

Program: Economics & Econometrics

This document outlines the scope of themes that may be included in the Olympiad tests. The themes are grouped by areas and are followed by a list of recommended references in the Russian and English languages.

Olympiad winner's skill set

To win the Olympiad, you should have a strong grasp of economic concepts and techniques, namely:

- understand the theoretical foundations and basic models of economic behavior of consumers and firms and macroeconomic dynamics; be familiar with the essence of financial markets, the basics of portfolio theory, types of portfolios, financial instruments, investment principles, investment portfolio management strategies, and ways to minimize risks; utilize basic econometric methods and methods for collecting and processing statistical economic information;
- be able to develop and analyze strategies for the behavior of economic agents, investment and financial decisions, present the results of economic calculations and forecasts in graphical and (or) analytical form, assess financial and economic risks, model and interpret relationships in micro- and macroeconomics, including for financial markets;
- be able to calculate the parameters of macroeconomic indicators and the behavior of consumers and firms; use basic methods of econometrics and financial calculations, as well as tools for financial and investment analysis in the stock market.

Content

Section 1. Economic behavior of consumers and firms

1. **Supply and demand elasticity concept.** Price elasticity, arc elasticity, point elasticity, cross elasticity, the elasticity of consumer spending (income of producers), income elasticity of demand, the elasticity of supply and its measurement.
2. **Consumer choice theory. Preference and utility.** Consumer budget constraint. Optimal consumer choice and demand function. Government and market: taxes, subsidies, and price controls. The income effect and the substitution effect.
3. **Theory of production and costs. Production function.** Returns to scale. Cost minimization and conditional demand for a resource. Analysis of production costs in the short and long term.
4. **Theory of the firm under perfect competition.** Profit maximization of a competitive firm and the supply function in the short and long run. Market equilibrium. Analysis of the consequences of government regulation (taxes, subsidies, price controls, production quotas, import tariffs and quotas, etc.).
5. **Factor market.** Pricing in the labor market. Demand for factors of production. Demand for labor in a perfectly competitive market. Market supply of labor. Factors of production in conditions of monopolistic competition. Economic equilibrium in the resource market. The monopsony model. Unions in the labor market.

Section 2. Macroeconomics

1. **Macroeconomic indicators.** The calculation of gross national income (GNI) and gross domestic product (GDP) in the system of national accounts. Nominal and real indicators. Methods for calculating GDP. Price indices.
2. **Macroeconomic policy.** Monetary policy instruments. Types of monetary policy. Money multiplier. Fiscal policy. Government spending and taxes. Discretionary fiscal policy. Non-discretionary policy. Balanced budget multiplier.
3. **AD-AS model.** Aggregate demand and its components. Price effects of demand. Factors in the aggregate demand curve shift. Aggregate supply: classical and Keynesian models. Aggregate supply in the long run. Aggregate supply in the short run. Non-price factors of change in aggregate supply (AS). Equilibrium of aggregate demand and aggregate supply (AD-AS model). Factors affecting aggregate demand and aggregate supply. Transition from short-term to long-term equilibrium. Demand shocks. Supply shocks. Macroeconomic policy within the AD-AS model.
4. **Labor market and unemployment. Inflation.** Forms of unemployment. The consequences of unemployment. Okun's law. The concept of inflation in modern macroeconomic theory. Causes and factors of inflation development. Types of inflation. The Phillips curve. Inflation expectations.
5. **Keynesian cross model. IS-LM model.** Multiplier effect: autonomous spending multiplier, tax multiplier. IS-LM model. Equilibrium in the market of goods and services. National, private, and public savings. Equilibrium in the money market. Monetary and fiscal policy in the IS-LM model.

Section 3. Macroeconomic dynamics. Open economy models

1. **Economic growth.** The concept, types, and factors of economic growth. Macroeconomic models of economic growth. Keynesian models of economic growth. The Harrod-Domar model. Neoclassical models of economic growth. The Solow model. The Golden Rule savings rate.
2. **Theories of international trade.** Open economy. Features of supply and demand in the commodity market in an open economy. Adam Smith's theory of absolute advantages. David Ricardo's law of comparative advantage. The Heckscher-Ohlin theory of differences in productive factors. The Leontief paradox.
3. **Balance of payments: macroeconomic aspects.** Displaying the current account balance in macroeconomic models. Absorption. Capital account balance and financial transactions: net capital inflow into the country and net outflow. Reserve assets.
4. **Exchange rate as a macroeconomic indicator.** Macroeconomic theories of the exchange rate. Monetary system evolution. The theory of purchasing power parity (PPP). Nominal and real exchange rates. Fixed and floating exchange rate.
5. **Automatic adjustment of an open economy.** IS-LM-BP model. Macroeconomic stabilization policy in a small open economy with a fixed and floating exchange rate and varying degrees of capital mobility. The impossible trinity.

Section 4. Financial markets and financial instruments

1. **Essence, functions, and segments of the financial market.** The concept, role, and significance of the financial and stock markets; participants and infrastructure of the stock market; classification of financial markets.
2. **Regulation of financial markets.** Models of financial market regulation. Central banks as regulators. Monetary Policy: Goals and instruments. Operations of central banks in financial markets.

3. **Financial calculations.** Future value, present value, discount rate, discount factor; simple and compound interest, nominal and real interest rates.

4. **Securities market, securities market instruments.** Features and elements of the securities market. Bonds: Characteristics and types. Bond valuation: Cost, yield, risk, duration. Risk-free rate. Shares: Properties and types. Dividends, dividend yield, share price and return. Dividend discount models: the Gordon model (with and without growth), the two-phase dividend discount model.

5. **Principles of investing in financial markets.** Investment portfolio. Expected return and portfolio risk: Portfolio return standard deviation and variance, return covariance and correlation, expected portfolio return, diversification, market beta.

Section 5. Econometrics

1. **Elements of statistics.** Numerical characteristics of random variables: Mean, variance, covariance, correlation. Hypotheses and confidence intervals. Data types in econometrics.

2. **Linear regression model.** Least square method. Prerequisites of the least square method. Economic interpretation of regression coefficients. Dummy variables. Determination coefficient. Adjusted coefficient of determination. Point and interval forecast.

3. **Regression coefficient hypothesis testing.** Checking the significance of an individual regression coefficient by Student's t-statistics. P-values. Confidence intervals for individual coefficients. Fisher's F-test for determining the significance of a regression equation.

4. **Violations of classical regression model assumptions: Consequences and diagnostics.** Heteroskedasticity of errors. Autocorrelation of errors. Bias due to omitted variables. Multicollinearity in a multiple regression model.

5. **Functions of paired nonlinear regressions.** Linearization. Interpretation of semilogarithmic functions. The elasticity coefficient.

Recommended references

Section 1. Economic behavior of consumers and firms

Source	Topic
1. Principles of Microeconomics 2e, Steven A. Greenlaw, University of Mary Washington, David Shapiro, Pennsylvania State University, 2018 Rice University. URL:// https://openstax.org/books/principles-microeconomics-2e/pages/preface (free access)	Supply and demand elasticity concept
2. Principles of Microeconomics, Dr. Emma Hutchinson, University of Victoria, Maxwell Nicholson, Ben Lukenchuk, Timothy Taylor, 2016. URL:// https://pressbooks.bccampus.ca/uvicecon103/ (free access)	
3. Principles of Microeconomics - Hawaii Edition Copyright © 2018 by John Lynham. URL: http://pressbooks.oer.hawaii.edu/principlesofmicroeconomics/ (free access)	
4. Вэриан Х. Микроэкономика. Промежуточный уровень. Современный подход. М.: ЮНИТИ, 1997 URL:// https://freakonomics.ru/ (свободный доступ)	

<p>5. Пиндайк Р., Рубинфельд Д. Микроэкономика. М.: Дело, 2001 URL:// http://economics-lib.ru/books/item/f00/s00/z0000013/index.shtml (свободный доступ)</p> <p>6. Тарасевич Л.С., Гребенников П.И., Леусский А.И. Микроэкономика: Учебник. — 4-е изд., испр. и доп. — М.: Юрайт-Издат, 2006. URL:// http://www.consultant.ru/edu/student/download_books/book/tarasevich_1_s_grebennikov_pi_leusskii_ai_mikroekonomika/ (свободный доступ)</p>	
<p>1. Principles of Microeconomics 2e, Steven A. Greenlaw, University of Mary Washington, David Shapiro, Pennsylvania State University, 2018 Rice University. URL:// https://openstax.org/books/principles-microeconomics-2e/pages/preface (free access)</p> <p>2. Principles of Microeconomics, Dr. Emma Hutchinson, University of Victoria, Maxwell Nicholson, Ben Lukenchuk, Timothy Taylor, 2016. URL:// https://pressbooks.bccampus.ca/uvicecon103/ (free access)</p> <p>3. Principles of Microeconomics - Hawaii Edition Copyright © 2018 by John Lynham. URL: http://pressbooks.oer.hawaii.edu/principlesofmicroeconomics/ (free access)</p> <p>4. Вэриан Х. Микроэкономика. Промежуточный уровень. Современный подход. М.: ЮНИТИ, 1997 URL:// https://freakonomics.ru/ (свободный доступ)</p> <p>5. Пиндайк Р., Рубинфельд Д. Микроэкономика. М.: Дело, 2001 URL:// http://economics-lib.ru/books/item/f00/s00/z0000013/index.shtml (свободный доступ)</p> <p>6. Тарасевич Л.С., Гребенников П.И., Леусский А.И. Микроэкономика: Учебник. — 4-е изд., испр. и доп. — М.: Юрайт-Издат, 2006. URL:// http://www.consultant.ru/edu/student/download_books/book/tarasevich_1_s_grebennikov_pi_leusskii_ai_mikroekonomika/ (свободный доступ)</p>	Theory of consumer choice
<p>1. Principles of Microeconomics 2e, Steven A. Greenlaw, University of Mary Washington, David Shapiro, Pennsylvania State University, 2018 Rice University. URL:// https://openstax.org/books/principles-microeconomics-2e/pages/preface (free access)</p> <p>2. Principles of Microeconomics, Dr. Emma Hutchinson, University of Victoria, Maxwell Nicholson, Ben Lukenchuk, Timothy Taylor, 2016. URL:// https://pressbooks.bccampus.ca/uvicecon103/ (free access)</p> <p>3. Principles of Microeconomics - Hawaii Edition Copyright © 2018 by John Lynham. URL: http://pressbooks.oer.hawaii.edu/principlesofmicroeconomics/ (free access)</p> <p>4. Вэриан Х. Микроэкономика. Промежуточный уровень. Современный подход. М.: ЮНИТИ, 1997 URL:// https://freakonomics.ru/ (свободный доступ)</p>	Theory of production and costs

<p>5. Пиндайк Р., Рубинфельд Д. Микроэкономика. М.: Дело, 2001 URL:// http://economics-lib.ru/books/item/f00/s00/z0000013/index.shtml (свободный доступ)</p> <p>6. Тарасевич Л.С., Гребенников П.И., Леусский А.И. Микроэкономика: Учебник. — 4-е изд., испр. и доп. — М.: Юрайт-Издат, 2006. URL:// http://www.consultant.ru/edu/student/download_books/book/tarasevich_1_s_grebennikov_pi_leusskii_ai_mikroekonomika/ (свободный доступ)</p>	
<p>1. Principles of Microeconomics 2e, Steven A. Greenlaw, University of Mary Washington, David Shapiro, Pennsylvania State University, 2018 Rice University. URL:// https://openstax.org/books/principles-microeconomics-2e/pages/preface (free access)</p> <p>2. Principles of Microeconomics, Dr. Emma Hutchinson, University of Victoria, Maxwell Nicholson, Ben Lukenchuk, Timothy Taylor, 2016. URL:// https://pressbooks.bccampus.ca/uvicecon103/ (free access)</p> <p>3. Principles of Microeconomics - Hawaii Edition Copyright © 2018 by John Lynham. URL: http://pressbooks.oer.hawaii.edu/principlesofmicroeconomics/ (free access)</p> <p>4. Вэриан Х. Микроэкономика. Промежуточный уровень. Современный подход. М.: ЮНИТИ, 1997 URL:// https://freakonomics.ru/ (свободный доступ)</p> <p>5. Пиндайк Р., Рубинфельд Д. Микроэкономика. М.: Дело, 2001 URL:// http://economics-lib.ru/books/item/f00/s00/z0000013/index.shtml (свободный доступ)</p> <p>6. Тарасевич Л.С., Гребенников П.И., Леусский А.И. Микроэкономика: Учебник. — 4-е изд., испр. и доп. — М.: Юрайт-Издат, 2006. URL:// http://www.consultant.ru/edu/student/download_books/book/tarasevich_1_s_grebennikov_pi_leusskii_ai_mikroekonomika/ (свободный доступ)</p>	Theory of the firm in conditions of perfect competition
<p>1. Principles of Microeconomics 2e, Steven A. Greenlaw, University of Mary Washington, David Shapiro, Pennsylvania State University, 2018 Rice University. URL:// https://openstax.org/books/principles-microeconomics-2e/pages/preface (free access)</p> <p>2. Principles of Microeconomics, Dr. Emma Hutchinson, University of Victoria, Maxwell Nicholson, Ben Lukenchuk, Timothy Taylor, 2016. URL:// https://pressbooks.bccampus.ca/uvicecon103/ (free access)</p> <p>3. Principles of Microeconomics - Hawaii Edition Copyright © 2018 by John Lynham. URL: http://pressbooks.oer.hawaii.edu/principlesofmicroeconomics/ (free access)</p> <p>4. Вэриан Х. Микроэкономика. Промежуточный уровень. Современный подход. М.: ЮНИТИ, 1997 URL:// https://freakonomics.ru/ (свободный доступ)</p>	Factor market

<p>5. Пиндайк Р., Рубинфельд Д. Микроэкономика. М.: Дело, 2001 URL:// http://economics-lib.ru/books/item/f00/s00/z0000013/index.shtml (свободный доступ)</p> <p>6. Тарасевич Л.С., Гребенников П.И., Леусский А.И. Микроэкономика: Учебник. — 4-е изд., испр. и доп. — М.: Юрайт-Издат, 2006. URL:// http://www.consultant.ru/edu/student/download_books/book/tarasevich_l_s_grebennikov_pi_leusskii_ai_mikroekonomika/ (свободный доступ)</p>	
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Section 2. Macroeconomics

Source	Topic
<p>1. Blanchard O. Macroeconomics. 6th ed. Pearson. 2016. 622 p. URL:// https://vowi.fsinf.at/images/3/3b/Macroeconomics_%286th_Edition%29_-_Blanchard%2C_Olivier.pdf (free access)</p> <p>2. Mankiw G. Macroeconomics. Harvard University. 2019. 719 p. URL:// https://www.sea-stat.com/wp-content/uploads/2020/08/N.-Gregory-Mankiw-Macroeconomics-Macmillan-Higher-Education-2019-1.pdf (free access)</p> <p>3. McConnell, Campbell R. Economics: principles, problems, and policies / Campbell R. McConnell, Stanley L. Brue, Sean M. Flynn. — 18th ed. p. cm. — The McGraw-Hill series in economics, 2009 - 917 p. https://faculty.ksu.edu.sa/sites/default/files/eb_mccconnell_econ.18e.pdf (free access)</p> <p>4. Бланшар О. Макроэкономика. М.: Изд. дом НИУ ВШЭ. 2015. 672 с. URL:// https://vse-ychebniki.ru/makroekonomika/olive-blanshar-makroekonomika/(свободный доступ)</p> <p>5. Дорнбуш Р., Фишер С. Макроэкономика. ИНФРА-М. 784 с. URL:// https://vse-ychebniki.ru/makroekonomika/dornbush-r-makroekonomika/(свободный доступ)</p> <p>6. Мэнкью Г. Макроэкономика. Пер. с англ. М.: Изд-во МГУ. 1994. 736с. URL:// http://math.isu.ru/ru/chairs/me/files/books/mankiw.pdf</p>	<p>Macroeconomic indicators</p>
<p>1. Blanchard O. Macroeconomics. 6th ed. Pearson. 2016. 622 p. URL:// https://vowi.fsinf.at/images/3/3b/Macroeconomics_%286th_Edition%29_-_Blanchard%2C_Olivier.pdf (free access)</p> <p>2. Mankiw G. Macroeconomics. Harvard University. 2019. 719 p. URL:// https://www.sea-stat.com/wp-content/uploads/2020/08/N.-Gregory-Mankiw-Macroeconomics-Macmillan-Higher-Education-2019-1.pdf (free access)</p> <p>3. McConnell, Campbell R. Economics: principles, problems, and policies / Campbell R. McConnell, Stanley L. Brue, Sean M. Flynn. —</p>	<p>Macroeconomic policy</p>

<p>18th ed. p. см. — The McGraw-Hill series in economics, 2009 - 917 p. https://faculty.ksu.edu.sa/sites/default/files/eb_mcconnell_econ.18e.pdf (free access)</p> <p>4. Бланшар О. Макроэкономика. М.: Изд. дом НИУ ВШЭ. 2015. 672 с. URL:// https://vse-uchebniki.ru/makroekonomika/olive-blanshar-makroekonomika/ (свободный доступ)</p> <p>5. Дорнбуш Р., Фишер С. Макроэкономика. ИНФРА-М. 784 с. URL:// https://vse-uchebniki.ru/makroekonomika/dornbush-r-makroekonomika/ (свободный доступ)</p> <p>6. Мэнкью Г. Макроэкономика. Пер. с англ. М.: Изд-во МГУ. 1994. 736с. URL:// http://math.isu.ru/ru/chairs/me/files/books/mankiw.pdf (свободный доступ)</p>	
<p>1. Blanchard O. Macroeconomics. 6th ed. Pearson. 2016. 622 p. URL:// https://vowi.fsinf.at/images/3/3b/Macroeconomics_%286th Edition%29 - Blanchard%2C Olivier.pdf (free access)</p> <p>2. Mankiw G. Macroeconomics. Harvard University. 2019. 719 p. URL:// https://www.sea-stat.com/wp-content/uploads/2020/08/N.-Gregory-Mankiw-Macroeconomics-Macmillan-Higher-Education-2019-1.pdf (free access)</p> <p>3. McConnell, Campbell R. Economics: principles, problems, and policies / Campbell R. McConnell, Stanley L. Brue, Sean M. Flynn. — 18th ed. p. см. — The McGraw-Hill series in economics, 2009 - 917 p. https://faculty.ksu.edu.sa/sites/default/files/eb_mcconnell_econ.18e.pdf (free access)</p> <p>4.Бланшар О. Макроэкономика. М.: Изд. дом НИУ ВШЭ. 2015. 672 с. URL:// https://vse-uchebniki.ru/makroekonomika/olive-blanshar-makroekonomika/ (свободный доступ)</p> <p>5.Дорнбуш Р., Фишер С. Макроэкономика. ИНФРА-М. 784 с. URL:// https://vse-uchebniki.ru/makroekonomika/dornbush-r-makroekonomika/ (свободный доступ)</p> <p>6.Мэнкью Г. Макроэкономика. Пер. с англ. М.: Изд-во МГУ. 1994. 736с. URL:// http://math.isu.ru/ru/chairs/me/files/books/mankiw.pdf (свободный доступ)</p>	AD-AS model
<p>1. Blanchard O. Macroeconomics. 6th ed. Pearson. 2016. 622 p. URL:// https://vowi.fsinf.at/images/3/3b/Macroeconomics_%286th Edition%29 - Blanchard%2C Olivier.pdf (free access)</p> <p>2. Mankiw G. Macroeconomics. Harvard University. 2019. 719 p. URL:// https://www.sea-stat.com/wp-content/uploads/2020/08/N.-Gregory-Mankiw-Macroeconomics-Macmillan-Higher-Education-2019-1.pdf (free access)</p> <p>3. McConnell, Campbell R. Economics: principles, problems, and policies / Campbell R. McConnell, Stanley L. Brue, Sean M. Flynn. —</p>	Labor market and unemployment. Inflation

<p>18th ed. p. см. — The McGraw-Hill series in economics, 2009 - 917 p. https://faculty.ksu.edu.sa/sites/default/files/eb_mcconnell_econ.18e.pdf (free access)</p> <p>4. Бланшар О. Макроэкономика. М.: Изд. дом НИУ ВШЭ. 2015. 672 с. URL:// https://vse-ychebniki.ru/makroekonomika/olive-blanshar-makroekonomika/ (свободный доступ)</p> <p>5. Дорнбуш Р., Фишер С. Макроэкономика. ИНФРА-М. 784 с. URL:// https://vse-ychebniki.ru/makroekonomika/dornbush-r-makroekonomika/ (свободный доступ)</p> <p>6. Мэнкью Г. Макроэкономика. Пер. с англ. М.: Изд-во МГУ. 1994. 736с. URL:// http://math.isu.ru/ru/chairs/me/files/books/mankiw.pdf (свободный доступ)</p>	
<p>1. Blanchard O. Macroeconomics. 6th ed. Pearson. 2016. 622 p. URL:// https://vowi.fsinf.at/images/3/3b/Macroeconomics_%286th%20Edition%29_-_Blanchard%2C_Olivier.pdf (free access)</p> <p>2. Mankiw G. Macroeconomics. Harvard University. 2019. 719 p. URL:// https://www.sea-stat.com/wp-content/uploads/2020/08/N.-Gregory-Mankiw-Macroeconomics-Macmillan-Higher-Education-2019-1.pdf (free access)</p> <p>3. McConnell, Campbell R. Economics: principles, problems, and policies / Campbell R. McConnell, Stanley L. Brue, Sean M. Flynn. — 18th ed. p. см. — The McGraw-Hill series in economics, 2009 - 917 p. https://faculty.ksu.edu.sa/sites/default/files/eb_mcconnell_econ.18e.pdf (free access)</p> <p>4. Бланшар О. Макроэкономика. М.: Изд. дом НИУ ВШЭ. 2015. 672 с. URL:// https://vse-ychebniki.ru/makroekonomika/olive-blanshar-makroekonomika/ (свободный доступ)</p> <p>5. Дорнбуш Р., Фишер С. Макроэкономика. ИНФРА-М. 784 с. URL:// https://vse-ychebniki.ru/makroekonomika/dornbush-r-makroekonomika/ (свободный доступ)</p> <p>6. Мэнкью Г. Макроэкономика. Пер. с англ. М.: Изд-во МГУ. 1994. 736с. URL:// http://math.isu.ru/ru/chairs/me/files/books/mankiw.pdf (свободный доступ)</p>	Keynesian cross model. IS-LM model

Section 3. Macroeconomic dynamics. Open economy models

Source	Topic
<p>1. Burda M., Wyplosz C. Macroeconomics. A European Text, Seventh Edition. Oxford University Press. 2017. 624 p. URL:// https://global.oup.com/uk/orc/busecon/economics/burda7e/student/webappendices/ (free access)</p>	Economic growth

<p>2. Mankiw G. Macroeconomics. Harvard University. 2019. 719 p. URL://https://www.sea-stat.com/wp-content/uploads/2020/08/N.-Gregory-Mankiw-Macroeconomics-Macmillan-Higher-Education-2019-1.pdf (free access)</p> <p>3. Turner P. Macroeconomics. OER Commons. URL://https://www.oercommons.org/courses/macro-economics-5/view (free access)</p> <p>4. Дорнбуш Р., Фишер С. Макроэкономика. ИНФРА-М. 784 с. URL://https://vse-uchebniki.ru/makroekonomika/dornbush-r-makroekonomika/ (свободный доступ)</p> <p>5. Мэнкью Г. Макроэкономика. Пер. с англ. М.: Изд-во МГУ. 1994. 736с. URL://http://math.isu.ru/ru/chairs/me/files/books/mankiw.pdf (свободный доступ)</p>	
<p>1. Burda M., Wyplosz C. Macroeconomics. A European Text, Seventh Edition. Oxford University Press. 2017. 624 p. URL://https://global.oup.com/uk/orc/busecon/economics/burda7e/student/webappendices/ (free access)</p> <p>2. Mankiw G. Macroeconomics. Harvard University. 2019. 719 p. URL://https://www.sea-stat.com/wp-content/uploads/2020/08/N.-Gregory-Mankiw-Macroeconomics-Macmillan-Higher-Education-2019-1.pdf (free access)</p> <p>3. Turner P. Macroeconomics. OER Commons. URL://https://www.oercommons.org/courses/macro-economics-5/view (free access)</p> <p>4. Дорнбуш Р., Фишер С. Макроэкономика. ИНФРА-М. 784 с. URL://https://vse-uchebniki.ru/makroekonomika/dornbush-r-makroekonomika/ (свободный доступ)</p> <p>5. Мэнкью Г. Макроэкономика. Пер. с англ. М.: Изд-во МГУ. 1994. 736с. URL://http://math.isu.ru/ru/chairs/me/files/books/mankiw.pdf (свободный доступ)</p>	Theory of international trade
<p>1. Burda M., Wyplosz C. Macroeconomics. A European Text, Seventh Edition. Oxford University Press. 2017. 624 p. URL://https://global.oup.com/uk/orc/busecon/economics/burda7e/student/webappendices/ (free access)</p> <p>2. Mankiw G. Macroeconomics. Harvard University. 2019. 719 p. URL://https://www.sea-stat.com/wp-content/uploads/2020/08/N.-Gregory-Mankiw-Macroeconomics-Macmillan-Higher-Education-2019-1.pdf (free access)</p> <p>3. Turner P. Macroeconomics. OER Commons. URL://https://www.oercommons.org/courses/macro-economics-5/view (free access)</p> <p>4. Дорнбуш Р., Фишер С. Макроэкономика. ИНФРА-М. 784 с. URL://https://vse-uchebniki.ru/makroekonomika/dornbush-r-makroekonomika/ (свободный доступ)</p> <p>5. Мэнкью Г. Макроэкономика. Пер. с англ. М.: Изд-во МГУ. 1994. 736с. URL://http://math.isu.ru/ru/chairs/me/files/books/mankiw.pdf (свободный доступ)</p>	Balance payments: Macroeconomic aspects

<p>1. Burda M., Wyplosz C. Macroeconomics. A European Text, Seventh Edition. Oxford University Press. 2017. 624 p. URL:// https://global.oup.com/uk/orc/busecon/economics/burda7e/student/webappendices/ (free access)</p> <p>2. Mankiw G. Macroeconomics. Harvard University. 2019. 719 p. URL:// https://www.sea-stat.com/wp-content/uploads/2020/08/N.-Gregory-Mankiw-Macroeconomics-Macmillan-Higher-Education-2019-1.pdf (free access)</p> <p>3. Turner P. Macroeconomics. OER Commons. URL:// https://www.oercommons.org/courses/macroeconomics-5/view (free access)</p> <p>4. Дорнбуш Р., Фишер С. Макроэкономика. ИНФРА-М. 784 с. URL:// https://vse-uchebniki.ru/makroekonomika/dornbush-r-makroekonomika/ (свободный доступ)</p> <p>5. Мэнкью Г. Макроэкономика. Пер. с англ. М.: Изд-во МГУ. 1994. 736с. URL:// http://math.isu.ru/ru/chairs/me/files/books/mankiw.pdf (свободный доступ)</p>	Exchange rate as a macroeconomic indicator
<p>1. Burda M., Wyplosz C. Macroeconomics. A European Text, Seventh Edition. Oxford University Press. 2017. 624 p. URL:// https://global.oup.com/uk/orc/busecon/economics/burda7e/student/webappendices/ (free access)</p> <p>2. Mankiw G. Macroeconomics. Harvard University. 2019. 719 p. URL:// https://www.sea-stat.com/wp-content/uploads/2020/08/N.-Gregory-Mankiw-Macroeconomics-Macmillan-Higher-Education-2019-1.pdf (free access)</p> <p>3. Turner P. Macroeconomics. OER Commons. URL:// https://www.oercommons.org/courses/macroeconomics-5/view (free access)</p> <p>4. Дорнбуш Р., Фишер С. Макроэкономика. ИНФРА-М. 784 с. URL:// https://vse-uchebniki.ru/makroekonomika/dornbush-r-makroekonomika/ (свободный доступ)</p> <p>5. Мэнкью Г. Макроэкономика. Пер. с англ. М.: Изд-во МГУ. 1994. 736с. URL:// http://math.isu.ru/ru/chairs/me/files/books/mankiw.pdf (свободный доступ)</p>	Automatic adjustment of an open economy. IS-LM-BP model

Section 4. Financial markets and financial instruments

Source	Topic
<p>1. Damodaran A. Investment Valuation: Tools and Techniques for Determining the Value of any Asset. 3rd ed. Wiley, 2012. URL:// https://suhaplanner.files.wordpress.com/2018/09/investment-valuation-3rd-edition.pdf (free access)</p> <p>2. Security Analysis by Benjamin Graham and David L. Dodd / McGraw-Hill, 1988. – 766 p. URL:// https://glenbradford.com/files/Stocks/security-analysis-benjamin-graham-6th-edition-pdf-february-24-2010-12-08-am-3-0-meg.pdf (free access)</p>	Essence, functions, and segments of the financial market

<p>3. Шарп, У. Ф. Инвестиции: учебник / У.Ф. Шарп, Г.Д. Александер, Д.В. Бэйли; пер. с англ. А.Н. Буренина, А.А. Васина. — Москва : ИНФРА-М, 2022. — 1028 с. URL:// https://traderslib.ru/investment.php?book=investments_sharp</p>	
<p>1. Damodaran A. Investment Valuation: Tools and Techniques for Determining the Value of any Asset. 3rd ed. Wiley, 2012. URL:// https://suhaplanner.files.wordpress.com/2018/09/investment-valuation-3rd-edition.pdf (free access)</p> <p>2. Security Analysis by Benjamin Graham and David L. Dodd / McGraw-Hill, 1988. – 766 p. URL:// https://glenbradford.com/files/Stocks/security-analysis-benjamin-graham-6th-edition-pdf-february-24-2010-12-08-am-3-0-meg.pdf (free access)</p> <p>3. Шарп, У. Ф. Инвестиции: учебник / У.Ф. Шарп, Г.Д. Александер, Д.В. Бэйли; пер. с англ. А.Н. Буренина, А.А. Васина. — Москва : ИНФРА-М, 2022. — 1028 с. URL:// https://traderslib.ru/investment.php?book=investments_sharp</p>	<p>Quantitative assessments in financial markets</p>
<p>1. Brigham E.F., Ehrhardt M. Financial Management: Theory and Practice / South-Western, a part of Cengage Learning. – 2011. 1152 p. URL:// https://handoutset.com/wp-content/uploads/2022/03/Financial-Management-Theory-and-Practice-13th-Edition-by-Eugene-F.-Brigham-Michael-C.-Ehrhardt.pdf (free access)</p> <p>2. Damodaran A. Investment Valuation: Tools and Techniques for Determining the Value of any Asset. 3rd ed. Wiley, 2012. URL:// https://suhaplanner.files.wordpress.com/2018/09/investment-valuation-3rd-edition.pdf (free access)</p> <p>3. Security Analysis by Benjamin Graham and David L. Dodd / McGraw-Hill, 1988. – 766 p. URL:// https://glenbradford.com/files/Stocks/security-analysis-benjamin-graham-6th-edition-pdf-february-24-2010-12-08-am-3-0-meg.pdf (free access)</p> <p>4. Бригхэм Ю., Эрхардт М. / Пер. с англ. под ред. к. э. н. Е. А. Дорофеева. Финансовый менеджмент. 10-е изд. — СПб.: Питер, — 960 с.. 2009. URL:// https://all-sci.net/management-finansovyy/finansovyy-menedjment-izd-spb-piter.html (free access)</p> <p>5. Шарп, У. Ф. Инвестиции: учебник / У.Ф. Шарп, Г.Д. Александер, Д.В. Бэйли; пер. с англ. А.Н. Буренина, А.А. Васина. — Москва : ИНФРА-М, 2022. — 1028 с. URL:// https://traderslib.ru/investment.php?book=investments_sharp</p>	<p>Securities market, securities market instruments</p>
<p>1. Brigham E.F., Ehrhardt M. Financial Management: Theory and Practice / South-Western, a part of Cengage Learning. – 2011. 1152 p. URL:// https://handoutset.com/wp-content/uploads/2022/03/Financial-Management-Theory-and-Practice-13th-Edition-by-Eugene-F.-Brigham-Michael-C.-Ehrhardt.pdf (free access)</p> <p>2. Damodaran A. Investment Valuation: Tools and Techniques for Determining the Value of any Asset. 3rd ed. Wiley, 2012. URL://</p>	<p>Principles of investing in financial markets</p>

<p>https://suhaplanner.files.wordpress.com/2018/09/investment-valuation-3rd-edition.pdf (free access)</p> <p>3. Security Analysis by Benjamin Graham and David L. Dodd / McGraw-Hill, 1988. – 766 p. URL:// https://glenbradford.com/files/Stocks/security-analysis-benjamin-graham-6th-edition-pdf-february-24-2010-12-08-am-3-0-meg.pdf (free access)</p> <p>4. Бригхэм Ю., Эрхардт М. / Пер. с англ. под ред. к. э. н. Е. А. Дорофеева. Финансовый менеджмент. 10-е изд. — СПб.: Питер, — 960 с.. 2009. URL:// https://all-sci.net/menedjment-finansoviy/finansoviy-menedjment-izd-spb-piter.html (свободный доступ)</p> <p>5. Шарп, У. Ф. Инвестиции: учебник / У.Ф. Шарп, Г.Д. Александер, Д.В. Бэйли; пер. с англ. А.Н. Буренина, А.А. Васина. — Москва : ИНФРА-М, 2022. — 1028 с. URL:// https://traderslib.ru/investment.php?book=investments_sharp</p>	
<p>1. Brigham E.F., Ehrhardt M. Financial Management: Theory and Practice / South-Western, a part of Cengage Learning. – 2011. 1152 p. URL://https://handoutset.com/wp-content/uploads/2022/03/Financial-Management-Theory-and-Practice-13th-Edition-by-Eugene-F.-Brigham-Michael-C.-Ehrhardt.pdf (free access)</p> <p>2. Damodaran A. Investment Valuation: Tools and Techniques for Determining the Value of any Asset. 3rd ed. Wiley, 2012. URL:// https://suhaplanner.files.wordpress.com/2018/09/investment-valuation-3rd-edition.pdf (free access)</p> <p>3. Security Analysis by Benjamin Graham and David L. Dodd / McGraw-Hill, 1988. – 766 p. URL:// https://glenbradford.com/files/Stocks/security-analysis-benjamin-graham-6th-edition-pdf-february-24-2010-12-08-am-3-0-meg.pdf (free access)</p> <p>4. Бригхэм Ю., Эрхардт М. / Пер. с англ. под ред. к. э. н. Е. А. Дорофеева. Финансовый менеджмент. 10-е изд. — СПб.: Питер, — 960 с.. 2009. URL:// https://all-sci.net/menedjment-finansoviy/finansoviy-menedjment-izd-spb-piter.html (свободный доступ)</p> <p>5. Шарп, У. Ф. Инвестиции: учебник / У.Ф. Шарп, Г.Д. Александер, Д.В. Бэйли; пер. с англ. А.Н. Буренина, А.А. Васина. — Москва: ИНФРА-М, 2022. — 1028 с. URL:// https://traderslib.ru/investment.php?book=investments_sharp</p>	Tools of financial and investment analysis

Section 5. Econometrics

Source	Topic
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<p>1. Dougherty: Introduction to Econometrics, 5th edition, by Oxford University Press. 2016. 346 p. URL://https://global.oup.com/uk/orc/busecon/economics/dougherty5e/student/studyguide/ (free access)</p> <p>2. Wooldridge Jeffrey M. Introductory Econometrics: A Modern Approach, Fifth Edition. Michigan State University. 2013. 862 p. URL://https://economics.ut.ac.ir/documents/3030266/14100645/Jeffrey_M._Wooldridge_Introductory_Econometrics_A_Modern_Approach_2012.pdf (free access)</p> <p>3. Сток, Д. Введение в эконометрику / Д. Сток, М. Уотсон; пер. с англ. ; под науч. ред. М.Ю. Турунцевой. — Москва : Издательский дом «Дело» РАНХиГС, 2015. — 864 с. URL://https://znanium.com/catalog/product/1043159 (limited access)</p>	Elements of statistics
<p>1. Dougherty: Introduction to Econometrics, 5th edition, by Oxford University Press. 2016. 346 p. URL://https://global.oup.com/uk/orc/busecon/economics/dougherty5e/student/studyguide/ (free access)</p> <p>2. Wooldridge Jeffrey M.. Introductory Econometrics: A Modern Approach, Fifth Edition. Michigan State University. 2013. 862 p. URL://https://economics.ut.ac.ir/documents/3030266/14100645/Jeffrey_M._Wooldridge_Introductory_Econometrics_A_Modern_Approach_2012.pdf (free access)</p> <p>3. Носко, В. П. Эконометрика: в 2 кн. Кн. 1: учебник / В. П. Носко. - Москва : Дело (РАНХиГС), 2021. - 704 с. URL://https://znanium.com/catalog/product/1863225 (limited access)</p> <p>4. Сток, Д. Введение в эконометрику / Д. Сток, М. Уотсон; пер. с англ. ; под науч. ред. М.Ю. Турунцевой. — Москва : Издательский дом «Дело» РАНХиГС, 2015. — 864 с. URL://https://znanium.com/catalog/product/1043159 (limited access)</p>	Linear regression model
<p>1. Dougherty: Introduction to Econometrics, 5th edition, by Oxford University Press. 2016. 346 p. URL://https://global.oup.com/uk/orc/busecon/economics/dougherty5e/student/studyguide/ (free access)</p> <p>2. Wooldridge Jeffrey M. Introductory Econometrics: A Modern Approach, Fifth Edition. Michigan State University. 2013. 862 p. URL://https://economics.ut.ac.ir/documents/3030266/14100645/Jeffrey_M._Wooldridge_Introductory_Econometrics_A_Modern_Approach_2012.pdf (free access)</p> <p>3. Носко, В. П. Эконометрика: в 2 кн. Кн. 1: учебник / В. П. Носко. - Москва : Дело (РАНХиГС), 2021. - 704 с. URL://https://znanium.com/catalog/product/1863225 (limited access)</p> <p>4. Сток, Д. Введение в эконометрику / Д. Сток, М. Уотсон; пер. с англ. ; под науч. ред. М.Ю. Турунцевой. — Москва : Издательский</p>	Regression coefficient hypothesis testing

<p>дом «Дело» РАНХиГС, 2015. — 864 с. URL://https://znanium.com/catalog/product/1043159 (limited access)</p>	
<p>1. Dougherty: Introduction to Econometrics, 5th edition, by Oxford University Press. 2016. 346 p. URL://https://global.oup.com/uk/orc/busecon/economics/dougherty5e/student/studyguide/ (free access)</p> <p>2. Wooldridge Jeffrey M. Introductory Econometrics: A Modern Approach, Fifth Edition. Michigan State University. 2013. 862 p. URL://https://economics.ut.ac.ir/documents/3030266/14100645/Jeffrey_M._Wooldridge_Introductory_Econometrics_A_Modern_Approach_2012.pdf (free access)</p> <p>3. Носко, В. П. Эконометрика: в 2 кн. Кн. 1: учебник / В. П. Носко. - Москва : Дело (РАНХиГС), 2021. - 704 с. URL://https://znanium.com/catalog/product/1863225 (limited access)</p> <p>4. Сток, Д. Введение в эконометрику / Д. Сток, М. Уотсон; пер. с англ. ; под науч. ред. М.Ю. Турунцевой. — Москва : Издательский дом «Дело» РАНХиГС, 2015. — 864 с. URL://https://znanium.com/catalog/product/1043159 (limited access)</p>	<p>Violations of Classical Regression Model Assumptions: Consequences and Diagnostics</p>
<p>1. Wooldridge Jeffrey M.. Introductory Econometrics: A Modern Approach, Fifth Edition. Michigan State University. 2013 URL://https://economics.ut.ac.ir/documents/3030266/14100645/Jeffrey_M._Wooldridge_Introductory_Econometrics_A_Modern_Approach_2012.pdf (free access)</p> <p>2. Носко, В. П. Эконометрика : в 2 кн. Кн. 1: учебник / В. П. Носко. - Москва: Дело (РАНХиГС), 2021. - 704 с. URL://https://znanium.com/catalog/product/1863225 (limited access)</p> <p>3. Сток, Д. Введение в эконометрику / Д. Сток, М. Уотсон; пер. с англ. ; под науч. ред. М.Ю. Турунцевой. — Москва: Издательский дом «Дело» РАНХиГС, 2015. — 864 с. URL://https://znanium.com/catalog/product/1043159 (limited access)</p>	<p>Functions of simple non-linear regressions</p>

Recommended online courses

Section 1. Economic behavior of consumers and firms

1. Microeconomics Principles (Coursera): <https://www.coursera.org/learn/microeconomics#syllabus>
2. The Power of Markets I: The Basics of Supply and Demand and Consumer Behavior (Coursera): <https://www.coursera.org/learn/market-power#syllabus>
3. The Power of Markets II: Market Structure and Firm Behavior (Coursera): <https://www.coursera.org/learn/market-structure#syllabus>
4. Microeconomics: The Power of Markets (Coursera): <https://www.coursera.org/learn/microeconomics-part1#syllabus>

5. Firm Level Economics: Consumer and Producer Behavior (Coursera):
<https://www.coursera.org/learn/firm-level-economics#syllabus>

6. Microeconomics: The Power of Markets (Coursera)
<https://www.coursera.org/learn/microeconomics-part1>

Section 2. Macroeconomics

1. Macroeconomics - The Basics (Edx)
<https://www.edx.org/course/macroeconomics-literacy?index=product&queryID=47d9260cb1bfebd0fb92c8bea7f86334&position=4>

2. Principles of Economics (Edx) <https://www.edx.org/course/principles-of-economics?index=product&queryID=47d9260cb1bfebd0fb92c8bea7f86334&position=1>

3. Fundamentals of Macroeconomics (Edx) <https://www.edx.org/course/fundamentals-of-macroeconomics?index=product&queryID=47d9260cb1bfebd0fb92c8bea7f86334&position=2>

Section 3. Macroeconomic dynamics. Open economy models

1. Introduction to Economic Theories (Coursera) <https://www.coursera.org/learn/intro-economic-theories>

2. Trade, Immigration and Exchange Rates in a Globalized World (Coursera)
<https://www.coursera.org/learn/trade-immigration-exchange-rates-globalized-world?specialization=globalization-economic-growth-and-stability#syllabus>

3. Macroeconomics for Business Management (Coursera)
<https://www.coursera.org/learn/macroeconomics-for-business-management>

Section 4. Financial markets and financial instruments

1. Make Smart Investment Decisions in a Global World. Learn how a wealth-generating investment portfolio functions in practice (Coursera)
<https://www.coursera.org/specializations/investment-management>

2. Investment Strategies and Portfolio Analysis (Coursera)
<https://www.coursera.org/learn/investment-strategies-portfolio-analysis>

3. Managing Investments in Today's Fast-Changing Economic Environment: Secrets of HEC Investment Managers Paris and AXA (Coursera) <https://www.coursera.org/learn/investment-management>

4. Understanding Financial Markets (Coursera)
<https://www.coursera.org/learn/understanding-financial-markets>

5. Global Financial Markets and Instruments (Coursera)
<https://www.coursera.org/learn/global-financial-markets-instruments>

6. Understanding Financial Markets (Coursera)
<https://www.coursera.org/learn/understanding-financial-markets>

Section 5. Econometrics

1. Econometrics: Methods and Applications (Coursera)
<https://www.coursera.org/learn/erasmus-econometrics>
2. Enjoyable Econometrics (Coursera) <https://www.coursera.org/learn/enjoyable-econometrics>
3. Linear Regression and Modeling (Coursera) www.coursera.org/learn/linear-regression-model#syllabus
4. Introduction to Statistics (Coursera) <https://www.coursera.org/learn/stanford-statistics#syllabus>
5. Introduction to Data Analysis (Openedu)
https://openedu.ru/course/spbu/DATA_ANALYSIS/
6. Econometrics for Economists and Finance Practitioners (Coursera)
<https://www.coursera.org/specializations/econometrics-for-economists-and-finance-practitioners>
7. Basic Statistics (Coursera) <https://www.coursera.org/learn/basic-statistics>
8. Inferential Statistics (Coursera) <https://www.coursera.org/learn/inferential-statistics>
9. Linear Regression for Business Statistics <https://www.coursera.org/learn/linear-regression-business-statistics>
10. Introductory Econometrics: A Practical Approach
<https://stepik.org/course/128816/promo?search=2395461966>