COURSE DESCRIPTION CARD - SYLLABUS

Course name
Qualitology [S1DSwB1>KWA]

Course

Field of study
Data Science in Business

Year/Semester
2/4

Area of study (specialization)
–

Profile of study
general academic

Level of study
first-cycle

Course offered in
Polish

Form of study
full-time

Requirements
elective

Number of hours

Lecture
15

Laboratory classes
0

Other
0

Tutorials
0

Projects/seminars
0

Number of credit points

1,00

Coordinators

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Lecturers

Prerequisites

The student possesses basic knowledge in management sciences. They understand basic concepts related to quality, classification, and sorting of objects in various fields. They can analyze and interpret relationships between qualitative characteristics and have the ability to think logically and solve problems. Additionally, the student shows readiness for analytical work, an understanding of interdisciplinary issues, and the ability to systematically approach the evaluation of quality and valuation of objects.

Course objective

The objective of the Quality Science course is to introduce students to an interdisciplinary approach to quality issues, its classification, evaluation, and optimization. Students will acquire knowledge about the basic principles and research goals of general quality theory and the theory of qualitative characteristics. The course will enable students to understand methods of ordering, classification, and categorization of objects and their sets.

Course-related learning outcomes

Knowledge:
Characterizes quality science as an interdisciplinary field of study focused on quality theory, its basic

assumptions, and research goals [DSB1_W03].
Describes the theory of qualitative characteristics, the principles of classification and ordering of objects and their sets in the context of quality analysis [DSB1_W01].
Explains the principles of evaluation, representation, and optimization of quality in management processes and decision-making [DSB1_W04].

Skills:
Analyzes and classifies qualitative characteristics of objects, applying principles of ordering and categorization to assess quality [DSB1_U07].
Uses quality science methods to evaluate the homogeneity of quality and the gradation of feature significance in various systems and processes [DSB1_U05].

Social competences:
Considers the quality aspect when making business and organizational decisions, guided by the principles of evaluation and optimization [DSB1_K05].

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Formative assessment: (1) ongoing assessment of performance in class, partial points for presentation of results and participation in discussion, (2) presentation of results related to the given topic and answering 3-4 open questions, pass mark from 51% of points.
Summative evaluation: the sum of the points from the partial discussion and the presentation is converted into the final evaluation, positive evaluation from 51% of the points.

Programme content

Definition of Qualitology as an interdisciplinary field of knowledge dealing with all issues related to quality, taking into account a set of basic principles and research objectives of the general toeria of quality; the theory of qualitative features; qualitative comparative issues related to the ordering, classification and categorisation of objects and their sets.

Course topics

1. The practical and theoretical rationale for the development of qalitology
2. Main objectives of qualitology and methodological instrumentation
3. Basic terms and definitions
4. Classification of characteristics - the theory qualitative features
5. Problems of qualitative homogeneity, gradation of feature relevance and quality determination
6. Qualitative comparative and axiological issues and valuated quality
7. Principle of qualitative mapping of objects, evaluation principle and optimisation principle
8. The issue of management quality
9. The scope of applications of qualitology
10. Development directions of qualitologu defined by the principles of the qualitative approach

Teaching methods

Teaching methods - problem lecture with multimedia presentation, video presentation, discussion, case study.

Bibliography

Basic:
Mantura W., Overview of Qualitology, Wydawnictwo Politechniki Poznańskiej, Poznań, 2020.
Mantura W., Zarys kwalitologii, Wydawnictwo Politechniki Poznańskiej, Poznań 2010.

Additional:
Kolman R., Kwalitologia : wiedza o różnych dziedzinach jakości, Wydawnictwo Placet, Warszawa 2009.
Borys, T., Interdyscyplinarność nauk o jakości. Zarządzanie i Finanse, 10(3, cz. 1), 7-23 2012.

Breakdown of average student's workload

	Hours	ECTS
Total workload	25	1,00
Classes requiring direct contact with the teacher	15	0,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	10	0,50