DESCRIPTION OF THE COURSE OF STUDY

Course code	**0719-2ID-F57-ZJDDG**	
Name of the course in	Polish	*Zarządzanie jakością danych i Data Governance*
	English	*Data Quality Management and Data Governance*

1. **LOCATION OF THE COURSE OF STUDY** within the system of studies

1.1. Field of study	**Data Engineering**
1.2. Mode of study	**Full-time**
1.3. Level of study	**First-cycle engineering studies**
1.4. Profile of study*	**General academic profile**
1.5. Person/s preparing the course description	**Łukasz Misztal**
1.6. Contact	**lukasz.misztal@ujk.edu.pl**

2. **GENERAL CHARACTERISTICS OF THE** course of study

2.1. Language of instruction	**Polish**
2.2. Prerequisites*	**None**

3. **DETAILED CHARACTERISTICS OF THE COURSE OF STUDY**

3.1. **Form of classes**		**Lectures, laboratory classes, project.**
3.2. **Place of classes**		**Classes in UJK teaching rooms**
3.3. **Form of assessment**		**graded credit**
3.4. **Teaching methods**		**Lecture – multimedia presentation, discussion; laboratory – problem solving, discussion**
3.5. **Bibliography**	**Required reading**	1. DAMA International, DAMA-DMBOK: Data Management Body of Knowledge, Technics Publications. 2. Jack E. Olson, Data Quality: The Accuracy Dimension, Morgan Kaufmann. 3. Arkady Maydanchik, Data Quality Assessment, Technics Publications.
	Further reading	

4. **OBJECTIVES, SYLLABUS CONTENT AND INTENDED LEARNING OUTCOMES**

4.1 Course objectives ***(including form of classes)***

Lecture, laboratory:

C1. To introduce students to the principles of data quality management in organizations.
C2. To develop practical skills in implementing Data Governance processes.
C3. To enhance the ability to assess, monitor, and improve data quality.

4.2 Detailed syllabus ***(including form of classes)***

Lectures

1. Introduction to data quality management – concepts and standards (ISO 8000, DAMA-DMBOK).
2. Data lifecycle and the importance of data quality in decision-making processes.
3. Data Governance frameworks and structures – policies, roles, and responsibilities.
4. Methods for measuring data quality – completeness, accuracy, consistency, timeliness.
5. Tools for data quality management and their integration with data warehouses.

Laboratory classes / Project:

1. Data profiling and data cleansing.
2. Implementation of a Data Quality Assessment process in a Talend/Informatica environment.
3. Use of the Great Expectations tool for data validation.
4. Team project: development of a Data Governance implementation plan for an organization.
5. Reporting and visualization of data quality metrics.

4.3 Intended learning outcomes

Code	**A student, who passed the course**	**Relation to learning outcomes**
within the scope of **KNOWLEDGE:**		
W01	knows the basic concepts, standards, and models of data quality management (ISO 8000, DAMA-DMBOK).	ID1A_W06, ID1A_W07

W02	knows the processes and roles within Data Governance, including principles of accountability and data management policies.	ID1A_W09, ID1A_W10
W03	Knowsthe methods and tools for data quality assessment (completeness, consistency, accuracy, timeliness).	ID1A_W07, ID1A_W16
within the scope of **ABILITIES:**		
U01	is able to profile, analyze, and assess data quality using selected tools (e.g., Talend, Great Expectations).	ID1A_U06, ID1A_U08
U02	is able to develop and implement elements of the Data Governance process within an organization.	ID1A_U07, ID1A_U09
U03	is able to prepare a report and present the results of data quality assessment along with improvement recommendations.	ID1A_U09, ID1A_U13
within the scope of **SOCIAL COMPETENCE:**		
K01	understands the importance of data quality for business and social decisions and the need for ethical data management, and is able to work in a team implementing a Data Governance project, taking responsibility for the quality and consistency of the work results.	ID1A_K01, ID1A_K03, ID1A_K04

4.4. **Methods of assessment of the intended learning outcomes**

Teaching outcomes *(code)*	**Method of assessment (+/-)**																				
	Exam oral/written*			**Test***			**Project***			**Effort in class***			**Laboratory Reports**			**Group work***			**Others* e.g. standardized test used in e-learning**		
	Form of classes			***Form of classes***			***Form of classes***			***Form of classes***			***Form of classes***			***Form of classes***			Lecture, tutorial		
	L	*C*	*P*	*L*	*C*	*P*	*L*	*C*	*P*	*L*	*C*	*P*	*L*	*C*	*P*	*L*	*C*	*P*	*L*	*C*	.. .
W01				+							+										
W02				+							+										
W03				+							+										
U01					+				+		+										
U02					+				+		+										
U03					+				+		+										
K01									+												

delete as appropriate

4.5. **Criteria of assessment of the intended learning outcomes**

Form of classes	Grade	Criterion of assessment
lecture (L) (including e-learning)	3	Achievement of <50–60)% of the requirements specified in the assessment methods
	3,5	Achievement of <60–70)% of the requirements specified in the assessment methods
	4	Achievement of <70–80)% of the requirements specified in the assessment methods
	4,5	Achievement of <80–90)% of the requirements specified in the assessment methods
	5	Achievement of <90–100)% of the requirements specified in the assessment methods
laboratory (C)* (including e-learning)	3	Achievement of <50–60)% of the requirements specified in the assessment methods
	3,5	Achievement of <60–70)% of the requirements specified in the assessment methods
	4	Achievement of <70–80)% of the requirements specified in the assessment methods
	4,5	Achievement of <80–90)% of the requirements specified in the assessment methods
	5	Achievement of <90–100)% of the requirements specified in the assessment methods
projrct (P)* (including e-learning)	3	Achievement of <50–60)% of the requirements specified in the assessment methods
	3,5	Achievement of <60–70)% of the requirements specified in the assessment methods
	4	Achievement of <70–80)% of the requirements specified in the assessment methods
	4,5	Achievement of <80–90)% of the requirements specified in the assessment methods
	5	Achievement of <90–100)% of the requirements specified in the assessment methods

5. **BALANCE OF ECTS CREDITS – STUDENT'S WORK INPUT**

Category	Student's workload	
	Full-time studies	Extramural studies
NUMBER OF HOURS WITH THE DIRECT PARTICIPATION OF THE TEACHER /CONTACT HOURS/	***60***	
*Participation in lectures**	15	
*Participation in classes, seminars, laboratories**	30	
Project	15	
INDEPENDENT WORK OF THE STUDENT/NON-CONTACT HOURS/	***40***	
*Preparation for the lectures**	10	
*Preparation for the classes, seminars, laboratories**	15	
Project	15	
TOTAL NUMBER OF HOURS	***100***	
ECTS credits for the course of study	**4**	

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Accepted for execution *(date and legible signatures of the teachers running the course in the given academic year)*

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