Study programmes: Bachelor studies - Mathematics

Course name: RM13 - Introduction to Relational Databases

Lecturers: Gordana Pavlović-Lažetić and other lecturers of the Department of Informatics and Computer Science

Status: Compulsory

ECTS: 5

Attendance prerequisites: M1.02, RM01, RM02

Course aims: Introducing database concepts and techniques.

Course outcome: After completion of the course, students have adopted introductory database concepts and data modeling techniques. They have acquired experience in using interactive SQL.

Course content:

- Database systems: motivation and development; components
- Database management systems; functions; architecture; data independence
- Data modeling: conceptual, logical, physical model; Entity-Relationship model
- Relational model of data; relational algebra and relational calculus
- Query languages; survey; SQL
- Design of relational databases; functional and multivalued dependency; normal forms

Literature:

1. G.Pavlović-Lažetić: Osnove relacionih baza podataka, Matematički fakultet, Beograd, 1999.
2. Date, C.J: An Introduction to Database Systems, 7th Ed, Addison-Wesley, 1999.

(a lecturer may recommend other literature sources if deemed appropriate)

Number of hours: 4	**Lectures: 2**	**Tutorials: 2**	**Laboratory: -**	**Research: -**

Teaching and learning methods: Frontal / Lectures / Exercises

Assessment (maximal 100 points)

Course assignments	**points**	**Final exam**	**points**
Lectures	-	Written exam	-
Exercises / Tutorials	-	Oral exam	-
Colloquia	40	Written-oral exam	60
Essay / Project	-		