### Introduction to Macroeconomics

ICEF, Higher School of Economics – BSc 1st year

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### Course description

1. **Pre-requisites**

Since the course of Introductory Macroeconomics is taught in English, students need to have the fluent knowledge of this language. Besides, students should possess basic mathematics and graphing skills.

1. **Abstract**

The course gives the introduction to the macroeconomic fundamentals and to the main concepts and principles of macroeconomic theory and policy. The course deals with the analysis of aggregate product and national income as well as price level determination; measurement and problems of unemployment and inflation and their trade-off; money and banking; commodity market, financial market, loanable funds market and labour market equilibrium; economic growth and economic fluctuations, primarily in order to understand the key instruments, mechanisms and consequences of the stabilization – fiscal and monetary – policies in the short and in the long run and different theories regarding these policies. A special part of the course is devoted to the issues of the international economics such as the international trade and finance, the balance of payments structure, exchange rates and the determinants of their changes, ends of the stabilization policies in the open economy.

1. **Learning objectives**

The purpose of the course is to give students a thorough understanding of the principles of economics that apply to an economic system as a whole and of the mechanism of macroeconomic processes and different types of macroeconomic policy.

The specific aims of the course are:

* to give the knowledge of macroeconomic terminology and basic macroeconomic concepts and issues;
* to show the economic intuition of macroeconomic performance and aggregate economic activity;
* to form the economic way of thinking, that is to use the intuitive analysis of economic process and macroeconomic policy;
* to explain the main principals of macroeconomic analysis using simple algebra and graphs;
* to teach students to apply their knowledge to analyze, interpret and explain specific macroeconomic problems, stylised economic facts and real macroeconomic situations;
* to form ability in reading and understanding economic literature.

Having completed this course, the student is expected to be able:

* to learn and acquire new knowledge and skills;
* to work with information: to find, evaluate and use information from various sources, necessary to solve scientific and professional problems;
* to conduct research, including problem analysis, setting goals and objectives, identifying the object and subject of research, choosing the means and methods of research;
* to identify and critically evaluate the main trends of modern economics;
* to collect, analyze and interpret the data of domestic and foreign statistics on socio-economic processes and phenomena;
* to solve analytical and research problems with modern technical means and information technologies.

1. **Methods of Instruction**

The following methods and forms of study are used in the course:

**Lectures (2 hours a week)**

The attendance at lectures is strongly recommended and is crucial to the success in this course that covers a substantial amount of material in a rather short amount of time, because lectures offer a verbal presentation and explanation of the material needed to understand the basic macroeconomic concepts and problems and in order to prepare successfully for the exams. The lecture materials include the main models, formulas and graphs followed by the explanation of the economic intuition of each process and are aimed to help a student better understand the reading of the textbooks and deeply know the core of macroeconomic theory. Some short questions of (having) a précising, but not discussion character, are allowed during the lecture. If a student has missed a lecture, he/she is advised to borrow and copy the lecture notes from and discuss its contents with his/her fellow who did attend the lecture. The unclear and difficult questions are better to consult with a tutor during classes or the tutor’s office hours.

**Classes (2 hours a week)**

Classes start in the second week of the semester and their attendance is obligatory. During classes students get the opportunity to discuss the lecture material, to ask the unclear questions, to discuss the main problems of home assignments. At the same time the tutor have the opportunity to explain the most difficult issues of each theme, answer the students’ questions concerning both the lecture materials and the home assignments, to check the students’ knowledge and understanding of the topics and details of each theme that can be done in the form of students’ answers to the tutor’s questions, solving problems, examining cases and writing quizzes (the optimal duration of the quiz is no longer than 20 minutes) with the further discussion of solutions and answers.

Students are expected to enter the class ready to learn, be well prepared and organized, treat everybody with respect and keep an open mind, and be an active participant, not just present.

Warning: Cell phones and any other personal electronic devices (smart phones, iPads, iPods, laptop computers) are not allowed to be used by the students during lectures and classes, if only with a special permission of the teacher. All electronic devices (as well as paper materials) must be put away during tests and quizzes in purses or backpacks; their visible evidence will be considered an attempt to cheat and will result in a zero for the assessment.

**Teachers’ consultations (each week)**

The aim of teachers’ consultations is to give thorough explanations of the material discussed in lectures and classes but which remained unclear to a student or a group of students. Consultations are also needed to explain mistakes made by students in solving problems, fulfilling the tasks of home assignments and in answers to the tasks of the exams. Teachers’ consultations have sense and will be useful only in the case when a student failed to investigate and understand the problem in the process of self-studies while examining corresponding lecture notes and textbooks.

**Written home assignments (each week)**

Home assignments are distributed one per each week and include conceptual and numerical problems, and free-response questions. Each home assignment usually concerns the questions upon one theme previously discussed in the lecture and must be delivered before the next lecture (the date of each delivery is pointed out). Then it is checked and discussed in the class during seminars. The work must be provided in a written form (no electronic versions are accepted), done carefully, and must contain complete and detailed answers to each task with definitions, obligatory economic intuition and explanations and with the use of formulas and graphs where necessary. Its aim is not only to check the knowledge and understanding of the material of each theme by the student, but mainly of his/her ability to analyse macroeconomic problems. Home assignments are examined and marked by class teachers. Those students who don’t deliver their homeworks in time or rewrite them from other students get 0 points. The total mark for home assignments is a weighted one from all the marks received by a student for this type of work and is an important part of a resulting mark according to which the students are ranged.

**Self-study**

Students take primary responsibility for their learning. Because of the time constraint of lectures and classes students are expected to study and gain the understanding of material by examining of the recommended textbooks and study guides and making revision and test training. It will help to write the correct and complete answers to home assignments, quizzes, be active during classes and is necessary to be well prepared for the exams and feel confident during the exams. A good idea (and a useful advice) for the students is to look through the material of the textbooks before each lecture to understand the theme better. The most difficult questions can be discussed with the tutor during the tutor’s office hours.

1. **Reading List**

**a. Required**

1. Case Karl E., Fair Ray C., Oster Sharon M. *Principles of Economics.* Pearson. 12th edition, 2017. (*CFO*)

2. Матвеева Т.Ю. *Макроэкономика.* Учебник для вузов. В двух томах *–* М., Изд. дом ВШЭ. 2019 (или 2020).

3. Матвеева Т.Ю. «*Основы макроэкономики*». Слайды лекций. Учебные материалы МИЭФ. Москва, 2011.

**b. Additional**

1. Begg D., Dornbusch R., Fischer S. *Economics*. New York: McGraw-Hill. 11th edition, 2014.
2. Colander, David C. *Economics*. New York: McGraw-Hill. 8th edition, 2010.
3. Krugman, Paul, and Robin Wells. *Economics*. New York: Worth Publishers. 2nd edition, 2009.
4. Mankiw, N. Gregory. *Principles of Economics*. Mason, OH: South-Western Cengage Learning. 6th edition, 2012.
5. McConnell, Campbell R., Stanley L. Brue, and Sean Masaki Flynn. *Economics: Principles, Problems, and Policies*. New York: McGraw-Hill. 19th edition, 2012.
6. Walter J. Wessels. *Economics*. Barron's Educational Series, Wiley Publishing. 4th edition, 2012.
7. Ward D., Begg D. *Student Workbook for Economics*. McGraw-Hill, 7th edition. 2003.
8. Матвеева Т.Ю. *Введение в макроэкономику*. М., Изд. дом ВШЭ. 2010.
9. Specific Equipment and Software Support

Laptop, projector, Internet connection

MS Word, MS Excel, MS PowerPoint

Internet Resources:

- ICEF Information System <http://www.icef-info.com>, where students can find current course materials: the lecture notes, materials for exams preparation, examples of previous ICEF exams and tests with answers and scoring guidelines.

- for Key Russian Macroeconomic Indicators students can see: [Federal State Statistics Service](https://www.translate.ru/dictionary/en-ru/Federal%20State%20Statistics%20Service) <http://www.gks.ru/>; Central Bank of Russian Federation <http://www.cbr.ru/>

- for Key Macroeconomic Indicators in Different Countries students can see: <https://www.imf.org/data>; <https://data.worldbank.org/>; <https://data.oecd.org/>; <https://www.worldeconomics.com/>

- HSE Library e-resources (<http://library.hse.ru/en/e-resources/>)

1. Grading System and Examination Type

Examination is in writing. The students take two intermediate internal forms of control - the midterm Mock Exam held on the last week of March and the Test held on the last week of May, and the final International Exam, held in June. The midterm Mock Exam covers the first half of the course, and the Test covers the whole course. The final International Exam includes all themes as well.

Sample materials for knowledge assessment are available in ICEF Information system at <https://icef-info.hse.ru>.

There are no blocking elements.

All grades are given initially out of 100. The final grades are also transferred to 10- and 5-points grades in accordance with the ICEF Grading Regulations (par.3) available at <https://icef-info.hse.ru/goto_icef_file_29833_download.html>

The grade for the final International Exam gives 50% of the final grade, the intermediate forms of control give total 40% (of which 20% for the Mock Exam and 20% for the Test), the home assignments provide 10%, and bonus up to 5% can be received for quizzes and/or class performance.

The formula is below:

G = 0.1\*Gha + 0.2\*Gmidterm + 0.2\*Gtest + 0.5\*Gexam

ha – home assignment

Only the final International Exam is subject to retake. Retakes are organized in accordance with the HSE Interim and Ongoing Assessment Regulations (incl. Annex 8 for ICEF). Grade determination after retakes is done in accordance with ICEF Grading Regulations (par. 5) available at <https://icef-info.hse.ru/goto_icef_file_29833_download.html>

In case of the student’s absence from a midterm test for a valid reason, the calculation of the total grade is based on other types of assessment, using a formula that partially compensates for the lost points. In this case, the weights of all other components of the final grade are multiplied by (1+0,5a), where “a” is the weight of a grade for the missed midterm test in the total grade.

**7. Course Plan**

**1. Introduction to Macroeconomics**

Subject of Macroeconomics. Major Macroeconomic Issues. A Brief History of Macroeconomics.

Aggregation. Macroeconomic Agents and Macroeconomic Markets. The Model of Circular Flows in the Closed Private Economy, in the Mixed Closed Economy, and in the Open Economy. The Major Identities in Macroeconomics. The Capital Formation Equation.

The Macroeconomic System. Macroeconomic Policy.

(*CFO ch. 20*)

**2. Measuring National Output and National Income**

National Income and Product Accounting System.

Gross Domestic Product (GDP). Methods for Calculating GDP. Other Variables of National Accounts.

Nominal versus Real GDP. GDP Deflator, Consumer Price Index (CPI) and Their Differences.

Actual Real and Potential Real GDP. The Long-Run Economic Growth and the Business Cycle. Limitations of the GDP Concept.

International Comparisons. Macroeconomic Situation in Russia.

(*CFO ch. 21*)

**3. Goods Market Equilibrium in the Private Closed Economy**

Determination of Output in the Long Run and in the Short Run: the Difference.

Demand-Side Analysis. The Consumption Demand, and the Consumption Function. The Saving Function. The Investment Demand and the Investment Function.

The Determination of Equilibrium Output in the Short Run (the “Keynesian Cross Model”). The Conditions for the Goods Market Equilibrium, and the Role of Inventory Changes in its Restoration.

The Multiplier Effect. The «Paradox of Thrift». Equilibrium Output and Potential Output. Inflationary and Recessionary Gaps.

(*CFO ch. 23*)

**4. Goods Market Equilibrium in the Mixed Closed and in the Open Economy**

The Government in the Circular Flows. The Effect of Government Purchases, Taxes and Transfers on Output. The Government Sector Multipliers.

The Foreign Sector in the Circular Flows. Net Exports and Aggregate Demand. The Multiplier Effect in the Open Economy.

The Keynesian Cross Model as the Model of Aggregate Demand. The Aggregate Demand Curve. Effects Explaining the Negative Slope of Aggregate Demand Curve. Causes of the Shifts of the Aggregate Demand Curve.

(*CFO ch. 24*)

**5. Fiscal Policy**

Fiscal Policy and its Objectives. Instruments of the Fiscal Policy. Types of the Fiscal Policy: Expansionary and Contractionary, Discretionary and Automatic Fiscal Policy.

The Mechanism of the Fiscal Policy. The Drawbacks of Active Fiscal Policy: the Crowding out Effect, the Government Budget Deficit. Deficit Financing and the Loanable Funds Market. The Loanable Funds Market Equilibrium and Causes for Changes.

The Effectiveness of Fiscal Policy in the Short Run: the Role of the Interest Rate Sensitivities of Investment Demand and of the Demand for Money. The Approaches to Fiscal Policy. Fiscal Policy and Aggregate Supply. The Laffer Curve.

Specific Features of Fiscal Policy in Russia.

(*CFO ch. 24*)

**6. Money and Money Market Equilibrium**

Money and its Functions. Kinds of Money. Money Supply Aggregates.

The Banking System. The Central Bank and its Functions. Commercial Bank and its Balance Sheet. Types of Bank Reserves. How Banks Create Money. The Money Market Multipliers. The Money Supply Curve.

The Demand for Money and its Determinants. The Money Demand Curve. The Liquidity Preference Theory. The Interest Rate and the Bond Prices.

The Money Market Equilibrium and its Restoration.

(*CFO ch. 25*)

**7. Monetary Policy**

Monetary Policy, its Goals and Targets. The Tools of Monetary Policy. Types of Monetary Policy. Expansionary and Contractionary Monetary Policy. The Keynesian Money Transmission Mechanism. Contemporary Channels of Monetary Policy Transmission.

The Effectiveness of Monetary Policy in the Short Run: the Role of the Interest Rate Sensitivities of Investment Demand and of the Demand for Money. The Effect of Monetary Policy on Real Output in the Long Run. The Quantity Theory of Money. The Neutrality of Money in the Long Run.

Specific Features of Monetary Policy in Russia.

(*CFO ch. 25*)

**8. Labour Market Equilibrium and Aggregate Supply**

The Production Function and Aggregate Supply. The Role of the Labour Market. The Labour Market Equilibrium.

The Labour Market with Flexible Wages. The Long-Run Aggregate Supply Curve. The Labour Market with Sticky Wages. The Short-Run Aggregate Supply Curve. Determinants of Aggregate Supply in the Short Run. Different Approaches to Aggregate Supply.

(*CFO ch. 26, 28*)

**9. Aggregate Demand and Aggregate Supply**

The Aggregate Demand and Aggregate Supply Model. Equilibrium in the AD-AS model in the Long Run and in the Short Run. The Role of the Shocks of Aggregate Demand and Aggregate Supply.

Changes in Aggregate Demand and in Aggregate Supply and the Equilibrium in the AD-AS Model in the Short Run and in the Long Run. How an Economy Adjusts to the Long-Run Equilibrium in the Absence of Any Policy Actions. Fiscal and Monetary Policy in the Framework of the AD-AS Model. Adverse Supply Shocks and Demand Management Policy Dilemma. How to Fight Stagflation.

(*CFO ch. 26, 27*)

**10. Unemployment**

Population and Labour Force. Non-Labour Force and Unemployed. Measurement of Unemployment.

Types of Unemployment: Frictional, Structural and Cyclical. The Natural Rate of Unemployment and its Determinants. The Nonaccelerating Inflation Rate of Unemployment (NAIRU). The Real-Wage Unemployment and its Causes.

The Individual and the Social Costs of Unemployment. The Okun’s Law. Government Policy to Reduce Unemployment.

International Comparisons. Features of Unemployment in Russia.

(*CFO ch. 22, 28*)

**11. Inflation**

The Concept and the Types of Inflation. Deflation and Disinflation.

Causes of Inflation. Demand-Pull Inflation and the Quantity Theory of Money. Government Budget Deficits and Inflation.

The Costs of Inflation. Specific Costs of Unanticipated Inflation. Nominal Interest Rate and Inflation: the Fischer Effect.

Hyperinflation, its Causes and Examples. How to Fight Hyperinflation.

Inflation, its Causes and Dynamics in Russia.

(*CFO ch. 22*)

**12. The Phillips Curve**

Trade-offs between Inflation and Unemployment. The Short-run Phillips Curve. Expectations-Augmented Phillips Curve. The Effect of the Supply Shocks. The Phillips Curve as the Model of Aggregate Supply.

Natural Rate Hypothesis and the Long-Run Phillips Curve. The Movement of the Economy from the Short-Run to the Long-Run Equilibrium.

The Cost of Reducing Inflation. Strategies to Reduce Inflation.

Disinflation Policy of the Bank of Russia.

(*CFO ch. 28*)

**13. The Long-Run Economic Growth**

The Concept of Economic Growth. The Measures of Economic Growth. Economic Growth and the Standard of Living. “The Rule of 70”. The Types and Sources of Economic Growth.

Determinants of Economic Growth. The Role of Labour Productivity and Technological Progress. Government Policy to Stimulate the Long-Run Economic Growth.

Problems of the Long-Run Economic Growth in Russia.

(*CFO ch.31*)

**14. The Open Economy**

International Links between the Economies. The International Trade: Net Exports and its Determinants. The International Financial System: Capital Flows and their Determinants. Russian Economy as an Open Economy.

Foreign Exchange Market and its Equilibrium. Nominal and Real Exchange Rate.

Exchange Rate Systems. The Central Bank Interventions. Devaluation and Revaluation. Depreciation and Appreciation.

Balance of Payments and its Structure. The Balance of Payments Equilibrium under Fixed Exchange Rates and under Flexible Exchange Rates. Russian Balance of Payments.

Monetary and Fiscal Policy in the Open Economy: Mechanism and Economic Effects.

(*CFO ch. 33, 34*)

Hours per topic:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **№ of topic** | **Total** | **Lectures** | **Seminars** | **Self-study** | **Expected learning outcomes** |
| After studying the topic, students should be able: |
| 1 | 18 | 4 | 4 | 10 | to define the science of macroeconomics; to distinguish between macroeconomic and microeconomic problems and variables; to explain the main principles and methods of macroeconomic analysis; to give the intuition of how the whole macroeconomy performs using the circular flows model, and to describe the macroeconomic system and its key elements |
| 2 | 18 | 4 | 4 | 10 | to define gross domestic product (GDP) and the three methods of its calculation, to calculate other variables of aggregate output and aggregate income; to distinguish between nominal GDP and real GDP, between actual GDP and potential GDP; to calculate the key macroeconomic variables such as unemployment rate, inflation rate, output growth rate, level of economic welfare |
| 3 | 18 | 4 | 4 | 10 | to explain the way of defining of equilibrium real output in the long run and in the short run, and to interpret the importance of aggregate demand for determination of the short-run equilibrium in macroeconomy; to derive the short-run consumption function, the saving function and the investment function, and to give the intuition of the market clearing process in the goods market in the short run, of the multiplier effect, of the “paradox of thrift” and of the output gaps, and to show them on the Keynesian Cross graph |
| 4 | 18 | 4 | 4 | 10 | to interpret the effect of government purchases, lump-sum taxes, transfer payment, balanced budget and proportional taxes on aggregate demand and aggregate output; to calculate government sector multipliers; to explain the role of the foreign sector and of the change in the functions of aggregate expenditures and of aggregate saving in the three sector and four sector models of the goods market; to calculate all types of the goods market multipliers in the open economy; to interpret the aggregate demand curve, to derive the AD curve from the Keynesian Cross graph and to explain the main properties of the AD curve |
| 5 | 14 | 4 | 2 | 8 | to list the targets, the instruments and the types of fiscal policy; to interpret the mechanism of each type of fiscal policy and to show it on the appropriate graphs; to explain the drawbacks and limitations of fiscal policy, especially the crowding-out effect and the budget deficit; to discuss the alternative approaches to fiscal policy in macroeconomic theory and practice, the way of reasoning and the conclusions |
| 6 | 16 | 4 | 4 | 8 | to define financial assets and their types; to define money and to list the functions and the kinds of money; to give the intuition of the money creation process and of the multiplier effect in the money market; to interpret the determinants of the money demand and of the money supply, and to give intuitive explanation of the money market equilibrium and the process of its restoration |
| 7 | 16 | 4 | 4 | 8 | to define the ultimate goals and the intermediate targets of monetary policy, to list the tools and the types of monetary policy; to give the intuition of the money transmission mechanism and to show it on the graphs; to list and to interpret the drawbacks and problems associated with monetary policy; to estimate the absolute and the comparative effectiveness of monetary and fiscal policy |
| 8 | 16 | 4 | 4 | 8 | * to define labour demand and labour supply; to explain the labour market equilibrium; to derive the long-run aggregate supply (LRAS) curve and the short-run aggregate supply (SRAS) curves from the long-run equilibrium and the short-run equilibrium of the labour market, [respectively](https://context.reverso.net/перевод/английский-русский/respectively); to list and interpret modern approaches to the causes for the deviations in the short run of actual output from its potential level and thus of the positive slope of the SRAS curve |
| 9 | 16 | 4 | 4 | 8 | * to define aggregate demand (AD) and aggregate supply (AS), and to interpret the equilibrium in the AD-AS model and the process of its restoration; to determine the types of AD and AS shocks and to explain intuitively the mechanism and the consequences of each type of shocks in the short run and in the long run |
| 10 | 16 | 4 | 4 | 8 | * to define unemployment and the way of its measurement; to interpret sources and types of unemployment; to distinguish natural unemployment rate from the actual rate of unemployment and to use the labour force dynamics model to calculate the natural rate of unemployment; to discuss the consequences of unemployment both economic and non-economic, individual and societal, especially the Okun’s laws, and to list government policy measures to reduce unemployment |
| 11 | 16 | 4 | 4 | 8 | * to define inflation and its types, and to interpret the causes of inflation; to discuss and explain the costs of inflation, and to show why inflation is a deterrent for the long-run economic growth; to distinguish expected inflation from unexpected inflation and their consequences; to explain the Fisher effect |
| 12 | 16 | 4 | 4 | 8 | * to explain the trade-offs between inflation and unemployment; to interpret the Phillips curve relation and the history of its development; to construct the short-run and the long-run Phillips curves, and to give the intuition of how economy moves from the short run to the long run under different types of inflationary expectations; to define disinflation policy, to explain its mechanism and to interpret the sacrifice ratio under the two strategies of disinflation policy |
| 13 | 8 | 2 | 2 | 4 | * to define the long-run economic growth and its main goal, and to show the long-run economic growth on the graphs; to discuss the types and the sources of the long-run economic growth using the production function, and to explain how government policy can stimulate the long-run economic growth |
| 14 | 22 | 6 | 6 | 10 | * to define the exchange rate, to list the factors that influence the demand for national currency and the supply of national currency, and to explain the exchange market equilibrium and the causes and consequences of its changes; to discuss the balance of payments and its structure; and to explain how the balance of payments becomes balanced under the fixed exchange rate system and under the flexible exchange rate system; to explain the mechanism and the ends of fiscal and monetary policy in the open economy under the fixed exchange rate system and under the flexible exchange rate system |
| **Total** | **228** | **54** | **54** | **120** |  |

1. **Organization of Studies for Persons with Limited Mobility and Disabilities**

If necessary, learners with limited mobility or a disability (as per his/her application), as well as per his/her individual rehabilitation programme, may be offered the following options for receiving learning information with due consideration of his/her individual psycho-physical needs (e.g., via eLearning studies or distance technologies):

* + 1. *for persons with impaired vision*: enhanced fonts in hard copy documents; e-documents; audio files (transfer of study materials to an audio-format); hard copy documents with the use of Braille; individual consultation with a facilitated communicator; individual assignments and mentoring;
    2. *for persons with hearing impairments*: in hard copy; e-documents; video materials with subtitles; individual consultation with a facilitated communicator; individual assignments and mentoring;
    3. *for persons with a muscular-skeleton disorder*: in hard copy; e-documents; audio-files, individual assignments and mentoring.