excess reserves (liquidity). Role of depository organizations in money creation. Deposit multiplier. Monetary base and money supply. Money multiplier.

Equilibrium on money market. Equilibrium interest rate. The impact of changes of real income, price levels and money supply on the equilibrium interest rate.

### **Topic 4. Mutual equilibrium of product and money markets**

Equilibrium on product market. “Investment-savings” curve (IS curve). Interpretation of slopes and shifts in IS curve.

Equilibrium on money market. “Liquidity preference - money supply” curve (LM curve). Interpretation of slopes and shifts in LM curve.

Relations between real economy and money economy. Mutual equilibrium of both markets (IS-LM model).

IS-LM model as a model of aggregate demand (AD). Aggregate demand curve, its slope and shifts.

### **Topic 5. Labour market equilibrium and aggregate supply**

Equilibrium on labour market with flexible wage. Equilibrium level of employment. Natural rate of unemployment.

Aggregate production function. Level of output under the conditions of full employment (potential output). Long-run aggregate supply curve.

Labour market with fixed nominal wage. Cyclical unemployment. Relations between production level and unemployment: Okun's law. Short-run aggregate supply curve (AS<sub>s</sub>), its slope and shifts.

Model of aggregate demand – aggregate supply (AD-AS model). Inner macroeconomic equilibrium.

Deviation of the output from the potential level (output gap). Economic (business) cycle. Phases of the business cycle. Cyclical behavior of economic indicators. Deflationary (recessionary) and inflationary gaps.

### **Topic 6. Fiscal policy in a closed economy**

Definition, goals, tools and types of fiscal policy.

The impact of the economic cycle on the state budget. Non-discretionary fiscal policy: “built-in stabilizers”. Limitations of non-discretionary fiscal policy.

Discretionary fiscal policy. Fiscal multipliers (public procurement multiplier, transfer multiplier, tax multiplier).

Cyclically adjusted budget balance (structural balance). Cyclically adjusted primary budget balance. Analysing fiscal policy.

Source of financing of state budget deficit. Public debt. Factors determining the dynamics of public debt. Stabilization of public debt. The impact of public debt on the economy.

Effectiveness of fiscal policy. Crowding-out effect. Difficulties in implementation of fiscal policy.

### **Topic 7. Monetary policy in a closed economy**

Definition and goals of monetary policy. Modes of monetary policy: targeting of exchange rate, monetary targeting, inflation targeting.

Costs of inflation. Benefits of inflation. Optimum of inflation.

Tools of monetary policy. Central bank rate of interest. Liquidity regulation activity. Reserve requirements. Direct tools of monetary policy.

Monetary policy transmission mechanism. Channels of transmission mechanism.

Monetary conditions. Neutral rate of interest. Expansionary and contractionary monetary policy.

Rules of monetary policy. Friedman rule. Taylor rule.

Effectiveness of monetary policy. Liquidity trap. Investment trap. Long-term money neutrality.

### **Topic 8. Macroeconomic equilibrium and macroeconomic policy with consideration to expectations.**

The effect of expectations on consumer choice. I. Fisher's Theory of Intertemporal Choice. F. Modigliani's Life-Cycle Model. M. Friedman's Permanent Income Hypothesis.

The effect of expectations on investment decisions. Expected net present value (NPV).

The role of expectations in fluctuations of national output. IS-LM model with consideration to expectations.

Relations between inflation and unemployment in the short term. Short-term Phillips curve, its slope and shifts. Phillips curve as a way to present aggregate supply. Dilemma over aggregate demand policy. Aggregate supply shocks. Stagflation.

Adaptive expectations and long-term Phillips curve. Changing of policy on labour market and shifts in long-term Phillips curve.

Rational expectations theory. Phillips curve in rational expectations theory. Macroeconomic policy under rational expectations.

## **Topic 9. Open economy: basic concepts, equilibrium in an open economy**

Balance of payments. Current account. Capital account. Financial account. Reserve assets. Relations between balance of payments accounts. External macroeconomic equilibrium.

Gross national income. Gross national disposable income. Savings in an open economy. Relations between System of National Accounts data and balance of payments data.

Exchange rate. Types of currency quotation. Nominal and real exchange rate. Exchange rate regimes.

Goods market in an open economy. Import determinant. Import function. Export determinant. Export function. Net export function. Goods market equilibrium in an open economy. IS-curve in an open economy.

International movement of financial assets. Factors affecting the movement of financial assets. Capital mobility degree. Balance of payments curve (BP-curve), its slope and shifts.

IS – LM – BP model as a model of a small open economy. Internal and external equilibrium in IS – LM – BP model.

## **Topic 10. Macroeconomic policy in an open economy**

Fiscal policy under fixed exchange rate. The effect of capital mobility degree on the effectiveness of fiscal policy under fixed exchange rate.

Monetary policy under fixed exchange rate. The effect of capital mobility degree on the effectiveness of monetary policy under fixed exchange rate.

Fiscal policy under floating exchange rate. The effect of capital mobility degree on the effectiveness of fiscal policy under floating exchange rate.

Monetary policy under floating exchange rate. The effect of capital mobility degree on the effectiveness of monetary policy under floating exchange rate.

## **Topic 11. Economic growth**

Definition, variables and factors of economic growth. Economic growth in the Republic of Belarus.

Basic prerequisite of Solow model. Neoclassic production function. Cobb-Douglas production function. Relations between labour efficiency and capital-labour ratio. Factors affecting the capital-labour ratio. Stable level of capital-labour ratio.

The effect of saving rate on economic growth. E. Phelps' Golden Rule. Population growth and economic growth.

Technological progress and economic growth. Limitations of Solow's model.

Modern theories of economic growth.

Economic growth policy, its directions and problems. Supply-side economy. Laffer curve. Economic growth policy in the Republic of Belarus.

## **Topic 12. Social policy of a state**

Social policy: definition, directions, principles, levels.

Living standards and quality of life. Personal income. Nominal and real income. Factors determining personal income. Social standards (living wage budget) and minimum wage.

Inequality in income distribution. Quantitative estimation of inequality. Decile and quintile coefficients. Lorenz curve. Gini coefficient. Ensuring social justice.

Social risks. Social protection programs and types of social allowances: social insurance, social aid, social welfare. Social insurance programs implemented by employers.

Social policy models. The concept of social state and its implementation in legislation and practical politics of the Republic of Belarus.

### **Requirements for course work**

The purpose of the course work on "Macroeconomics" is to apply the knowledge gained during the study of the discipline and develop analytical skills in practice about the national economic patterns and the government policy. The department gives the student the task in which the deadlines for submitting the course work and its plan are specified. The terms of protection are set by the department. The department approves Methodological recommendations for implementing the course work. 40 hours are allotted to complete the course work.



**ACADEMIC MAP OF THE DISCIPLINE**  
for full-time form education

Number of topic	Topic and questions	Number of auditory hours					Forms of knowledge control Practical studies
		Lectons	Practical studies	Seminars	Laboratorial studies	other	
1	2	3	4	5	6	7	8
1.	Introduction to macroeconomics	4		2		[1, 2, 3, 4, 5, 6, 7, 8]	Survey, reports
2.	Product market equilibrium	4		4		[6, 7, 8, 9, 10]	Survey, reports
3.	Money market equilibrium	4		4		[6, 7, 8, 9, 10, 11, 12]	Survey, reports
4.	Mutual equilibrium of product and money markets	2		2		[6, 7, 8, 9, 10, 13]	Survey, reports, test
5.	Labour market equilibrium and aggregate supply	4		4		[6, 7, 8, 9, 10, 11, 14]	Survey, reports
6.	Fiscal policy in a closed economy	4		4		[6, 9, 10, 13, 14, 15, 16]	Survey, reports
7.	Monetary policy in a closed economy	4		4		[6, 7, 10, 13, 14, 15, 16]	Survey, reports, test
8.	Macroeconomic equilibrium and macroeconomic policy with consideration to expectations.	4		4		[6, 8, 10, 11, 14, 15, 16]	Survey, reports
9.	Open economy: basic concepts, equilibrium in an open economy	4		4		[6, 9, 11, 12, 14, 15, 16]	Survey, reports
10.	Macroeconomic policy in an open economy	4		4		[6, 8, 10, 13, 14, 15, 16]	Survey, reports, test
11.	Economic growth	4		4		[6, 9, 10, 13, 14, 15, 16]	Survey, reports
12.	Social policy of a state	2		2		[6, 8, 10, 13, 14, 15, 16]	Survey, reports
	<b>Итого</b>	<b>44</b>		<b>42</b>			<b>Exam</b>

## INFORMATION AND METODIC PART

### Methodical recommendations on organization of independent work of students on training discipline «Microeconomics»

In mastering the knowledge of the discipline, an important stage is the independent work of students.

The main directions of the student's independent work are:

- initially, a detailed introduction to the syllabus of the discipline;
- familiarization with the list of recommended literature on the academic discipline as a whole and its sections, its availability in the library and other available sources, study of the necessary literature on the topic, selection of additional literature;
- study and expansion of the lecturer's lecture material through special literature, consultations;
- preparation for seminars according to specially developed plans with the study of basic and additional literature;
- preparation for the implementation of diagnostic forms of control (tests, etc.);
- preparation for the exam.

The list of recommended tools for diagnosing the effectiveness of students' work: standard tasks, open-type tasks, tasks of a communicative type, tests, complex qualification tasks, methodological developments on innovative forms of training and control over the formation of competencies, topics and principles of essay writing, forms of questionnaires for self-assessment of students' competencies.

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***Basic:***

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***Additional:***

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11. Ivashutin, A. L. Microeconomics and macroeconomics : an educational and methodological guide for students of the specialty 1-27 01 01 "Economics and organization of production (mechanical engineering)" / A. L. Ivashutin, A. A. Kogan, L. M. Korotkevich ; M-in education Rep. Belarus, Belarus. national tech. un-t, Machine-building faculty, Kaf. "Engineering Economics". - Minsk : BNTU, 2020. - 115, [1] p. – (in Russian).

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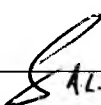
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## COORDINATION PROTOCOL OF THE CURRICULUM OF HIGHER EDUCATION INSTITUTION

The discipline which requires coordination	Department	Offers on changes in the curriculum contents of academic discipline of higher education institution	The decision made by the department which developed the curriculum (with the indication of date and number of the protocol)
<i>World economy</i>	<i>World economy</i>	<i>No offers</i>	protocol № <u>10</u> from <u>11.05</u> 2023

  
A.L. Yanchuk

**ADDITIONS AND CHANGES TO THE CURRICULUM OF HIGHER  
EDUCATION INSTITUTION**  
for \_\_\_\_ / \_\_\_\_ academic year

№	Additions and changes	Reason

The curriculum is revised and approved at the meeting of the Department

\_\_\_\_\_ (protocol № \_\_\_\_ dated \_\_\_\_\_ 20\_\_ )  
(department name)

Head of the Department

\_\_\_\_\_  
(academic degree/title)                      (signature)                      (full name)

APPROVED BY  
Dean of the Faculty

\_\_\_\_\_  
(academic degree/title)                      (signature)                      (full name)