



SZKOŁA GŁÓWNA
GOSPODARSTWA
WIEJSKIEGO

Oracle Databases

Educational subject description sheet

Basic information

Field of study Course Offer for exchange students - second cycle studies, including uniform master studies (MA programmes)		Didactic cycle 2024/25	
Speciality -		Subject code PWMPWM2S_D.B100000.02493.24	
Organizational unit Course Offer for exchange students		Lecture languages english	
Study level second cycle studies, including uniform master studies (MA programmes)		Mandatory Obligatory subjects	
Study form full-time studies		Block Special subjects	
Education profile General academic		Disciplines Technical computing and telecommunications	
Coordinator	Krzysztof Karpio		
Teacher	Krzysztof Karpio		
Period Winter semester	Examination Pass with grade	Number of ECTS points 4	
	Activities and hours Lecture: 15 Laboratory exercises: 30		

Goals

Code	Goal
C1	to familiarize students with the basics of Oracle relational database programming

Entry requirements

Student posiada podstawą wiedzę na temat obsługi komputera, systemu operacyjnego Windows. Wskazane jest aby zetknął się wcześniej z oprogramowaniem do przechowywania danych, np.: MS Access, MS Excel.

Subject's learning outcomes

Code	Outcomes in terms of	Effects	Examination methods
Knowledge - Student knows and understands:			
W1	methods and tools, including techniques for obtaining quantitative and qualitative data, derived from the observation of socio-economic and natural phenomena and surveys, appropriate for studying computer science and econometrics, allowing to describe and study economic structures and institutions as well as processes in them and between them using advanced techniques.		Written credit, Assessment of work in the laboratory
W2	algorithms and their computational complexity, computer system architecture, operating systems, network technologies, programming languages and paradigms, artificial intelligence, databases, software engineering.		Written credit, Assessment of work in the laboratory
W3	methods, techniques and tools used in solving simple IT tasks in the field of analysis of computational complexity of algorithms, construction of computer systems, operating systems, computer networks and network technologies, implementation of programming languages, artificial intelligence, databases, software and computer engineering information systems.		Written credit, Assessment of work in the laboratory
W4	information and knowledge acquisition technology, database and data warehouse technology, knowledge base technology, ICT technologies (communication technologies, network technologies, Internet technologies).		Written credit, Assessment of work in the laboratory
Skills - Student can:			
U1	acquire information in an advanced way from literature, databases and other properly selected sources, also in English, and can correctly interpret and explain economic and social phenomena and the mutual relations between them.		Written credit, Assessment of work in the laboratory
U2	analyze, design and test IT systems using methodologies, techniques and tools supporting project management.		Written credit, Assessment of work in the laboratory

Study content

No.	Course content	Subject's learning outcomes	Activities
1.	<ul style="list-style-type: none"> • Introduction • Data filtering and sorting • Scalar and conversion functions • Data grouping • Work with multiple tables • Subqueries • Data modification • Tables • Database objects • Advanced techniques 	W1, W2, W3, W4, U1, U2	Lecture, Laboratory exercises

Course advanced

Activities	Methods of conducting classes
Lecture	Lecture
Laboratory exercises	Laboratory (experiment), learning by experiment

Activities	Examination method	Percentage
Lecture	Written credit	80%
Laboratory exercises	Assessment of work in the laboratory	20%

Activities	Credit conditions
Lecture	50%
Laboratory exercises	condition optional

Literature

Obligatory

1. J.Casteel, Oracle SQL, 2018
2. R.Mratz, Programming Oracle 12g

Calculation of ECTS points

Activity form	Activity hours*
Lecture	15
Laboratory exercises	30
Preparation for the exam	60
Student workload	Hours 105
Number of ECTS points	ECTS 4

* hour means 45 minutes