

Relational Databases Course

<i>Name of the subject:</i> Relational Databases - BSc	<i>SUBJECT code:</i>	Weekly hours: 4 lectures 2; exercises 2	Credit: 6
<i>Subject leader:</i> Stanujkic Dragisa	<i>Academic Degree:</i> Associate Professor	Prerequisites: Courses: Informatics I and II	

Purpose: Within the course, with the constant modernization of the course content, students are introduced with basics of basics of the SQL language and the relational databases.

Course description: Through the course, students are prepared for designing, implementing, using and maintaining relational databases, as well as for using SQL language.

Schedule

Weeks	Topics
1.	Introduction to data management procedures, database terminology and concepts.
2.	Basic Concepts of Data Modeling: Conceptual, logical, and physical data models.
3.	Entity Relationship Diagram.
4.	Entity Relationship Diagram.
5.	Relational Database Model.
6.	Relational Database Model.
7.	Relational Database Constraints.
8.	Functional Dependencies and Types of Keys.
9.	Update anomalies in relational databases.
10.	Normal Forms.
11.	Relational Database Design Approaches.
12.	Structured Query Language (SQL): Data definition & data control.
13.	SQL: Data manipulation.
14.	SQL: Data manipulation.

Final grade:

20pt – Class attendance: 10pt lectures and 10pt exercises attendance; 20pt – Seminar project; 20pt – Colloquium; 40pt – Final exam: 20pt written and 20pt oral exam.

(<51pt fail; 51-60 grade 6; 61-70 grade 7; 71-80 grade 8; 81-90 grade 9; 91-100 grade 10)

Compulsory literature:

Date, C.J. (2004) An Introduction to Database Systems. Adison Wesley.

Supplemental literature:

Sheldon, R., & Moes, G. (2005). Beginning MySQL. Wiley & Sons.

Harrington, J. L. (2009). Relational database design and implementation: Clearly Explained. Elsevier.