

POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

COURSE DESCRIPTION CARD - SYLLABUS

Course name

Fundamentals of Management [S1DSwB1>PZ]

Course

Field of study Year/Semester

Data Science in Business 1/1

Area of study (specialization) Profile of study

general academic

Level of study Course offered in

first-cycle Polish

Form of study Requirements full-time compulsory

Number of hours

Lecture Laboratory classes Other

0 0

Tutorials Projects/seminars

15 15

Number of credit points

4,00

Coordinators Lecturers

dr inż. Marta Pawłowska-Nowak marta.pawlowska-nowak@put.poznan.pl

Prerequisites

General knowledge of social relationships and phenomena occurring in society, the ability to recognize, associate, and interpret these phenomena in the context of interpersonal relations, as well as an awareness of responsibility in decision-making.

Course objective

The objective of this course is to introduce students to the fundamental principles of management, including theories, concepts, and practices applied in modern organizations. Students will develop the ability to analyze management processes and apply basic management tools in a business environment, particularly in the context of Data Science.

Course-related learning outcomes

Knowledge:

Defines fundamental management concepts and functions and describes their significance within an organization [DSB1 W01].

Describes organizational structures and decision-making processes, considering principles of communication and coordination [DSB1_W10].

Explains the importance of leadership, motivation, and change and innovation management in organizational development [DSB1 W04].

Skills:

Identifies and analyzes management functions within an organization, applying methods of planning, organizing, motivating, and controlling [DSB1 U05].

Diagnoses organizational structure and decision-making processes within a company and proposes improvements to enhance their efficiency [DSB1 U06].

Selects appropriate leadership and motivation styles based on team characteristics and organizational objectives [DSB1_U14].

Analyzes change and innovation implementation processes, identifying factors influencing their effectiveness [DSB1 U09].

Applies management methods in practical business scenarios, making data-driven decisions based on management theories [DSB1 U08].

Social competences:

Justifies managerial decisions by supporting them with management theories and models [DSB1_K01]. Collaborates in project teams, integrating knowledge of management, data analysis, and information technology [DSB1_K02].

Initiates and supports actions aimed at implementing innovations and organizational improvements within a company [DSB1 K04].

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Within the "Fundamentals of Management" course, each type of class-lecture, exercises, and projectis assessed separately. This means that students receive three independent grades, and each must be passed individually.

Lecture

- Final exam The lecture grade is based solely on the final exam, which assesses theoretical knowledge acquired throughout the course.
- After each thematic block, partial tests are conducted to reinforce learning.
 Exercises
- Assessment based on partial tasks The grade for exercises is determined by student participation and the completion of assigned tasks during classes.
 Project
- Management project Students develop a project focused on a selected aspect of management within an organization.

Grading System

Each component (lecture, exercises, project) is scored out of 100 points, and a minimum of 50% is required to pass.

Score Grade

0 - 49 Fail

50 - 59 Satisfactory

60 - 69 Satisfactory plus

70 - 79 Good

80 - 89 Good plus

90 - 100 Very good

Programme content

Fundamental Concepts and Functions of Management - Definitions and significance of management, key management functions (planning, organizing, motivating, and controlling), and the evolution of management theories.

Organizational Culture - The role of culture in shaping organizational behavior and performance.

The Organization as a System - Organizational structures and their types, decision-making processes within an organization, as well as communication and coordination mechanisms.

Leadership - Motivation and motivation theories, leadership styles and team management, and fostering organizational culture.

Change and Innovation Management - Factors influencing organizational change, the change

implementation process, and innovation strategies, including adaptation to new technologies.

Course topics

Lectures:

- Introduction to Management History, definitions, essence, management theories, and contemporary approaches.
- The Manager's Role in an Organization Responsibilities, competencies, and key challenges.
- The Organizational Environment Internal and external factors shaping organizations.
- Planning and Decision-Making Strategic and operational planning, decision-making models.
- Organizing as the Second Function of Management Organizational structures and coordination.
- Leadership Leadership theories, styles, and team management.
- Controlling Monitoring performance, evaluation, and corrective actions.

Exercises:

- Managerial Decision-Making Practical applications and case studies.
- Organizational Life Cycle Changes in organizational functioning and structure.
- Leadership Styles and Management Approaches Analyzing and applying leadership models.
- Le Chatelier's Organizational Cycle Understanding adaptation processes.
- The Concept of the Ideal System by G. Nadler Designing efficient organizational structures.
- Benchmarking Comparative analysis of best practices in management.
- Employee Motivation Analysis Evaluating and improving motivation strategies. Project:
- Organizational Planning Developing an organization's mission, vision, and goals.
- Building an Organizational Structure Applying six structural design tools.
- Environmental Analysis Identifying key external and internal factors.
- Leadership Style Assessing and selecting appropriate management approaches.
- Motivation Systems and Strategies Designing effective incentive mechanisms.

Teaching methods

Informative lectures with discussion elements, team-based project work, text analysis, Problem-Based Learning (PBL), and case study analysis.

Bibliography

Basic:

Griffin, R.W. (2017). Podstawy zarządzania organizacjami. Warszawa: Polskie Wydawnictwo Ekonomiczne.

Koźmiński, A.K., & Piotrowski, W. (2004). Zarządzanie. Teoria i praktyka. Warszawa: Wydawnictwo Naukowe PWN.

Stoner, J.A.F., Freeman, R.E., & Gilbert, D.R. (2001). Kierowanie. Warszawa: Polskie Wydawnictwo Ekonomiczne.

Additional:

Łukasiewicz, K., & Pietrzak, P. (red.) (2023). Nowoczesne zarządzanie. Podstawy zarządzania. Warszawa: CeDeWu.

Cyfert, S. (red.) (2024). Podstawy zarządzania. Poznań: Wydawnictwo Uniwersytetu Ekonomicznego w Poznaniu.

Breakdown of average student's workload

	Hours	ECTS
Total workload	100	4,00
Classes requiring direct contact with the teacher	47	2,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	53	2,00