POLITEHNICA University of Bucharest (**UPB**)
Faculty of Industrial Engineering and Robotics (**IIR**)
Study Programme: Industrial Engineering (**IE**)
Form of study: Licence (Bachelor)

COURSE SPECIFICATION

Course title:	Databases	*Semester:*	3
Course code:	UPB.06.F.03.O.005	*Credits (ECTS):*	6

Course structure	Lecture	Seminar	Laboratory	Project	Total hours
Number of hours per week	2		2	2	6
Number of hours per semester	28		28	28	84

Lecturer	Lecture	Seminar / Laboratory / Project
Name, academic degree	LecturerRadu Constantin Parpală	LecturerLidia Florentina Parpală
Contact (email, location)	radu.parpala@gmail.com, CE004	lidia.parpala@gmail.com CK109

Assessment method:	% of the final grade	Minimal requirements for award of credits
Written exam	20	

Course description:
The main aim of the course is the student assimilation of the following concepts: database fundamentals, E-R model, database modeling, design and administration techniques, collaborative use of databases, data manipulation techniques.   This course is also designed to develop SQL programming proficiency. At the end of the course students should be able to write SQL code to perform simple tasks as querying, updating, deleting records as well as more advanced task as writing procedures and triggers,

Seminar / Laboratory / Project description:
The main topics of the laboratory are: Client –server database architecture, the functional design of a database,SQL query language, database system integration in practical applications. The project aim is that the students create a functional database model for a real application

Intended learning outcomes:

At the end of this course students should have acquired extensive knowledge about:
- Database management system
- Relational database model
- Relational algebra
- Database modeling
- SQL query language

Report / project	25	Database conceptual model, database tables.
Laboratory	20	basic database knowledge (tables definition, simples queries, database rows manipulation)
Other: midterm eval. tests	35	

References:
Understanding DB2 Raul F. Chong, Clara Liu, Sylvia F. Qi., Dwaine R Snow. ISBN9780131859166 DB2 10.1 Fundamentals, Certification Study Guide Roger E. Sanders, ISBN 9781583473498 Database Design and SQL for DB2, James Cooper, ISBN 9781583473573

Prerequisites:	*Co-requisites* *(courses to be taken in parallel as a condition for enrolment):*
- Computer Programing 1; - Computer Programing 2.	

Additional relevant information:

Date: 09.07.2016
Lecturer, Radu Constantin, Parpala: