



## MACROECONOMICS

### Syllabus

#### Syllabus details

Higher education level	<b>First (bachelor's)</b>
Branch of knowledge	<b>05 Social and behavioral sciences</b>
Specialty	<b>051 Economy</b>
Educational program	<b>International economics</b>
Discipline status	<b>Compulsory educational component</b>
Form of study	<b>Full-time</b>
Preparation year, semester	<b>1th year, spring semester</b>
Discipline scope	<b>135 hours</b>
Semester control / control measures	<b>Exam</b>
Schedule	<b>Lectures and practical classes - weekly</b>
Language	<b>English</b>
Course leader / teachers information	<b>Lecturer: PhD, associate professor Olena Korohodova, olena.korohodova@lil.kpi.ua</b>  <b>Practical: PhD, associate professor Olena Korohodova, olena.korohodova@lil.kpi.ua</b>
Course placement	<b>Google Drive cloud technology service in the Google Workspace for Education Fundamentals</b>

#### Syllabus program

##### 1. Syllabus description, purpose, subject of study and learning outcomes

The subject of the discipline "Macroeconomics" is the causes and consequences of the joint activities of all agents of the national economy, which are reflected through such generalizing categories as the gross domestic product, social expenditures, employment and unemployment, inflation, the state budget, balance of payments, exchange rate, etc. From macroeconomics expect not only an explanation of the essence of causal links in the economy, but also the disclosure of the opportunities of society in the person of the state to influence the course of economic development of the country.

This course is an introduction to the behavioral science of economics, which focuses on the aggregate behavior of households, firms and the government. Topics covered include gross domestic product, national income, economic growth, unemployment, inflation, the business cycle, fiscal policy and monetary policy, and international trade.

### Learning Objectives

Upon successful completion of the course, students should be able to demonstrate:

- a basic understanding of news relating to the economy as a whole as reported in such publications as The Economist;
- the economic implications of changes in government fiscal or monetary policy;
- how interest rates are determined and the role of interest rates in personal and corporate decision-making;
- and critically apply economic concepts when participating as a citizen in a democratic society.

In particular, students should be able to calculate equilibrium national income levels, calculate and use various multipliers, convert nominal values to real values, and use a graph to explain the impact of changes in fiscal and/or monetary policy on income and price levels.

Also, students should be able to use simple models of international trade to study the flow of goods between countries and discuss the costs of protectionism within the context of such models.

### Assessment:

The ability to demonstrate the following exemplary educational objectives will be evaluated in this course:

- to know the main macroeconomic definitions;
- to employ the appropriate methods, technologies, and data that social and behavioral scientists used to investigate the human condition;
- to use and critique alternative explanatory systems or theories;
- to analyze the effects of historical, social, political, economic, cultural, and global forces on the area under study
- to analyze, critically assess, and develop creative solutions to macroeconomic problems

## **2. Syllabus prerequisites and postrequisites (place in the structural and logical scheme of education according to the relevant educational program)**

The discipline has an interdisciplinary nature and integrates knowledge from other educational and scientific fields. According to the structural and logical scheme of the training program, this

discipline is closely related to other disciplines of General training cycle. The discipline “Macroeconomics” provides a foundation for further study of such modules as “National economics”.

### 3. Syllabus content

Topic 1. Intro to Macroeconomics

Topic 2. Macroeconomic indicators

Topic 3. Labour market. Employment policy

Topic 4. Commodity market

Topic 5. Money Market. Inflationary mechanism

Topic 6. Household consumption. Private investment

Topic 7. Cumulative cost and GDP

Topic 8. Government in the system of national economics

Topic 9. Macroeconomic policy in an open economy

### 4. Training materials and resources

#### *Basic literature:*

1. Macroeconomics: Practice [Electronic Resource]: Teaching manual for the students Specialty 051 "Economics" / S.O. Tulchynska, A. Yu. Pohrebniak, K. Yu. Redko; Igor Sikorsky Kyiv Polytechnic Institute - Electronic text data (1 file: 221 KB). – Kyiv: Igor Sikorsky Kyiv Polytechnic Institute, 2019. - 42 p.
2. The Economics of an Ageing Population Macroeconomic Issues Edited by Paolo Onofri. Available at: [http://englishonlineclub.com/pdf/The%20Economics%20of%20an%20Ageing%20Population%20%20Macroeconomic%20Issues%20\[EnglishOnlineClub.com\].pdf](http://englishonlineclub.com/pdf/The%20Economics%20of%20an%20Ageing%20Population%20%20Macroeconomic%20Issues%20[EnglishOnlineClub.com].pdf)

#### *Additional literature (monographs, articles, documents, electronic resources):*

1. Kukharuk, A. Macroeconomic stability in CIS countries and Ukraine: a statistical approach / Anna Kukharuk // Міжнародне науково-технічне співробітництво: принципи, механізми, ефективність : збірник праць XIII (XXV) Всеукраїнської науково-практичної конференції, 16-17 травня 2017 року, м. Київ. – Київ : КПІ ім. Ігоря Сікорського, 2017. – С. 10. – Бібліогр.: 4 назви.
2. Moiseienko T., Hlushenko J., Korohodova O., Chernenko N. Regulation of international labor migration in the Industry 4.0 and its impact on socio-economic development of the country // KSI Transactions KNOWLEDGE SSOCIETY; Bulgaria. - 2020. - Vol. XIII, № 3, p. 9 – 12.
3. The International Handbook of Competition Edited by Manfred Neumann, Jürgen Weigand, WHU Otto Beisheim Available at:[http://englishonlineclub.com/pdf/The%20International%20Handbook%20of%20Competition%20\[EnglishOnlineClub.com\].pdf](http://englishonlineclub.com/pdf/The%20International%20Handbook%20of%20Competition%20[EnglishOnlineClub.com].pdf)
4. Intermediate Macroeconomics Julio Garín Claremont McKenna College Robert Lester Colby College Eric Sims University of Notre Dame August 2, 2018 [https://www3.nd.edu/~esims1/gls\\_int\\_macro.pdf](https://www3.nd.edu/~esims1/gls_int_macro.pdf)

5. Theory and Applications of Macroeconomics (v. 1.0). Available at: <https://2012books.lardbucket.org/pdfs/theory-and-applications-of-macroeconomics.pdf>
6. Introduction to Macroeconomics Lecture Notes Robert M. Kunst March 2006. Available at: <https://homepage.univie.ac.at/robert.kunst/macro1.pdf>
7. Macroeconomics Second Edition. Available at: [https://www.researchgate.net/publication/317605466\\_Macroeconomics\\_Second\\_Edition](https://www.researchgate.net/publication/317605466_Macroeconomics_Second_Edition)
8. MACROECONOMICS. Matthias Doepke, Andreas Lehnert, Andrew W. Available at: <https://www.bu.edu/econ/files/2014/08/DLS1.pdf>
9. Lecture Notes in Macroeconomics John C. Driscoll Brown University and NBER1 December 21, 2003 Available at: [https://uh.edu/~bsorensen/Macro\\_Lecture\\_Notes.pdf](https://uh.edu/~bsorensen/Macro_Lecture_Notes.pdf)

## Educational content

### 5. Discipline mastering methods (educational component)

№	Topic	Hours	Classes type and content (questions for consideration)	Educational methods
1	Intro to Macroeconomics	4	<b>Lecture 1.</b> <b>Lecture 2.</b>	slide shows, presentations, dialogue on the issue
		4	<b>Practice session 1.</b> <b>Practice session 2.</b>	ducational dispute; dialogue on the issue
2	Macroeconomic indicators	4	<b>Lecture 1.</b> <b>Lecture 2.</b>	slide shows, presentations, dialogue on the issue
		4	<b>Practice session 1.</b> <b>Practice session 2.</b>	retrospective method (recollection); dialogue on issues; consideration of cases; problem solving
3	Labour market. Employment policy	4	<b>Lecture 1.</b> <b>Lecture 2.</b>	slide shows, presentations, dialogue on the issue
		4	<b>Practice session 1.</b> <b>Practice session 2.</b>	retrospective method (recollection); dialogue on issues; consideration of cases; problem solving
4	Commodity market	4	<b>Lecture 1.</b> <b>Lecture 2.</b>	slide shows, presentations, dialogue on the issue
		4	<b>Practice session 1.</b> <b>Practice session 2.</b>	retrospective method (recollection); dialogue on issues; consideration

				of cases
5	Money Market. Inflationary mechanism	4	<b>Lecture 1.</b> <b>Lecture 2.</b>	slide shows, presentations, dialogue on the issue
		4	<b>Practice session 1.</b> <b>Practice session 2.</b>	retrospective method (recollection); dialogue on issues; consideration of cases
6	Household consumption. Private investment	4	<b>Lecture 1.</b> <b>Lecture 2.</b>	slide shows, presentations, dialogue on the issue
		4	<b>Practice session 1.</b> <b>Practice session 2.</b>	retrospective method (recollection); dialogue on issues; consideration of cases
7	Cumulative cost and GDP	4	<b>Lecture 1.</b> <b>Lecture 2.</b>	slide shows, presentations, dialogue on the issue
		4	<b>Practice session 1.</b> <b>Practice session 2.</b>	retrospective method (recollection); dialogue on issues; consideration of cases
8	Government in the system of national economics	4	<b>Lecture 1.</b> <b>Lecture 2.</b>	slide shows, presentations, dialogue on the issue
		4	<b>Practice session 1.</b> <b>Practice session 2.</b>	retrospective method (recollection); dialogue on issues; consideration of cases
9	Macroeconomic policy in an open economy	4	<b>Lecture 1.</b> <b>Lecture 2.</b>	slide shows, presentations, dialogue on the issue
		4	<b>Practice session 1.</b> <b>Practice session 2.</b>	retrospective method (recollection); dialogue on issues; consideration of cases

## 6. Student's self-study

The student's self-study (SSS) involves preparation for lectures and practical classes, which includes: review of the information field on the topic of the lesson, preparation for the discussion of the analyzed information in the classroom; performance of tasks provided by the

teacher in practical classes and lectures; problem solving, module reference work, calculation work. Time distribution of independent work of students:

#### **Student's self-study**

<b>№</b>	<b>Topics and questions submitted for self-study and references to educational literature</b>	<b>Hours on SSS</b>
1	Topic 1. Intro to Macroeconomics	2
2	Topic 2. Macroeconomic indicators	2
3	Topic 3. Labour market. Employment policy	2
4	Topic 4. Commodity market	2
5	Topic 5. Money Market. Inflationary mechanism	3
6	Topic 6. Household consumption. Private investment	3
7	Topic 7. Cumulative cost and GDP	3
8	Topic 8. Government in the system of national economics	2
9	Topic 9. Macroeconomic policy in an open economy	2
10	Modul reference work (MRW)	2
11	Calculation work (CW)	10
20	Exam	30
<b>Total hours</b>		<b>63</b>

### **Policy and control**

#### **7. Syllabus policy (educational component)**

##### **Attending classes**

Lectures, practical classes attendance, as well as absence from them, is not evaluated. However, students are encouraged to attend classes because they teach theoretical material and develop the skills needed to complete a semester individual assignment. The grading system is focused on obtaining points for student activity, as well as performing tasks that are able to develop practical skills and abilities.

##### **Classroom rules**

The system of work involves constant communication in the form of dialogue, providing feedback to students on the material listened to and the tasks received, which may be in the form of feedback, ideas, suggestions and more. Student feedback is an important component in the process of compiling and improving the content of training courses.

At each practical lesson, students are invited to make short reports, including a review of current news on the topic. This approach helps to navigate in the modern business space and draw their own analytical conclusions on problem situations.

Students receive assignments for independent work on the passed material.

Acquisition of students of theoretical economic knowledge and practical skills in accordance with the expected robotics of learning plans of forms of organization of education. Lectures contribute to the formation of theoretical knowledge of the student in the process of teaching theoretical material, solving problems, situations, solving practical and applied nature, which can be used with the help of multimedia tools.

In the course of practical classes involvement in the involvement of theoretical material and the introduction of practical problems in the process of disclosure of individual and differentiated tasks, problem situations, partner discussions, presentations.

The method of studying the discipline is based on interrelated studies of the ability to study lecture material, process program materials in practical classes, perform coordinated tasks in accordance with homework, independent work of students using basic and additional material from information sources.

Initial control is carried out at the beginning of the publication of a new discipline in order to determine the readiness of students to master it. For the results of input control, developers seek help from individual assistance to students, adjusting the learning process.

When studying the material of the discipline, attention is focused on the theoretical aspects of the logic of economic decision-making at the level of individual economic actors, and on the applied value of economic laws defined by laws and regulations of enterprises as economic entities. Lectures lay the foundations for students to understand the essence of economic laws, their causes and consequences. The lecture should organize the creative thinking of students, intensify their thoughts on the problem and help students choose the right tactics in solving certain industrial and commercial situations. In lectures, students must learn to understand the basic concepts and laws of economics, to identify and master the main factors of problematic economic situations.

To master the lecture material, the teacher sends students a reference syllabus, syllabus and other materials. Students are encouraged to review the files in advance, to master the submitted material to clarify certain issues in the lectures online.

The list of recommended literature and material for independent work of students is prepared in the context of topics of the discipline.

When studying the discipline in practical classes, students perform typical computational and analytical tasks and process the material of lectures.

Evaluation control measures missed. Each student has the right to complete missed classes for a good reason (illness confirmed by a doctor's certificate, mobility, etc.) through independent work. More details on the link: <https://kpi.ua/files/n3277.pdf>

**Procedure for appealing the results of evaluation control measures.** The student can raise any issue related to the control procedure and expect it to be considered according to predefined procedures. Students have the right to challenge the results of control measures, explaining which criterion they do not agree with according to the assessment. More details on the link: <https://kpi.ua/files/n3277.pdf>

**Academic integrity.** Any manifestations of academic dishonesty are not tolerated. The consequences of such manifestations are determined by the decision of the department and are regulated in accordance with the "Temporary Regulations on the system of prevention of academic plagiarism at the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute". More details at the link: [https://osvita.kpi.ua/files/downloads/Pologen\\_pro\\_plagiat.pdf](https://osvita.kpi.ua/files/downloads/Pologen_pro_plagiat.pdf)

**Norms of ethical behavior.** Norms of ethical behavior of students and employees are defined in Section 2 of the Code of Honor of the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute". Details: <https://kpi.ua/code>

**Inclusive education.** Acquisition of knowledge and skills during the study of the discipline can be accessible to most people with special educational needs and is carried out in accordance with the Regulations on the organization of inclusive education in Igor Sikorsky Kyiv Polytechnic Institute. More details at the link: <https://kpi.ua/inclusive-education-regulation>

**Assignment of incentive and penalty points.** According to the Regulations on the system of evaluation of learning outcomes, incentive and penalty points are not included in the main scale of the RSE, and their amount may not exceed 10% of the rating scale. Incentive points can be provided for the performance of creative work in the discipline. Penalty points are provided only for late performance of an individual semester task. The distribution of incentive and penalty points is given in the table.

Distribution of incentive and penalty points

<i>Incentive points</i>		<i>Penalty points</i>	
<i>Criterion</i>	<i>Weight score</i>	<i>Criterion</i>	<i>Weight score</i>
Participation (with publication of abstracts) in a scientific-practical conference (on the subject of the discipline)	10 points	Violation of the terms of the calculation work submitted to the teacher at the penultimate practical lesson	-1 point for each day of delay (but not more than -10 points)



Preparation for practical classes and tests is carried out during the independent work of students with the possibility of consulting with the teacher through e-mail (e-mail, messengers). Communication with the teacher is carried out during lectures and practical classes, through e-campus, e-mail, Google Drive cloud technology service in the Google Workspace for Education Fundamentals, as well as through Telegram.

## 8. Types of control and rating system for evaluation of learning outcomes (RSO)

Assessment of the results of current, calendar and semester tests is carried out in accordance with the rating system for assessing the learning outcomes of students in the discipline, which contains assessment criteria that are formed taking into account the requirements of the Regulations on the system of assessment of learning outcomes. Igor Sikorsky.

Current control is carried out during the semester in order to provide feedback between the teacher and students in the learning process and to check the level of theoretical and practical training of students at each stage of the discipline. The results of current control are regularly entered by the teacher in the module "Current control" of the Electronic campus. The results of current control are used both by the teacher - to adjust teaching methods and tools, and by the student - to plan independent work. Means of current control: express-survey, assessment of students' participation in practical classes, assessment of reports, discussions, presentations, as well as assessment of homework.

Calendar control is performed twice a semester as a monitoring of the current state of compliance with the requirements of the syllabus. Calendar control is carried out in the discipline, usually at 7-8 and 14-15 weeks of each semester of students, and is implemented by determining the level of compliance of current achievements (ratings) of the student established and defined in the RSE criteria. The condition for obtaining a positive assessment of the calendar control in the discipline is the value of the current rating of the applicant not less than 50% of the maximum possible at the time of such control. The results of the calendar control are entered by the examiner in the module "Calendar control" of the Electronic campus. An unsatisfactory result of two calendar tests on the educational component cannot be a ground for not admitting a student to the semester control on this educational component, if the student has fulfilled all the conditions of admission provided by the RSO before the beginning of the semester control.

**Current control:** express survey, survey on the topic of the lesson, MCW, test, etc.

**Calendar control:** is conducted twice a semester as a monitoring of the current state of compliance with the requirements of the syllabus.

Criterion	First certification	Second certification
Certification term	8th week	14th week
The condition for certifications is the current rating	≥ 15 points	≥ 30 points

## Semester control: exam

Assessment of student learning outcomes is based on a rating system. The rating system for assessing the learning outcomes of students in the discipline is based on postoperative control over certain criteria and the accumulation of rating points for a variety of educational and cognitive and practical activities of students in the learning process.

The purpose of the rating system is to ensure the quality of training by:

- increasing students' motivation for active, conscious learning, systematic independent work during the semester and responsibility for the results of educational activities;
- establishing constant feedback with each student and timely adjustment of his educational activities;
- ensuring competitiveness and healthy competition in education;
- increasing the objectivity of assessing student learning outcomes;
- reduction of psychological, emotional and physical overload during examination sessions.

When teaching the discipline "Macroeconomics" used RSE of the second type, which contains two components: starting - assessment of student learning activities during the semester (passing or performing certain types of work provided by current control measures) and final - assessment of student learning outcomes during conducting semester control (assessment of the results of passing or performing certain types of work).

Assessment of learning outcomes is carried out on a 100-point scale with subsequent transfer to assessments on a university scale. For each control measure, taking into account the importance, complexity and scope of certain educational and cognitive activities of the student developed evaluation criteria in the system "quality of learning outcomes - rating points" with the definition of certain levels of learning material and skills. The lower limit of positive evaluation of each control measure (question, task) must be at least 60% of the points determined for this control measure (question, task), and the negative result is evaluated at 0 points. If the student did not pass or did not appear for the control event, his result is evaluated in 0 points.

Course grades will be based on two parts:

1) a work in class during the semester; 2) an exam. Classwork worth 60 points. Exam worth 40 points. This gives a total of 100 available points in the course.

### Evaluation control measures

<i>N<sup>o</sup> з/п</i>	<i>Evaluation control measure</i>	<i>%</i>	<i>Weight score</i>	<i>Number</i>	<i>Total</i>
1.	Work on practical / seminar classes	20%	2	10	20*
2.	Module reference work	20%	10	2	20**

3.	Calculation work	20%	20	1	20***
4.	Exam	40%	40	1	40****
	Total				100

\* 20 points cover work in practical / seminar classes. Weight point: 2. The maximum number of points in practical classes:  $2 \times 10 = 20$  points.

Work in the classroom is evaluated by the following criteria:

- "excellent" - complete answer / solution of the problem (not less than 90% of the required information), as well as active participation in discussions: 2 points;
- "good" - a sufficiently complete answer / solution of the problem (not less than 75% of the required information) or a complete answer with minor inaccuracies, as well as some participation in discussions: 1 p .;
- "unsatisfactory" - the answer / solution of the problem does not meet the requirements: 0 p.

\*\* 20 points cover the performance of modular reference work. Weight score – 20 points for 1 modular test during the semester. The maximum number of points for the modular test, which is divided into 2 parts, is  $10 \times 2 = 20$  points.

Criteria for evaluating each of the parts of the MRW:

- "excellent" - the correct solution of all problems using multivariate approaches, correct answers to test tasks: 10 p .;
- "good" - some arithmetic inaccuracies in the calculations; most of the tasks are solved correctly; 10-20% of test tasks are not performed, or incorrect options are selected: 8-9 points;
- "satisfactory" - the smaller part of the problems is solved correctly, there are arithmetic inaccuracies in the calculations, 30-40% of the test tasks are not performed, or incorrect options are selected: 6-7 points;
- non-compliance with MCR: 0 p.

\*\*\* 20 points cover the calculation work in practical classes

Weight score - 20. The maximum number of points per report - 20 b. 2 theoretical questions, and 2 tasks with graphical interpretation. Performed in the form of a 5-7 minute report in a practical lesson. The received estimation varies depending on urgency and degree of disclosure of the declared theme, oratory skill of the speaker, conformity of work to requirements, availability of a visual material, the proved answers to questions of an audience.

Evaluation criteria:

- "excellent" - a creative approach to solving the problem, the ability to fit in the allotted time, deep disclosure of the topic, reflection of their own position, the report is made in accordance with the requirements, clear answers to questions, visual material in speech: 19-20 points;

- "good" - insignificant shortcomings in the requirements listed in the previous paragraph: 14-18 points;
- "satisfactory" - the material is presented illogically, the topic is incompletely disclosed, no clear conclusions are formed, insufficient number of sources: 11-13 points;
- "unsatisfactory" - the task is not completed, the report is not credited: 0 p.

*Conditions of admission to the semester control - exam:*

Conditions for positive current certification for full-time education. According to the results of the value of the current rating of the student in the discipline, students are certified twice a semester. As a result of studying for the first certification, the student must have at least 10 points, for the second certification - at least 30 points.

The maximum sum of points of the starting component is equal to 60 points. The condition for admission to the exam is enrollment in the MCR and a starting rating of at least 40 points.

At the exam, students perform a written test. Each task contains three theoretical questions (tasks) and one practical one. Each question (task) is evaluated with 10 points according to the following criteria:

- "excellent", complete answer, not less than 90% of the required information (complete, error-free solution of the problem) - 9-10 points;
- "good", a fairly complete answer, at least 75% of the required information or minor inaccuracies (complete solution of the problem with minor inaccuracies) - 7-8 points;
- "satisfactory", incomplete answer, not less than 60% of the required information and some errors (the task is performed with certain shortcomings) - 5-6 points;
- "unsatisfactory", the answer does not meet the conditions for "satisfactory" - 0 points.

The sum of starting points and points for the examination test is transferred to the examination grade according to the table:

Table of correspondence of rating points to grades on the university scale:

<b>Scores</b>	<b>Mark</b>
100-95	<i>Excellent</i>
94-85	<i>Very good</i>
84-75	<i>Good</i>
74-65	<i>Satisfactorily</i>
64-60	<i>Enough</i>
<i>Less than 60</i>	<i>Not enough</i>
<i>Admission conditions are not met</i>	<i>Not allowed</i>

## 9. Syllabus additional information (educational component)

Strategies for active and collective learning are used, which are determined by the following methods and technologies:

1) methods of problem-based learning (problem-based presentation, part-search (heuristic conversation) and research method);

2) personality-oriented (developmental) technologies based on active forms and methods of learning ("brainstorming", "situation analysis", discussion, express conference, case technology, etc.);

3) information and communication technologies that provide problem-solving nature of the learning process and activation of students' independent work (electronic presentations for lectures, use of audio and video support of classes, in particular, analysis of YouTube network service on the availability and quality of training videos).

### Work program of the discipline (syllabus):

**Folded:** PhD, associate professor, associate professor of International economy Department  
Olena Korohodova

**Approved by** International economy Department (Protocol № 11 from 26.05.2021)

**Agreed by** the Faculty of Management and Marketing Methodical Council <sup>1</sup> (Protocol № 10 from 15.06.2021)

<sup>1</sup> Methodical council of the university - for general university disciplines.