УНИВЕРСИТЕТ ЗА НАЦИОНАЛНО И СВЕТОВНО СТОПАНСТВО

UNIVERSITY OF NATIONAL AND WORLD ECONOMY

Adopted by the Faculty Council Decision of
Faculty of General Economics
protocol № ….. / ……

Approved by:

Dean of Faculty
Prof. Georgi Petrunov, PhD

SYLLABUS

Course	**MACROECONOMIC THEORY AND ANALYSES**	
Course category	**COMPULSORY**	
Area of study	**SOCIAL SCIENCES, ECONOMICS AND LAW**	
Field of study	**ECONOMICS**	
Degree programme	**ECONOMICS TAUGHT IN ENGLISH**	
Educational and qualification degree	**BACHELOR OF ECONOMICS**	
Faculty	**FACULTY OF GENERAL ECONOMICS**	
Department	**ECONOMICS**	
Academic hours	*Full Time*	**60 hours**
Extracurricular academic hours	*Full Time*	**60 hours**
Credits	**4**	
Lecturer	**Assoc. prof. Dimitar Damyanov, PhD** **Assoc. prof. Nikolay Velichkov, PhD**	

COURSE DESCRIPTION

1. The course in Macroeconomic Theory and Analyses has been taught to students enrolled in the "ECONOMICS TAUGHT IN ENGLISH" degree programme for the "Bachelor" EQD, since the 2009/2010 academic year.

2. Course description: The course in Macroeconomic Theory and Analyses is intended for students who have already taken the courses in Fundamentals of Economic Theory, Microeconomics and Macroeconomics. Students must be familiar with the terminology and the basic knowledge of the principles of functioning of the economy at the various levels of aggregation. The methods of teaching also rely on the knowledge acquired by students in the courses in Mathematics and Statistics, studied in the previous years.

The course is a logical continuation of the first-year course in Macroeconomics, where students have learned the basic macroeconomic categories and the key relationships in the national economy. It elaborates theoretical constructions and models of the previous discipline, following the standard logic of presentation of the macroeconomic issues. In the examination of each thematic range of issues the course focuses on its interpretation within the framework of the different theoretical concepts – Keynesian school, post-Keynesian school, neo-Keynesian school, neoclassical school, monetarism, new classical macroeconomics, etc. It traces out the evolution of the views within each of major macroeconomic theories, and analyzes the fundamental assumptions and conclusions drawn in the respective concepts and models.

3. Language of instruction: English

CONTENT

№	TOPIC	Academic hours			
		Full time		Distance learning	
		L	S	L	S
1.	**INTRODUCTION TO MACROECONOMIC THEORY AND ANALYSES** • Classical theory. • Keynesian theory. • Neoclassical Theory. • Monetarist school. • New classical macroeconomics (rational expectations school). • Three main macroeconomic models: short-run, medium-run, and long- run models. • Three main macroeconomic equilibriums: the expenditure equilibrium, the IS-LM equilibrium and the aggregate demand-aggregate supply equilibrium. • Contemporary debate between different theoretical schools.	4			
2.	**MEASURING THE NATIONAL ECONOMY** • The circular flow of expenditure and income. • Equality between expenditure and income. Injections and withdrawals. • Gross domestic product (GDP).	4			

	• Three ways of measuring GDP: the final expenditure approach, the income approach and the product approach. Value added and double counting. • Net domestic product (NDP), gross national income (GNI), and net national income (NNI). Gross national disposable income (GNDI) and net national disposable income (NNDI). • Gross national product (GNP) and net economic well-being. • Nominal GDP and real GDP. • Price indices and GDP deflator. • Classification criteria, advantages, and disadvantages of the price indices.				
3.	**CONSUMPTION AND SAVING** • The consumption function of J. Keynes. • Saving function. • Average propensities to consume and to save (APC and APS). Marginal propensities to consume and to save (MPC and MPS). • The absolute income hypothesis (AIH). • The permanent income hypothesis (PIH). • Measurement of permanent income. • Short-run multipliers according to the absolute income hypothesis and the permanent income hypothesis. • The "life-cycle" hypothesis of F. Modigliani. • Other determinants of consumption: wealth, interest rate, redistribution of income. • Saving: household saving, business saving, and national saving.	4			
4.	**INVESTMENT** • Gross fixed capital formation and changes in inventories. • Depreciation (Capital consumption). • Gross investment and net investment. • Investment demand. • Marginal efficiency of capital theory. • Present value approach and marginal efficiency of capital approach. • Marginal efficiency of investment theory. • "Animal spirits" expectations of J. Keynes. • Accelerator: a simple model of accelerator and an expectations-augmented accelerator. • Profit as a determinant of investments. • Tobin's q model. • Neoclassical approach to investment. • Investment and relative input prices. • The influence of taxes and subsidies.	4			

5.	**GOVERNMENT EXPENDITURE AND TAXATION. NET EXPORT** • Government expenditures. • Gross and net taxes, autonomous and induced taxes. • Government expenditure multiplier and tax multiplier in a closed economy. • Balanced budget multiplier in a closed economy with and without induced taxes. • Budget deficit and government debt. • The limits of the budget deficit. • Financing the deficit: domestic financing and foreign financing, seigniorage and inflation tax. • The crowding out effect. • Ricardian equivalence. • Budget deficit in the absence of and in overlapping generation models. • Export, the import function, and the net export function. • Working out the basic multiplier and the tax multiplier in an open economy with induced taxes.	4			
6.	**EXPENDITURE AND INCOME: EXPENDITURE EQUILIBRIUM** • Aggregate expenditure function. • Autonomous expenditure and induced expenditure. • Aggregate expenditure in a closed economy. • Marginal propensity to import (MPIm) and aggregate expenditures in an open economy. • Marginal propensity to tax (MPT). • Marginal propensity to spend (MPE). • Ways to draw the aggregate expenditure curve. • Expenditure equilibrium: the mechanisms for its maintenance. • Changes in autonomous expenditures. • Changes in the marginal propensity to spend. • The paradox of thrift.	4			
7.	**MONEY DEMAND** • Money: the definition and functions. • Money supply and its measures. • Classical quantity theory of money: Fisher's equation and the Cambridge version. • Keynes's theory of the demand for money. • Transactions motive and precautionary motive for holding money. • Speculative motive for holding money. • Money demand as a function of income and interest rate. • W. Baumol's model of the transactions demand for money. • J. Tobin's theory of liquidity preference.	4			

	• Modern quantity theory of the demand for money. • M. Friedman's function of the demand for money. • The influences of wealth, permanent income, and interest rate. • Buffer-stock money.				
8.	**MONEY SUPPLY AND MONEY MARKET EQUILIBRIUM** • Monetary policy tools. • Effectiveness and time lags of monetary policy. • Monetary policy transmission mechanisms. • Money supply: alternative approaches. • Money supply and high-powered money. • The high-powered money multiplier approach. • The flow of funds analysis of J. Tobin and Ch. Goodhart. • The credit counterpart approach. • The central bank independence. • Targets of the central bank: monetary base, inflation, and nominal GDP targeting. • Monetary policy under the currency board arrangement. • Discretionary tools under the Bulgarian currency board. • Money market equilibrium. • Money, credit and interest rate.	4			
9.	**THE GOODS MARKET EQUILIBRIUM AND THE IS CURVE** • The IS curve definition in the simple model of J. Keynes. • Geometric drawing of the IS curve in the simplified model with a four- quadrant diagram, showing the investment demand function, the saving function, the equality between investment and saving, and the IS curve. • Analytical deriving of the IS curve based on equality between investment and saving. • The IS curve definition in an open economy with government. • Geometric drawing of the IS curve in the extended model by transforming four-quadrant diagram taking into account the role of the government and the foreign trade. • Analytical deriving of the IS curve based on equality between injections and withdrawals. • Multi-factor analysis of the dynamics of the goods market, based on the usage of a set of ten autonomous variables. • Shifting the IS curve as a result of changes in the autonomous expenditures and in the marginal propensity to spend.	4			

10.	**THE MONEY MARKET EQUILIBRIUM AND THE LM CURVE** • The LM curve definition. • Geometric drawing of the LM curve. • A four-quadrant diagram, showing the speculative money demand function, the function of the transactions and precautionary money demand, the equality between money demand and money supply, and the LM curve. • Analytical deriving of the LM curve based on equality between the demand for money and the supply of money. • Multi-factor analysis of the dynamics of the money market, based on the usage of a set of five autonomous variables. • Parallel shifts of the LM curve as a result of changes in money supply and the price level. • Changes in the slope of LM in a response of changes in the income elasticity and the interest elasticity of the demand for money.	4			
11.	**IS-LM EQUILIBRIUM** • Definition of the IS-LM equilibrium. • A change in the IS-LM equilibrium as a result of changes in autonomous variables on the goods market and/or the money market. • Macroeconomic policy and IS-LM equilibrium. • Extreme Keynesians and the liquidity trap. • Extreme Keynesian version of the IS-LM equilibrium. • Extreme monetarists. • Extreme monetarist version of the IS-LM equilibrium. • Controversies and capabilities of a rational synthesis. • IS-LM equilibrium in an open economy. • Determinants of the equilibrium GDP and the equilibrium interest rate under fixed and flexible exchange rates. • Effectiveness and ineffectiveness of monetary policy. • Effectiveness and ineffectiveness of fiscal policy. • The fiscal-monetary policy mix. • IS-LM equilibrium and aggregate demand.	4			
12.	**EMPLOYMENT AND UNEMPLOYMENT** • Labor market in the classical and in the Keynesian theory. • Supply of labor and the consumption – leisure trade-off. • Labor demand, labor productivity real wages. • Labor market equilibrium and wage determination. • Measuring employment and unemployment. • Population in working ages and labor force. • Labor force activity rate.	4			

	• Employment and employment rate. • Unemployment and unemployment rate. • Frictional, structural and cyclical unemployment. • Okun's law. • Employment and unemployment with flexible wages. • Employment and unemployment with sticky wages. • Deriving the short-run aggregate supply curve and the long-run aggregate supply curve.				
13.	**MACROECONOMIC EQUILIBRIUM OF AGGREGATE DEMAND AND AGGREGATE SUPPLY** • Aggregate demand. • Determinants of aggregate demand. • Aggregate supply. • Determinants of aggregate supply: production function, demand for labor, and supply of labor. • Income effect and substitution effect. • Classical approach to aggregate supply. • Keynesian approach to aggregate supply. • Short-run aggregate supply and long-run aggregate supply. • Macroeconomic equilibrium of aggregate demand and aggregate supply. • The Keynesian-classical debate.	4			
14.	**INFLATION AND EXPECTATIONS** • Inflation and inflation measurement. • Low inflation, high inflation and hyperinflation. • Anticipated and unanticipated inflation. • Monetary causes of inflation. • Monetary theory and the expectation augmented Phillip's curve. • Cagan's model of hyperinflation. • Inflation and rational expectations. • Fiscal theory of inflation. • Non-monetary factors of inflation. • The influence of wage push, import prices and exchange rate dynamics. • Structural theory of inflation. • Balassa-Samuelson effect. • The effects of inflation.	4			
15.	**BUSINESS CYCLE AND ECONOMIC GROWTH** • Theory and practice of cyclical economic development. • Duration of business cycles. • Leading and lagging indicators. • Alternative concepts of the business cycle: neokeynesian, neoclassical, monetary-credit, and investment theories. • The multiplier-accelerator principle. The sticky prices business cycle.	4			

	• Theory of the real business cycle. • Measurement of economic growth. • Sources of economic growth: capital accumulation, population growth, technological process. • Neokeynesian, neoclassical and endogenous growth models. • Macroeconomic policy to promote growth. • International trade, exchange rate, and economic growth.				
	Total	**60**			

L – Lectures; S – Seminars

TEACHING AND LEARNING METHODS

A combination of various contemporary teaching techniques and methods is applied in instruction, such as lectures, seminars, discussions, outsourced training at business organizations or administrative units (whenever possible), individual assignments, reports, surveys, case studies, among other methods. During the course, practical examples from the Bulgarian macroeconomic environment are analyzed, based on information sourced from National Statistical Institute, Bulgarian National Bank, IMF, Eurostat, World Bank, IMF, etc. The presentation of the material involves the application of modern methodological approaches with a relatively high level of formalization of the relationships studied.

The necessary technical resources for the purpose of instruction are: multimedia, software, information and communications technologies, online information sources, digitally-aided education and other digital devices.

Individual assignment: The individual work requires students to develop a written assignment, whose topic is directly or indirectly related to the specific issues of the course content. It aims to extend students' theoretical knowledge in specific macroeconomic problems and to develop their abilities to prepare empirical analyses based on official statistical sources. The individual work involves the use of a wide range of theoretical papers and requires a creative approach to solving the tasks required. The evaluation of the assignment is based on the following criteria: originality, appropriate selection and usage of the empirical information, and soundness of the theoretical and empirical conclusions. The assessment of the written assignment gives 20% of the final grade.

EXTRACURRICULAR ACADEMIC HOURS

Components	Number of hours	
	Full time	Distance learning
1. Practical training		
2. Course project / Assignment	15	
3. Essay		
4. Case study		
5. Individual / Team activity		
6. Laboratory training		
7. Midterm exam / test	15	
8. Other: ……		
9. Exam	30	
Total	**60**	

EVALUATION

The course evaluation consists of several components.

For full time students the final grade is formed as follows:

FG = 0.3*MTE + 0.2*IA + 0.5*FE,

where:

FG = Final grade;
MTE = Mid-term exam;
IA = Individual assignment;
FE = Final exam.

A variety of e-learning platforms and other contemporary educational technologies are used in the evaluation of student performance.

The final grade is based on a six-point scale, in which the lowest grade for successful completion of the course is 3. Converted to the ECTS the grading scale is as follows:

Excellent /6/	Very good /5/	Good /4/	Average /3/		Fail /2/	
A	**B**	**C**	**D**	**E**	**FX**	**F**
The corresponding number of ECTS credit points is being allocated					No ECTS credit points are being allocated	

QUALIFICATION GOALS

This course is designed in compliance with the requirements of the National Qualification Framework[1] in terms of acquired knowledge, skills and competences for the corresponding EQD and Council Recommendation of Key Competences for Lifelong Learning[2].

The course provides students with knowledge of:

[1]The National Qualification Frame of Bulgaria gives the definition of the knowledge, skills and competences which are required as a result of the education process in the corresponding EQD in higher education.

[2]Council Recommendation on Key Competences for Lifelong Learning (OJ 2018/C 189/01)

- current developments in macroeconomic theory and theoretical macroeconomic analysis,
- interpretations of macroeconomic relationships within the different theoretical concepts,
- achievements and limitations of fundamental theoretical models,
- deepens and broadens their knowledge of key macroeconomic variables and relationships, acquired in the previous related courses, and characterizes their behavior in the controversial macroeconomic reality.

The course will help students acquire skills for:

- applying macroeconomic analysis to the real-world economic problems focusing on the application of theoretical models,
- the assessment of different views for macroeconomic policy design and implementation.

DISSEMINATION OF THE COURSE

1. London School of Economics, UK
2. Humboldt University, Germany
3. University of Oslo, Norway

LITERATURE

A. Basic / Main

1. Blanchard, O., Amighini, A., Giavazzi, F. (2021). Macroeconomics: A European Perspective, 4th edition, Pearson.
2. Cobham D., Macroeconomic Analysis, 2nd edition, Addison Wesley Longman Ltd., New York, 1998.
3. Dornbusch, R., S. Fischer, R. Startz, Macroeconomics, 13th edition, Irwin/McGraw-Hill, New York, 2018.
4. Mankiw, N. G., Macroeconomics, 12th edition, Worth Publishers, 2024.

Online sources:

1. https://ec.europa.eu/eurostat/data/database
2. https://www.imf.org
3. https://www.worldbank.org
4. https://www.oecd.org
5. https://www.bnb.bg
6. https://www.nsi.bg

B. Additional

1. Barro, R., Macroeconomics, A Modern Approach, South-Western, 2008.
2. Barro, R., A. Chu, G. Cozzi, Intermediate Macroeconomics, 1st ed., Cengage, 2017.
3. Blanchard, O. (2025). Macroeconomics, 9th ed., Pearson.
4. Burda, M., Wyplosz, C. (2022). Macroeconomics: A European text, 8th edition, Oxford University Press.
5. Damyanov, D., Velichkov, N., Macroeconomics: Study Guide, Publishing Complex – UNWE, 2021
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7. Gartner, M., Macroeconomics, 5th edition, Pearson Education, 2016.

8. Griffiths, A., St. Wall, Applied Economics, 12th edition, Prentice Hall, 2012.
9. Jones, C. (2024). Macroeconomics, 6th ed., W. W. Norton & Co.
10. Krugman, P., Wells, R. (2024). Macroeconomics, 7th edition, MacMillan.
11. Marthinsen, J., Managing in a Global Economy: Demystifying International Macroeconomics, 2nd Edition, Cengage Learning, 2014.
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14. Parkin, M., Macroeconomics, 13th Edition, Pearson, 2019.
15. Romer, D., Advanced Macroeconomics, 5th edition, McGraw-Hill, 2019.
16. Rossi, R., A. Cencini, Economic and Financial Crises: A New Macroeconomic Analysis, Palgrave Macmillan, 2015.
17. Snowdon, B., H. Vane, Modern Macroeconomics, Edward Elgar,Cheltenham, 2005.
18. Tsoukis, Ch., Theory of Macroeconomic Policy, 1st Edition, Oxford University Press 2020.
19. Williamson, S., Macroeconomics, 6th edition, Pearson, New Jersey, 2018.

Author / Lecturer: _____

(Assoc. prof. Dimitar Damyanov, PhD)

Author / Lecturer: _____

(Assoc. prof. Nikolay Velichkov, PhD)

Head of Department: _____

(Assoc. prof. Ivaylo Beev, PhD)

Dean of Faculty: _____

(Prof. Georgi Petrunov, PhD)