University of Gdańsk

Subject card

Subject name and code	Managerial Economics, PG_00199292		
Field of study	Economics		
Date of commencement of studies	October 2026	Academic year of realisation of subject	2026/2027
Education level	Master's studies	Subject group	Obligatory subject group in the field of study Subject group related to scientific research in the field of study
Mode of study	full-time studies	Mode of delivery	at the university
Year of study	1	Language of instruction	Polish
Semester of study	1	ECTS credits	6.0
Learning profile	academic	Assessment form	exam
Conducting unit	Department of Microeconomics -> Faculty of Economics -> Rector		
Name and surname of lecturer (lecturers)	Subject supervisor	dr Sylwia Machowska-Okrój	
	Teachers	dr Sylwia Machowska-Okrój	

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	30.0	0.0	0.0	0.0	0.0	30

E-learning hours included: 0.0

Learning activity and number of study hours

Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours	Self-study	SUM
Number of study hours	30	4.0	116.0	150

Subject objectives

The aim of the course is to familiarise students with the essence of decision-making problems and methods of making optimal decisions from the point of view of a business entity in a market economy.

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[EKONMU2_U08] can independently analyse economic and social phenomena and processes, and can perform a theoretically deepened assessment of such phenomena, using appropriately selected research method	Uses analytical tools, is able to use analytical tools and computer programmes to support decision-making processes, such as spreadsheets, mathematical models. Deepens knowledge by solving problems outside of classes and consulting with the instructor.	[SU4] test/exam - oral or written [SU5] implementation of a problem task
	[EKONMU2_U07] can independently propose solutions to complex economic or social problems, select methods of analysis and conduct conclusive procedures in this respect	Knows how to collect, analyse and interpret economic data in order to make sound managerial decisions. Deepens knowledge by solving problems outside of classes and consulting with the instructor.	[SU4] test/exam - oral or written [SU5] implementation of a problem task
	[EKONMU2_U03] can analyse causes and course of economic and social processes and phenomena, formulate his/her own opinions on the subject, construct research hypotheses, and select and apply methods of their verification	He is able to identify the various markets and verify the economic situation of the entrepreneur.	[SU1] oral statement/conversation/ discussion [SU4] test/exam - oral or written
	[EKONMU2_K05] correctly identifies, diagnoses and solves advanced dilemmas and alternative solutions related to the profession	The student is able to use advanced economic analysis tools and management techniques to identify, analyse and solve economic problems. Deepens knowledge by solving problems outside of classes and consulting with the instructor.	[SK4] test/exam - oral or written [SK5] implementation of a problem task
	[EKONMU2_U01] can creatively interpret and explain economic and social phenomena and relations between them, using acquired knowledge of economics, finance and management sciences	The student has the ability to solve economic problems creatively and effectively using methods of marginal calculus, forecasting and linear programming.	[SU4] test/exam - oral or written [SU5] implementation of a problem task
	[EKONMU2_W05] has a knowledge of the human being as a manufacturer and consumer and has a knowledge of the human being as a creator of culture and social structures	Understands the process of optimising the bottom line that the model entrepreneur aims to achieve.	[SW4] test/exam - oral or written [SW5] implementation of a problem task
	[EKONMU2_W11] knows the detailed principles of establishing and developing forms of individual entrepreneurship, using the knowledge of economics, finance and management sciences	Characterises models and procedures for the development of the enterprise.	[SW4] test/exam - oral or written [SW1] oral statement/ conversation/discussion
	[EKONMU2_K01] recognises the importance of knowledge in the field of economics in the process of identifying and solving economic problems and of consulting experts when having difficulties in solving them independently	Acquires the competences and skills to be a manager. Learns to take responsibility for decisions. Applies knowledge and skills in independent work.	[SK1] oral statement/conversation/ discussion
	[EKONMU2_K02] is aware of the level of their knowledge in the area of solving complex problems in economic,; understands the need to extend and update this knowledge throughout his/her life	Understands the need to complement knowledge and skills throughout life.	[SK1] oral statement/conversation/ discussion
	[EKONMU2_W06] has an in-depth understanding of statistical and econometric methods and tools for describing and modelling macro- and microeconomic economic structures and public institutions, as well as the processes taking place within them.	Knows the methods and tools to optimise production, price, revenue and the bottom line.	[SW4] test/exam - oral or written [SW1] oral statement/ conversation/discussion [SW5] implementation of a problem task

Subject contents	1. The essence and mechanism of managerial decision making. 2. Optimal decision making on the basis of marginal calculus .3. Profit maximisation using the equilibrium condition and the marginal profit category. 4. Demand as a multivariate function. 5. Optimal pricing policy .6. Measures of elasticity of demand and methods of calculating it. 7 The evolution of revenue and profit as a function of total and variable costs. 8. The relationship between marginal revenue and price elasticity of demand. 9. Price elasticity as a forecasting tool. 10. Pricing based on the surplus to cover fixed costs, the optimal marginal cost mark-up and full costs. 11. Relationship between price, surplus to cover, sales volume and Edp. 12. Price discrimination strategy. 13. Creation of demand equations using regression analysis. 14. Linear regression using the method of least squares .15. multivariate regression used to obtain a more accurate forecast. 16. Interpretation of regression results. 17. Structural and unstructured forecasting models. 18. time series analysis - extrapolation. 19. regression equations including lagged variable. 20. Methods of correcting seasonal variations. 21 Cost analysis (economic model). 22. Costs due to decisions made. 24. Relationship between average and marginal costs and marginal and average productivity. 25. Linear programming and sensitivity analysis of linear programming results.

	Any doubts arising during the implementation of the subject matter or interpretation issues will be resolved during consultations.
Prerequisites and co-requisites	Basic mathematics, knowledge of microeconomics and macroeconomics.

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
written exam, 60 minutes	51.0%	100.0%

Recommended reading

Basic literature	William F. Samuelson, Stephen G. Marks, Ekonomia Menedżerska, PWE, Warszawa 2009
Supplementary literature	1. Ekonomia Menedżerska, praca zbiorowa pod redakcja Stanisława Piochy i Renaty Gabryszak, dla MSP w teorii i praktyce, Difin, Warszawa 20082. Oz Shy, Industrial Organization, Theory and Applications, The MIT Press, 19963. Christelle Gueret, Christian Prins, Marc Sevaux, Applications of optimization with Xpress-MP, Dash Optimization Ltd., 20074. L. M. Froeb, B. T. McCann, Ekonomia menedżerska, PWE, Warszawa 20125. I. Png, D. Lehman, Ekonomia menedżerska, Oficyna, Warszawa 20116. A. Wasniewska, K. Srzeszewska, Ekonomia menedżerska. Podstawy teoretyczne z zadaniami, Akademia Morska w Gdyni, Gdynia 2012.7. A. Sołek, Optymalne decyzje ekonomia menedżerska w zadaniach, Wyd. Uniwersytet Ekonomiczny w Krakowie, Kraków 2013. Empirical analysis of the relationship between the openness of the economy and economic growth on the example of Poland,Machowska-Okrój Sylwia, Prace Naukowe Uniwersytetu Ekonomicznego We Wrocławiu, 2017, no.489, pp.222-230 Skip to document by digital identifier
eResources addresses	
Example issues/ example questions/ tasks being completed	Problem simulation:A company that is a cable TV network operator has experienced continuous subscriber growth over the last 10 quarters. With 500,000 subscribers now, the company wants to know how many customers it can acquire in the next year, in the next two years and in the next five years. The development trend is shaped as shown in the figure (the figure is a given). From the shape of the curve, we conclude that the number of subscribers is increasing, but at a decreasing rate. It is not known whether the decreasing rate will continue in the future. It would be necessary to extrapolate the trend observed so far. Therefore, we need to consider the form of the regression equation. We have the following information:(a) Approximately 98% of customers renew their subscription for the next quarter.b) The potential size of demand is estimated at 1,000,000 subscribers but the total market is 1,500,000 subscribers.c)The number of new subscribers registered each quarter represents approximately 8% of the total number of potential customers not yet acquired.On this basis, it can be concluded that the total number of actual subscribers in each quarter is described by the equation:Xt= a + bXt-1Forecasts need to be made.
Work placement	Not applicable

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