

<b>Course title: Database Programming</b>
Course code: 62042
ECTS credits: 6
Requirements: None
<b>Basic information</b>
Level of studies: Master applied studies
Year of study: 1
Trimester: 1
Goal: Becoming familiar with the limits of SQL language and the importance of working on database functionalities. Introducing students to the elements of a procedural language which is used for expansion of SQL capabilities, such as variables, conditional clauses, loops, etc, using PL/SQL language. Becoming familiar with PL/SQL components while using and creating procedures, functions, triggers.
Outcome: Students are trained to create components written in a procedural language, such as procedures, functions, triggers, etc.
<b>Contents of the course</b>
Theoretical instruction
1. Basics
2. Defining variables and data types
3. Using SQL in PL/SQL
4. Cursors and parameters
5. Using procedures, functions and packages
6. Exceptions
7. Triggers
Practical instruction (Problem solving sessions/Lab work/Practical training)
1. Students are trained to create PL/SQL components in Oracle Apex, which is used during theoretical classes.
<b>Textbooks and References</b>

1. Oracle 10g – PL / SQL Programming Scott Urman, Ron Hardman, Michael McLaughlin, Mikroknjiga
2. Oracle PL/SQL by Example, Benjamin Rosenzweig, Elena Silvestrova
3. Oracle Academy Curriculum, Oracle Database Programming with PL/SQL, 2011.
<b>Number of active classes (weekly)</b>
Lectures: 4
Practical classes: 1
Other types of classes: 1
<b>Grading (maximum number of points: 100)</b>
<b>Pre-exam obligations: Points</b>
Activities during lectures: 5
Activities on practical exercises: 20
Seminary work: 10
Colloquium: 20
<b>Final exam: Points</b>
Written exam: 45
Oral exam: 0
<b>Lecturer</b>
Milorad Paskaš, PhD
<b>Associate</b>
Milena Vesic