



SZKOŁA GŁÓWNA  
GOSPODARSTWA  
WIEJSKIEGO

## Oracle Databases

### Educational subject description sheet

#### Basic information

<b>Field of study</b> Course Offer for exchange students - second cycle studies, including uniform master studies (MA programmes)		<b>Didactic cycle</b> 2024/25	
<b>Speciality</b> -		<b>Subject code</b> PWMPWM2S_D.B100000S.02493.24	
<b>Organizational unit</b> Course Offer for exchange students		<b>Lecture languages</b> english	
<b>Study level</b> second cycle studies, including uniform master studies (MA programmes)		<b>Mandatory</b> Obligatory subjects	
<b>Study form</b> full-time studies		<b>Block</b> Special subjects	
<b>Education profile</b> General academic		<b>Disciplines</b> Technical computing and telecommunications	
<b>Coordinator</b>	Krzysztof Karpio		
<b>Teacher</b>	Krzysztof Karpio		
<b>Period</b> Winter semester	<b>Examination</b> Pass with grade	<b>Number of ECTS points</b> 4	
	<b>Activities and hours</b> 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
<b>Knowledge - Student knows and understands:</b>			
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
<b>Skills - Student can:</b>			
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"> <li>• Introduction</li> <li>• Data filtering and sorting</li> <li>• Scalar and conversion functions</li> <li>• Data grouping</li> <li>• Work with multiple tables</li> <li>• Subqueries</li> <li>• Data modification</li> <li>• Tables</li> <li>• Database objects</li> <li>• Advanced techniques</li> </ul>	W1, W2, W3, W4, U1, U2	Lecture, Laboratory exercises
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### 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
<b>Student workload</b>	<b>Hours</b> 105
<b>Number of ECTS points</b>	<b>ECTS</b> 4

\* hour means 45 minutes