POZNAN UNIVERSITY OF TECHNOLOGY



EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

COURSE DESCRIPTION CARD - SYLLABUS

Course name

Data Science in business [S1DSwB1>SMSU]

Course			
Field of study		Year/Semester	
Data Science in Business		4/7	
Area of study (specialization) –		Profile of study general academic	c
Level of study first-cycle		Course offered in Polish	1
Form of study full-time		Requirements elective	
Number of hours			
Lecture 15	Laboratory classe 0	es	Other 0
Tutorials 0	Projects/seminars 15	S	
Number of credit points 3,00			
Coordinators dr inż. Marek Goliński marek.golinski@put.poznan.pl		Lecturers	

Prerequisites

The student has basic information on marketing methods and tools, marketing research, management and Internet applications. The student has the ability to use the indicated sources and interpret social and market phenomena.

Course objective

To gain knowledge of marketing methods of doing business, the model of which is based on ICT solutions, especially Internet applications. To gain skills in the use of tools that support the development of business from the exchange of information between market players (manufacturers, distributors and buyers of products) to online transactions with particular emphasis on data available on the Internet.

Course-related learning outcomes

Knowledge:

• Characterizes methods of analyzing marketing strategies, including brand strategies, product positioning, and marketing communication [DSB1_W01].

- Describes basic economic models used in planning marketing strategies for startups [DSB1_W09].
- Explains the principles of building a startup's brand in the digital environment and optimizing

marketing activities online [DSB1_W10].

Skills:

• Selects appropriate sources of information and analytical tools to assess marketing strategies for startups [DSB1_U01].

• Formulates specifications for marketing problems of startups, analyzing their impact on the decisionmaking process [DSB1_U05].

• Critically analyzes the effectiveness of marketing communication strategies and social media in startups [DSB1_U07].

• Plans and organizes marketing activities for startups, considering customer segmentation strategies and sales paths [DSB1_U13].

• Effectively collaborates in interdisciplinary teams, creating creative and media strategies for startups [DSB1_U14].

Social competences:

• Critically analyzes own knowledge and skills in marketing strategies and strives for their development [DSB1_K01].

• Engages in initiatives related to startup marketing and the use of data analysis in marketing strategies [DSB1_K03].

• Undertakes business initiatives related to implementing marketing strategies based on modern technologies and data analytics [DSB1_K04].

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Formative assessment: discussions summarizing individual lectures and exercises, marketing problems solved in class, giving the opportunity to assess the student's understanding of the issues. Knowledge acquired in the lecture is verified by two 15-minute colloquia, each of which consists of about 3 questions, variously scored, the need to pass both colloquia. Summative assessment: written credit for the course in the form of a test carried out in the last class, separately for exercises and lecture. The colloquium consists of about 3 questions. Credit threshold: 51% of the points

Programme content

Marketing strategy- role and importance in marketing management. The process of developing a marketing strategy. Brand strategies and new product strategies. Communication strategy, the role of the Internet in marketing communication. Competitive strategies. Buyer behavior in the Internet space. Segmentation strategies, individualization. Control in marketing activities.

Course topics

The place of StartUps in business development. Analysis of the product as a carrier of value. Brand building strategy on the web. Characteristics of the target group, persona profile. Marketing communication, creative and media strategies in promotion, social media. Content marketing strategy. Strategies for positioning and optimization of websites and marketing communications. Strategy for setting KPIs and conversion on the Internet. Strategies for establishing sales paths. Marketing data analysis.

Teaching methods

Lecture classes are conducted in the form of multimedia presentations confirmed by examples. Problem discussions.

Exercise classes are conducted by the case method, based on the solution of practical examples (tasks). During the exercises there is a scored (evaluated) discussion; students work (implement tasks) in predetermined groups. Preparation for classes requires independent work of the student, including work with a book. Classes require independent (in consultation with the instructor) solution of the problem posed.

Bibliography

Basic:

Kotler, P., Kartajaya, H., Setiawan, I., (2024), Marketing 6.0, Przyszłość jest immersyjna, MT Biznes Andrzejczyk, A., (2024), Data driven marketing. O logicznym podejściu do podejmowania decyzji, Gliwice, Onepress

Chaffey, D., Chadwickave, F.E., (2022), Digital Marketing, Wyd. Pearson Education Limited

Additional:

Chaffey D., Digital Business i E-Commerce Management, Strategia, Realizacja, Praktyka, Wyd. PWN, Warszawa, 2020

Laskowska-Rutkowska, A, red. (2020) Cyfryzacja w zarządzaniu, Warszawa : CeDeWu

Goliński M., Metody badań potrzeb informacyjnych, w: Zintegrowany system dostępu do informacji w przestrzeni miejskiej z wykorzystaniem GPS i GIS, praca pod redakcją M.Golińskiego i M. Szafrańskiego, Wyd. Politechniki Poznańskiej, Poznań 2012

Goliński M., Methodology of research into information needs, [in] Integrated support system for access to information in urban space with use of GPS and GIS systems, edited by M. Goliński i M. Szafrański, Wydawnictwo Politechniki Poznańskiej, Poznań 2012

Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,00
Classes requiring direct contact with the teacher	30	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	45	2,00