Uniwersytet Ekonomiczny w Katowicach

APPLIED MARKET ANALYTICS: SEGMENTATION & POSITIONING

Syllabus

Basic information

Field of study Electives **Speciality** - **Organizational unit** School of Undergraduate and Graduate Studies **Study level** graduate studies **Study form** full-time **Education profile** general academic/practical	**Didactic cycle** 2026/27 **Subject code** EKOPSWS.M2.3673.26 **Lecture languages** English **Mandatory** Elective **Block** Free choice electives **Department responsible for the subject** Department of Labour Market Forecasting and Analysis **Subject related to scientific research** No **Subject shaping practical skills** No

Coordinator	Anna Sączewska-Piotrowska
Teacher	Anna Sączewska-Piotrowska

Period	**Form of teaching, number of hours and method of examination**	**Number of ECTS points**
Semester 2	• lecture: 14, Credit with grade	3

Goals

Code	Goal
C1	Indicating the possibilities of applying multivariate statistical analysis methods to market segmentation and product positioning.
C2	Developing skills that enable the measurement of a company's market position.
C3	Acquiring skills that allow for comparing the perception of a company's product against those of other firms.

Recommended requirements

None

Subject's learning outcomes

Code	Outcomes in terms of	Major learning outcomes for the subject	Examination methods
Knowledge:			
W1	The student identifies multivariate statistical methods applicable to the market segmentation and product positioning.	DEK.M_W03	End-of-course assessment - group project
Skills:			
U1	The student analyzes market data to perform market segmentation and product positioning.	DEK.M_U02, DEK.M_U03	End-of-course assessment - group project
U2	The student applies their knowledge to formulate and solve complex and non-standard problems related to the market segmentation and product positioning.	DEK.M_U02, DEK.M_U03	End-of-course assessment - group project
Social competences:			
K1	The student is capable of systematic and critical self-assessment of their own knowledge, skills, and competences in applying multivariate statistical methods to the market segmentation and product positioning.	DEK.M_K02	End-of-course assessment - group project

Study content

No.	Course content	Subject's learning outcomes	Activities
1.	Data preparation for analysis.	W1, U1, U2, K1	lecture
2.	Creating product rankings using linear ordering methods (non-model and model approaches).	W1, U1, U2, K1	lecture
3.	Applying cluster analysis (hierarchical agglomerative methods, k-means method) to market segmentation.	W1, U1, U2, K1	lecture
4.	Product positioning on the market using factor analysis.	W1, U1, U2, K1	lecture

No.	Course content	Subject's learning outcomes	Activities
5.	Direct post hoc measurement of market position using multidimensional scaling.	W1, U1, U2, K1	lecture
6.	Direct a priori measurement of market position using correspondence analysis.	W1, U1, U2, K1	lecture

Additional information

Activities	Methods of conducting classes
lecture	Lecture using multimedia techniques, Program operation

Activities	Examination method	Percentage
lecture	End-of-course assessment - group project	100%

Activities	Credit conditions
lecture	Obtaining at least 50% of points on the group project

Literature

Obligatory

1. Everitt, B., & Hothorn, T. (2011). An introduction to applied multivariate analysis with R. Springer Science & Business Media.
2. Zelterman, D. (2015). Applied multivariate statistics with R (pp. 393-393). Basel, Switzerland: Springer International Publishing.
3. Cleff, T. (2019). Applied statistics and multivariate data analysis for business and economics: A modern approach using SPSS, Stata, and Excel. Springer.

Optional

1. Reutterer, T., & Dan, D. (2019). Cluster analysis in marketing research. In Handbook of market research (pp. 1-29). Springer, Cham.
2. Tillmanns, S., & Krafft, M. (2017). Logistic regression and discriminant analysis. In Handbook of market research (pp. 1-39). Springer, Cham.
3. Sączewska-Piotrowska A. (2021), Economic factors influencing the health bahavior changes during COVID-19 pandemic: multiple correspondence analysis results, Procedia Computer Science, Vol. 192, s. 2522-2530.

Calculation of ECTS points

Activity form	Activity hours*
lecture	14
Preparation of the end-of-course assessment - group project	30
Analysis and interpretation of source materials - statistic data	16
Analysis of lecture notes	15

Consultations	2
Re-sit assignement	2
Student workload	**Hours** 79
Number of ECTS points	**ECTS** 3

* hour means 45 minutes

Major learning outcomes for the subject

Code	Content
DEK.M_K02	Jest gotów doceniać znaczenie rzetelnej wiedzy w rozwiązywaniu problemów poznawczych i praktycznych, w tym zwłaszcza w obszarze gospodarki oraz jest przygotowany do zasięgania opinii ekspertów.
DEK.M_U02	Potrafi - wykorzystując posiadaną wiedzę - formułować oraz rozwiązywać (w tym innowacyjnie) złożone i nietypowe problemy gospodarcze, a także podejmować decyzje dotyczące procesów gospodarczych w warunkach niepewności z uwzględnieniem właściwego doboru źródeł, dokonywania ich oceny, syntezy i twórczej interpretacji wiedzy i informacji, doboru i stosowania, przystosowania lub opracowania nowych właściwych narzędzi, w tym zaawansowanych technik informacyjno-komunikacyjnych.
DEK.M_U03	Potrafi analizować i prognozować procesy i zjawiska ekonomiczne z wykorzystaniem zaawansowanych metod i narzędzi wykorzystywanych w ekonomii, w tym potrafi formułować i testować hipotezy badawcze.
DEK.M_W03	Zna i rozumie w pogłębionym stopniu metodykę badań naukowych w zakresie dyscypliny ekonomia i finanse, w tym zna zaawansowane metody matematyczno-statystyczne i narzędzia informatyczne gromadzenia, analizy i prezentacji danych ekonomicznych i społecznych.