MODULE DESCRIPTION

| Module code | z-0007z |
|--------------------------|----------------|
| Module name | Mikroekonomia |
| Module name in English | Microeconomics |
| Valid from academic year | 2016/2017 |

A. MODULE PLACEMENT IN THE SYLLABUS

| Field of study | Management and Production Engineering |
|---------------------------------------|--|
| Level of education | 1st degree (1st degree / 2nd degree) |
| Studies profile | General (general / practical) |
| Form and method of conducting classes | Full-time (full-time / part-time) |
| Specialisation | All |
| Unit conducting the module | The Department of Economics and Finances |
| Module co-ordinator | Prof. Oleksandr Oksanych, PhD hab. |
| Approved by: | |

B. MODULE OVERVIEW

| Type of subject/group of subjects | Basic (basic / major / specialist subject / conjoint / other HES) |
|---|---|
| Module status | Compulsory (compulsory / non-compulsory) |
| Language of conducting classes | English |
| Module placement in the syllabus - semester | 1st semester |
| Subject realisation in the academic year | Winter semester (winter semester/ summer) |
| Initial requirements | No requirements (module codes / module names) |
| Examination | Yes (yes / no) |
| Number of ECTS credit points | 5 |

| Method of conducting classes | Lecture | Classes | Laboratory | Project | Other |
|------------------------------|---------|---------|------------|---------|-------|
| Per semester | 45 | 30 | | | |

C. TEACHING RESULTS AND THE METHODS OF ASSESSING TEACHING RESULTS

Module target The aim of the module is to familiarise students with basic elements of the theory of economy concerning enterprise activity and its closest environment. Theoretical fundamentals of microeconomics include the following: the rules of market functioning, the fundamentals of the consumer choice theory, the fundamentals of the production theory, and the fundamentals of the distribution theory. Practical aspects concerns decisions which are made by an enterprise in order to provide optimal states in terms of utilising production factors, achieving the desired levels of costs, gross receipts and profits.

| Effect symbol | Teaching results | Teaching methods (l/c/lab/p/other) | Reference to subject effects | Reference to effects of a field of study |
|------------------|---|--|------------------------------|--|
| | A student has basic knowledge of the essence of | I/c | K_W10 | S1A_W05 |
| | microeconomics as a science of economic | | | S1A_W06 |
| | processes on the level of an enterprise and its | | | |
| | market environment. A student also knows basic | | | |
| W_01 | principles and methods of microeconomics. | | | |
| | A student knows basic notions and categories of | I/c | K_W10 | S1A_W05 |
| W_02 | microeconomics. | | | S1A_W06 |
| | A student knows basic laws of market functioning | I/c | K_W10 | S1A_W05 |
| W_03 | and the mechanisms of self-regulation. | | | S1A_W06 |
| | A student knows basic principles of searching | I/c | K_W10 | S1A_W05 |
| W_04 | optimal states in microeconomics. | | | S1A_W06 |
| | A student can correctly distinguish the types of | I/c | K_U12 | TA1_U09 |
| | markets and describe functioning conditions of an | | | TA1_U12 |
| U_01 | enterprise on each of them. | | | SA1_U03 |
| | A student can correctly formulate and explain basic | I/c | K_U12 | TA1_U09 |
| | notions in microeconomics, their contents, and | | | TA1_U12 |
| U_02 | relationships among them. | | | SA1_U03 |
| | A student can use appropriate mathematical tools to | I/c | K_U12 | TA1_U09 |
| | justify decision-making in microeconomics. | | | TA1_U12 |
| U_03 | | ., | 14, 140.4 | SA1_U03 |
| | As student understands the necessity of continuous | I/c | K_K01 | T1A_K01 |
| | raising his/her professional qualifications in relation | | | |
| K_01 | to the changing market conditions. | 17. | 17 1700 | T44 1600 |
| | A student identifies and solves problems of | I/c | K_K02 | T1A_K02 |
| | economic practice having their reflection in | | | |
| | microeconomics as well as evaluates the rationality | | | |
| | of the decisions made by business entities as | | | |
| 14.00 | regards knowledge of enterprise functioning in the | | | |
| K_02 | market economy. | I/c | K K04 | T1 / 1/02 |
| | A student is able to co-operate and act in a team, | I/C | K_K04 | T1A_K03 |
| | communicate effectively, and act ethically in order to make rational decision as regards microeconomics | | | T1A_K04 |
| K 03 | _ | | | |
| K_03 | in a business entity. | | | |

Teaching contents:

1. Teaching contents as regards lectures

| Lecture number | Teaching contents | Reference to teaching results for a module |
|-------------------|--|---|
| 1 | Basic notions and the subject of economy. | W_01 |
| | | K_01 |
| | Production factors. The process of management. Property, the classification | |
| | of property. The limitation of sources. The limits of production capacity. The | |

| 2 Current socio-economic systems. The description of the market economy. The evolution of the market system in the countries of developed capitalism. The description of the centrally planned economy. Classical economics. Neo-classical economics. 3 Market, supply, and demand. The notion and functions of the market, market classification. Demand and its determining factors. The demand law. Supply and its determining factors. The supply law. Market equilibrium price. Buyer's market and seller's market. The mechanism of restoring market equilibrium. 4 The concept of supply and demand elasticity. Supply and demand elasticity. Graphical interpretation of elasticity. Measuring supply and demand elasticity. Price elasticity of demand. The price effect and the quantity effect of price change. Substitution and income effect. Supply elasticity and measuring it. 5 Income and mixed elasticity of demand. Income elasticity of demand. Necessity and luxury goods. Inferior and normal goods. Cross elasticity of demand. Complementary and substitute goods. Marginal rate of substitution. 6 The rudiments of the consumer choice theory. The choice of the current consumption structure. Total utility. Final utility. Budget constraint line. Indifference curve. The condition concerning optimal choice of the structure of consumer current consumption. | W_01 K_01 K_01 W_02 U_01 U_02 W_03 U_02 W_03 U_02 K_02 |
|--|--|
| in the countries of developed capitalism. The description of the centrally planned economy. Classical economics. Neo-classical economics. Market, supply, and demand. The notion and functions of the market, market classification. Demand and its determining factors. The demand law. Supply and its determining factors. The supply law. Market equilibrium price. Buyer's market and seller's market. The mechanism of restoring market equilibrium. The concept of supply and demand elasticity. Supply and demand elasticity. Graphical interpretation of elasticity. Measuring supply and demand elasticity. Price elasticity of demand. The price effect and the quantity effect of price change. Substitution and income effect. Supply elasticity and measuring it. Income and mixed elasticity of demand. Income elasticity of demand. Necessity and luxury goods. Inferior and normal goods. Cross elasticity of demand. Complementary and substitute goods. Marginal rate of substitution. The rudiments of the consumer choice theory. The choice of the current consumption structure. Total utility. Final utility. Budget constraint line. Indifference curve. The condition concerning optimal choice of the structure of consumer current consumption. The rudiments of the consumer choice theory, part 2. The basis of choice between worktime and free time. Consumption optimisation in | U_01 U_02 W_02 U_03 U_02 W_03 U_02 |
| 3 Market, supply, and demand. The notion and functions of the market, market classification. Demand and its determining factors. The demand law. Supply and its determining factors. The supply law. Market equilibrium price. Buyer's market and seller's market. The mechanism of restoring market equilibrium. 4 The concept of supply and demand elasticity. Supply and demand elasticity. Graphical interpretation of elasticity. Measuring supply and demand elasticity. Price elasticity of demand. The price effect and the quantity effect of price change. Substitution and income effect. Supply elasticity and measuring it. Income and mixed elasticity of demand. Income elasticity of demand. Necessity and luxury goods. Inferior and normal goods. Cross elasticity of demand. Complementary and substitute goods. Marginal rate of substitution. 6 The rudiments of the consumer choice theory. The choice of the current consumption structure. Total utility. Final utility. Budget constraint line. Indifference curve. The condition concerning optimal choice of the structure of consumer current consumption. 7 The rudiments of the consumer choice theory, part 2. The basis of choice between worktime and free time. Consumption optimisation in | U_01 U_02 W_02 U_03 U_02 W_03 U_02 |
| The notion and functions of the market, market classification. Demand and its determining factors. The demand law. Supply and its determining factors. The supply law. Market equilibrium price. Buyer's market and seller's market. The mechanism of restoring market equilibrium. 4 The concept of supply and demand elasticity. Supply and demand elasticity. Graphical interpretation of elasticity. Measuring supply and demand elasticity. Price elasticity of demand. The price effect and the quantity effect of price change. Substitution and income effect. Supply elasticity and measuring it. Income and mixed elasticity of demand. Income elasticity of demand. Necessity and luxury goods. Inferior and normal goods. Cross elasticity of demand. Complementary and substitute goods. Marginal rate of substitution. 6 The rudiments of the consumer choice theory. The choice of the current consumption structure. Total utility. Final utility. Budget constraint line. Indifference curve. The condition concerning optimal choice of the structure of consumer current consumption. 7 The rudiments of the consumer choice theory, part 2. The basis of choice between worktime and free time. Consumption optimisation in | U_01 U_02 W_02 U_03 U_02 W_03 U_02 |
| its determining factors. The demand law. Supply and its determining factors. The supply law. Market equilibrium price. Buyer's market and seller's market. The mechanism of restoring market equilibrium. 4 The concept of supply and demand elasticity. Supply and demand elasticity. Graphical interpretation of elasticity. Measuring supply and demand elasticity. Price elasticity of demand. The price effect and the quantity effect of price change. Substitution and income effect. Supply elasticity and measuring it. 5 Income and mixed elasticity of demand. Income elasticity of demand. Necessity and luxury goods. Inferior and normal goods. Cross elasticity of demand. Complementary and substitute goods. Marginal rate of substitution. 6 The rudiments of the consumer choice theory. The choice of the current consumption structure. Total utility. Final utility. Budget constraint line. Indifference curve. The condition concerning optimal choice of the structure of consumer current consumption. 7 The rudiments of the consumer choice theory, part 2. The basis of choice between worktime and free time. Consumption optimisation in | W_02 U_03 W_03 U_02 |
| Supply and demand elasticity. Graphical interpretation of elasticity. Measuring supply and demand elasticity. Price elasticity of demand. The price effect and the quantity effect of price change. Substitution and income effect. Supply elasticity and measuring it. 5 Income and mixed elasticity of demand. Income elasticity of demand. Necessity and luxury goods. Inferior and normal goods. Cross elasticity of demand. Complementary and substitute goods. Marginal rate of substitution. 6 The rudiments of the consumer choice theory. The choice of the current consumption structure. Total utility. Final utility. Budget constraint line. Indifference curve. The condition concerning optimal choice of the structure of consumer current consumption. 7 The rudiments of the consumer choice theory, part 2. The basis of choice between worktime and free time. Consumption optimisation in | W_03 U_02 W_03 U_02 |
| Measuring supply and demand elasticity. Price elasticity of demand. The price effect and the quantity effect of price change. Substitution and income effect. Supply elasticity and measuring it. Income and mixed elasticity of demand. Income elasticity of demand. Necessity and luxury goods. Inferior and normal goods. Cross elasticity of demand. Complementary and substitute goods. Marginal rate of substitution. The rudiments of the consumer choice theory. The choice of the current consumption structure. Total utility. Final utility. Budget constraint line. Indifference curve. The condition concerning optimal choice of the structure of consumer current consumption. The rudiments of the consumer choice theory, part 2. The basis of choice between worktime and free time. Consumption optimisation in | W_03 U_02 W_03 U_02 |
| Income elasticity of demand. Necessity and luxury goods. Inferior and normal goods. Cross elasticity of demand. Complementary and substitute goods. Marginal rate of substitution. 6 The rudiments of the consumer choice theory. The choice of the current consumption structure. Total utility. Final utility. Budget constraint line. Indifference curve. The condition concerning optimal choice of the structure of consumer current consumption. 7 The rudiments of the consumer choice theory, part 2. The basis of choice between worktime and free time. Consumption optimisation in | U_02 W_03 U_02 |
| normal goods. Cross elasticity of demand. Complementary and substitute goods. Marginal rate of substitution. The rudiments of the consumer choice theory. The choice of the current consumption structure. Total utility. Final utility. Budget constraint line. Indifference curve. The condition concerning optimal choice of the structure of consumer current consumption. The rudiments of the consumer choice theory, part 2. The basis of choice between worktime and free time. Consumption optimisation in | W_03 U_02 |
| Total utility. Final utility. Budget constraint line. Indifference curve. The condition concerning optimal choice of the structure of consumer current consumption. The rudiments of the consumer choice theory, part 2. The basis of choice between worktime and free time. Consumption optimisation in | U_02 |
| Total utility. Final utility. Budget constraint line. Indifference curve. The condition concerning optimal choice of the structure of consumer current consumption. The rudiments of the consumer choice theory, part 2. The basis of choice between worktime and free time. Consumption optimisation in | |
| condition concerning optimal choice of the structure of consumer current consumption. 7 The rudiments of the consumer choice theory, part 2. The basis of choice between worktime and free time. Consumption optimisation in | |
| choice between worktime and free time. Consumption optimisation in | |
| | W_02 |
| time. | W_04 U_03 K_02 |
| The basis of choice between worktime and free time. The line of payment. | |
| The choice between current and future consumption. The line of market | |
| constraints. The optimisation of consumption structure in time. The influence | |
| of interest rates on the consumption structure in time. 8 The concept of an enterprise, its objectives and characteristics. | W_03 |
| , co | U_01 |
| The concept of an enterprise. The types of enterprises. The objectives of | U_02 |
| enterprise activity in market and centrally planned economy. Assets, funds, | K_02 |
| and the financial result of an enterprise. 9 The rudiments of the production theory. | W_02 |
| The familiance of the production in the same of the sa | W_04 |
| The notion of production. Factors of production. Short run production theory. | U_02 |
| Total, average, and marginal products. The law of diminishing returns. Long | U_03 |
| run production theory. Isoquant and isocost. Optimisation of production factors use. The selection of production techniques. | |
| 10 Costs, takings, and profit of an enterprise. | W_03 |
| | U_02 |
| Short run costs. Total, fixed, and variable costs. Average and marginal costs. | K_01 |
| Total, average, and marginal takings. Economic and normal profits. Opportunity cost. Closing price. Long run costs. Scale effects. The sources | K_02 |
| of economies and diseconomies of scale. | |
| 11 Equilibrium of a perfect competition enterprise. | W_03 |
| | W_04 |
| The conditions for functioning of an enterprise on a perfect market. Average and marginal takings on a perfect market. The concept of break-even point. Incomes and profits of a perfect competition enterprise. The condition of | U_02 U_03 K_01 |

| | equilibrium of an enterprise on a perfect market. | K_02 |
|----|--|------|
| 12 | Equilibrium of an enterprise on an imperfect market. | W_03 |
| | | W_04 |
| | The conditions for functioning of an enterprise on an imperfect market. | U_02 |
| | Average and marginal takings on an imperfect market. The condition of | U_03 |
| | equilibrium of an enterprise on an imperfect market. Monopolistic enterprise. | K_01 |
| | Types of monopolisation. Anti-monopoly legislation. | K_02 |
| 13 | The models of an imperfect market. | W_03 |
| | | W_04 |
| | Sweezy's oligopoly model and Cournot's duopoly model. Chamberlin's | U_02 |
| | model of monopolistic competitiveness. | U_03 |
| | | K_01 |
| | | K_02 |
| 14 | The fundamentals of the neo-classical distribution theory. | W_03 |
| | | W_04 |
| | Income and assets diversification. The measures of disproportion. Circular | U_02 |
| | flow of incomes and expenses. Principal factors determining income | U_03 |
| | distribution. Classical distribution theory. The Lorenz curve and the Gini | K_01 |
| | index. | K_02 |
| 15 | Factor market. | W_03 |
| | | W_04 |
| | Marginal productivity theory. Average and marginal factor cost. The value of | U_02 |
| | a marginal product of a factor. Marginal income from a product of a factor. | U_03 |
| | The condition of equilibrium of an enterprise on a factor market. Labour | K_01 |
| | market. Perfect labour market. Imperfect labour markets. Economic rent. | K_02 |
| | Capital market. Current and future value of money. Measures of investment effectiveness. | |
| | cliculveliess. | |

2. Teaching contents as regards classes

| Class number | Teaching contents | Reference to teaching results for a module |
|-----------------|---|---|
| 1 | Basic concepts and the essence of economics. | W_01 |
| | | W_02 |
| | Identification of problems as regards economics. Management process. | K_01 |
| | Property, the classification of property. Resource limitations. Production- | K_03 |
| | possibility frontier. The methods of economic research. Economic models. | |
| 2 | Modern socio-economic systems. | W_04 |
| | | U_01 |
| | The characteristics of market and centrally planned economies. The role of | K_02 |
| | the state in economy. Classical and neoclassical economics. The functions | |
| | of the state as regards economy. | |
| 3 | Market, supply, and demand. | U_01 |
| | | K_03 |
| | The notion and functions of the market, market classification. Demand and | |
| | its determining factors. The demand law. Supply and its determining | |
| | factors. The supply law. Market equilibrium price. Buyer's and seller's | |
| | markets. The mechanism of restoring market equilibrium. | |
| 4 | The concept of supply and demand elasticity. | W_03 |
| • | The concept of capping and domains case only. | W 04 |
| | The coefficients of supply and demand elasticity. The interpretation of the | U_02 |
| | coefficient value. The methods of calculating the coefficients of supply and | K 02 |
| | demand elasticity. Price elasticity. Arc elasticity. Price elasticity of demand. | |
| | The price effect and the quantity effect of price change. | |
| 5 | Income and mixed elasticity of demand. | W 03 |
| | , in the second | W 04 |
| | Income elasticity of demand. Necessity and luxury goods. Inferior and | U 02 |
| | normal goods. Cross elasticity of demand. Complementary and substitute | U 03 |
| | goods. Marginal rate of substitution. | K_02 |

| | | • |
|-----|---|---------|
| 6 | The rudiments of the consumer choice theory. The choice of the | W_03 |
| | structure of current consumption. | W_04 |
| | | U_02 |
| | Discussing such notions as: total utility and final utility. Calculating final | U_03 |
| | utility. Determining the placement of budget constraint line. Indifference | K_01 |
| | curve. The condition of optimal choice regarding the structure of consumer | K_02 |
| | current consumption. | |
| 7 | A test. The analysis of answers and solutions | |
| 8 | The notion of an enterprise, its activity targets and characteristics. | W_03 |
| | | U_02 |
| | Discussing the types of enterprises. Assets, funds, and the financial result | U_03 |
| | of an enterprise. The analysis of balance sheet components in an | K_01 |
| | enterprise. | K_02 |
| | | |
| | The rudiments of the production theory. | |
| | Discussing the notions of the <i>total product</i> , average product, and <i>final</i> | |
| | product. Calculating the value of the final product. The law of diminishing | |
| | returns. Discussing the concepts of isoquant and isocost. Optimising the | |
| | use of factors of production. | |
| 9 | Costs, takings, and profit of an enterprise. | W_03 |
| | | W_04 |
| | Short run costs. Total, fixed and variable costs. Total, average, and | U_02 |
| | marginal takings. Economic and normal profits. Opportunity cost. Closing | U_03 |
| | price. Long run costs. Scale effects. The sources of economies and | K_01 |
| | diseconomies of scale. | K_02 |
| 10 | Equilibrium of a perfect competition enterprise. | W_03 |
| | | W_04 |
| | The conditions for functioning of an enterprise on a perfect market. Average | U_02 |
| | and marginal takings on a perfect market. The concept of the break-even | U_03 |
| | point. Incomes and profits of a perfect competition enterprise. The condition | K_01 |
| | of equilibrium of an enterprise on a perfect market. Solving tasks connected | K_02 |
| | with determining enterprise equilibrium state on a perfect market. | |
| 11 | Equilibrium of an enterprise on an imperfect market. | W_03 |
| | | W_04 |
| | The conditions for functioning of an enterprise on an imperfect market. | U_02 |
| | Average and marginal takings on an imperfect market. The condition of | U_03 |
| | equilibrium of an enterprise on an imperfect market. Monopolistic | K_01 |
| | enterprise. Types of monopolisation. Anti-monopoly legislation. | K_02 |
| 12 | A test. The analysis of answers and solutions. | 14/ 00 |
| 13 | The fundamentals of the neo-classical distribution theory. | W_03 |
| | Income and accept diversification. The maccures of dispression Circular | U_02 |
| | Income and assets diversification. The measures of disproportion. Circular | U_03 |
| | flow of incomes and expenses. Principal factors determining income | K_01 |
| | distribution. Classical distribution theory. The Lorenz curve and the Gini | K_02 |
| | index. | |
| | Factor markets. | |
| | Discussing the following notions: average and marginal factor aget the | |
| | Discussing the following notions: average and marginal factor cost, the value of a marginal product of a factor, and marginal income from a product | |
| | of a factor. The condition of equilibrium of an enterprise on a factor market. | |
| | Labour market. Solving tasks connected with determining enterprise | |
| | equilibrium state on a factor market. | |
| 14 | Factor markets. | W_03 |
| 1-1 | - Solo manage | W_04 |
| | Labour market. A perfect labour market. Imperfect labour markets. | U_02 |
| | Economic rent. Capital market. Current and future value of money. NPV, | U_03 |
| | BEP, and IRR measures of investment effectiveness. | K_01 |
| | , | K_02 |
| | | |

| 15 | A test. The analysis of answers and solutions. | |
|----|--|--|
|----|--|--|

3. Teaching contents as regards laboratory classes

| Laboratory class number | Teaching contents | Reference to teaching results for a module |
|-------------------------------|-------------------|---|
| | | |
| | | |
| | | |
| | | |

4. The characteristics of project assignments

The methods of assessing teaching results

| Effect symbol | Methods of assessing teaching results (assessment method, including skills – reference to a particular project, laboratory assignments, etc.) | | |
|------------------|---|--|--|
| | A final test and a written examination. | | |
| W_01 | In order to gain a B mark, a student ought to know basic notions, rules, and methods concerning microeconomics. In order to gain an A mark, a student should additionally know and understand the principles and mechanism as regards the functioning of the market economy. | | |
| W_01 | A final test and a written examination. | | |
| W_02 | In order to gain a B mark, a student ought to know basic categories in microeconomics and the relations occurring among them. In order to gain an A mark, a student should be able to analyse and identify the cause-and-effect type of these relations. | | |
| | A final test and a written examination. | | |
| W 03 | In order to gain a B mark, a student ought to know basic laws of microeconomics. In order to gain an A mark, a student should be able to analyse and identify their significance for supply and demand. | | |
| VV_03 | A final test and a written examination. | | |
| U_01 | In order to gain a B mark, a student ought to know basic principles of searching optimal states. In order to gain an A mark, a student should additionally know the principles of creating algorithms of searching optimal states. Tasks completed during the classes supervised by the lecturer. A credit test and | | |
| | a written examination. | | |
| U_02 | In order to gain a B mark, a student ought to be able to identify and define the phenomena and processes taking place in an enterprise, its market environment as well as identify their economic effects for business entities. In order to gain an A mark, a student should additionally be able to determine particular conditions of a perfect and imperfect markets. | | |
| | Tasks completed during the classes supervised by the lecturer. A credit test and a written examination. | | |
| U_03 | In order to gain a B mark, a student ought to be able to formulate basic categories and notions concerning microeconomics. In order to gain an A mark, a student should be able to formulate his/her own conclusions as regards the relations between categories and notions. | | |
| | Tasks completed during the classes supervised by the lecturer. A credit test and a written examination. | | |
| K_01 | In order to gain a B mark, a student ought to be able to use appropriate formulas to calculate basic microeconomic values and optimal states. In order to gain an A mark, a student should | | |

| | be able to analyse disequilibrium states and justify crucial decisions to restore them. | | |
|------|---|--|--|
| | Observation of a student's attitude during the classes; a discussion during the classes. | | |
| K_02 | In order to gain a B mark, a student ought to be able to understand the necessity of continuous broadening of his/her knowledge concerning microeconomics and improve it regularly. In order to gain an A mark, a student should be able to improve this knowledge to a larger extent than other group members. | | |
| | Observation of a student's attitude during the classes; a discussion during the classes. | | |
| K_03 | In order to gain a B mark, a student ought to be aware of the complexity of economic processes on the level of an enterprise and its market environment. In order to gain an A mark, a student should be able to identify the connections between various phenomena and economic procedures as well as their impact on business entities. In addition, a student should indicate the methods of solving non-standard tasks. | | |
| | Observation of a student's attitude during the classes; a discussion during the classes. | | |
| | In order to gain a B mark, a student ought to co-operate well and work in a team. Moreover, a student should actively participate in solving problem tasks. In order to gain an A mark, a student should be able to introduce initiative during teamwork. | | |

D. STUDENT'S INPUT

| | ECTS credit points | | | | |
|----|--|--------------------|--|--|--|
| | Type of student's activity | Student's workload | | | |
| 1 | Participation in lectures | 45 | | | |
| 2 | Participation in classes | 30 | | | |
| 3 | Participation in laboratories | | | | |
| 4 | Participation in tutorials (2-3 times per semester) 5 | | | | |
| 5 | Participation in project classes | | | | |
| 6 | Project tutorials | | | | |
| 7 | Participation in an examination | 2 | | | |
| 8 | | | | | |
| 9 | Number of hours requiring a lecturer's assistance | 82 (sum) | | | |
| 10 | Number of ECTS credit points which are allocated for assisted work (1 ECTS point=25-30 hours) | 3 | | | |
| 11 | Unassisted study of lecture subjects | 15 | | | |
| 12 | Unassisted preparation for classes | 10 | | | |
| 13 | Unassisted preparation for tests | 10 | | | |
| 14 | Unassisted preparation for laboratories | | | | |
| 15 | Preparing reports | | | | |
| 15 | Preparing for a final laboratory test | | | | |
| 17 | Preparing a project or documentation | 10 | | | |
| 18 | Preparing for an examination | 10 | | | |
| 19 | | | | | |
| 20 | Number of hours of a student's unassisted work | 55 (sum) | | | |
| 21 | Number of ECTS credit points which a student receives for unassisted work (1 ECTS point=25-30 hours) | 2 | | | |
| 22 | Total number of hours of a student's work | 137 | | | |
| 23 | ECTS points per module 1 ECTS point=25-30 hours | 5 | | | |
| 24 | Work input connected with practical classes Total number of hours connected with practical classes | 85 | | | |
| 25 | Number of ECTS credit points which a student receives for practical classes (1 ECTS point=25-30 hours) | 3 | | | |

E. LITERATURE

| | Begg D., Fisher S., <i>Mikroekonomia</i> , Polskie Wydawnictwo Ekonomiczne, Warszawa 2007. |
|-----------------|--|
| | 2. Blaug M., <i>Teoria Ekonomii</i> , Wydawnictwo Naukowe PWN, Warszawa 2000. |
| | |
| | 3. Czarny B., <i>Pozytywizm a sądy wartościujące w ekonomii,</i> Szkoła Główna |
| | Handlowa w Warszawie, Warszawa 2010. |
| Literature list | 4. Bremond J., Kompendium wiedzy ekonomii, Wydawnictwo Naukowe PWN, |
| | Warszawa 2008 |
| | 5. Lowers B., Collins internet-linked dictionary of Business, Harper Collins |
| | Publishers, 2005. |
| | 6. Milewski R., Elementarne zagadnienia ekonomii, Wydawnictwo Naukowe |
| | PWN, Warszawa 2008. |

| | Milewski R., Podstawy ekonomii, (ćwiczenia, zadania, problemy), Wydawnictwo Naukowe PWN, Warszawa 2007. Milewski R., Podstawy ekonomii, Wydawnictwo Naukowe PWN, Warszawa 2007. Nasiłowski System rynkowy. Podstawy mikro i makroekonomii, Wydawnictwo Key Text Sp. z o.o., Warszawa 2006. Samuelson P., Nordhaus W., Ekonomia tom 1, Wydawnictwo Naukowe PWN, Warszawa 2008. Samuelson P., Nordhaus W., Ekonomia tom 2, Wydawnictwo Naukowe PWN, Warszawa 2008. Tokarski T., Ekonomia matematyczna, Polskie Wydawnictwo Ekonomiczne S.A., Warszawa 2011. |
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| Module website | |