

COURSE NAME: File Structures and Databases		
Degree: BS in Computer Science and Engineering	YEAR: 2 <sup>nd</sup>	SEMESTER: 2 <sup>nd</sup>

	COURSE WEEKLY SCHEDULE								
WEEK	SESSIC	SESSION CONTENT DESCRIPTION	GROUP		Room different from classroom (computer	Is a two	STUDENT'S SEMANAL ASSIGNMENT		
	Š		ALL	REDUCED	room, audiovisual, etc.)	session?	DESCRIPTION	PRESENTIAL HOURS	WORK HOURS
1	1	Presentation e Introduction. Item 1: Introduction to Storage and DB.	х				Learn up compulsory materials	1,66	2
1	2	Item 2R: Relational Design (statics). Relational modelling Exercises (statics)		Х			Exercise solving.	1,66	3
2	3	Item 2: Statics of the Relational Model: Elements, Characteristics and Restrictions.	х				Learn up compulsory materials	1,66	_
2	4	Item 2P: Relational Statics labwork. The SQL+. console. The Data Description Language syntax.		Х	Computer Room	YES	Work on laboratory assignment	1,66	5
3	5	Item 2: Statics of the Relational Model (end). Item 3: Relational Dynamics: Relational Algebra.	х				Learn up compulsory materials. Complementary readings.	1,66	6
3	6	Relational modelling Exercises (statics)		Х			Work on laboratory assignment Exercise solving.	1,66	

4	7	Item 3: Relational Dynamics: Rel. Dynamics in SQL (the <i>Select</i> ) Item 4: Advanced Relational: views.	х				Learn up compulsory materials	1,66	5
4	8	Item 3P: Relational Dynamics: from algebra to SQL. Queries and testing. Workload.		Х	Computer Room	YES	Work on laboratory assignment	1,66	5
5	9	Item 4: Advanced Relational: triggers.	Х				Learn up compulsory materials.	1,66	
5	10	Item 3R: Relational Dynamics. Solving strategies. Examples (queries).		Х			Exercise solving.	1,66	3
6	11	Theoretical Test (continuous assessment).  Item 5 (I): Introduction and Basic Concepts on File Structures	х				Learn up compulsory materials. Complementary readings.	1,66	
6	12	1 <sup>ST</sup> assignment submission.  Item 4P: Views. Blocks in SQL (named and y not-named).  Exceptions. User and system Packages. Resources and Syntax.  Triggers design and implementation (examples).		х	Computer Room	YES	Work on laboratory assignment	1,66	5
7	13	Item 5 (II): Introduction and Basic Concepts on File Structures	Х				Learn up compulsory materials.	1,66	
7	14	Item 4R: Examples and Exercises on Triggering. Examples and Exercises on External Design.		Х			Exercise solving. Work on laboratory assignment	1,66	6
8	15	Item 6 (I): Base Organizations	Х				Learn up compulsory materials.	1,66	
8	16	Item 6R (I): Exercises on costs and space usage.		Х			Exercise solving. Work on laboratory assignment	1,66	6
9	17	Item 6 (II): Base Organizations.	Х				Learn up compulsory materials. Complementary readings.	1,66	_
9	18	Item 6R (II): Problem on costs regarding diverse organizations		Х			Exercise solving. Work on laboratory assignment	1,66	7
10	20	Item 7 (I): Auxiliary Organizations.	Х				Learn up compulsory materials.	1,66	
10	21	Deliverance and exam on first two assignments block (valid for continuous assessment).		Х			Work on laboratory assignment	1,66	7
11	22	Item 7 (II): Auxiliary Organizations.	Х				Learn up compulsory materials.	1,66	2
11	23	Item 7R (II): Exercises on auxiliary organizations.		Х			Exercise solving.	1,66	3
12	24	Item 8 (I): Database Management Systems	Х				Learn up compulsory materials.	1,66	
12	25	Item 8P: Fourth labwork: measuring performance with Oracle. Physical design with DBMS Oracle.		Х	Computer Room	YES	Work on laboratory assignment	1,66	8
13	26	Item 8 (II): Database Management Systems Item 9: Storage Paradigms.	х				Learn up compulsory materials. Complementary readings.	1,66	7

13	27	Reviewing exercises: file structures complete pro	blem		Х		Exercise solving.  Work on laboratory assignment	1,66	
14	28	Theoretical Test (continuous assessment). Review. Question answering. Exercise solving.		х			Go over the contents of the second block.	1,66	7
14	29	Reviewing exercises (all items).			Х		Work on laboratory assignment	1,66	
Subtotal 1							48,33	80	
<b>Total 1</b> (classroom hours and student's standalone work in weeks 1-14)						128,33			
15									
Preparation for examination and exam						3	32		
17	17   18   17   17   18   17   18   17   18   17   18   17   18   17   18   17   18   17   18   17   18   17   18   18						3	32	
18									
Subtotal 2						3	32		
Total 2 (classroom hours and student's standalone work in weeks 15-18)					35				
TOTAL (Total 1 + Total 2. <u>maximum 180 hours</u> )					163,3	3			