



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

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

3	6	Exercises on Relational Statics (modelling) Item 3R: Relational Dynamics. Solving strategies. Examples (queries).		X			Work on laboratory assignment Exercise solving.	1,66	
4	7	Item 3 (II): Relational Dynamics Item 4 (I): Advanced Relational: views and triggers.	X				Learn up compulsory materials	1,66	5
4	8	Exercises on Relational Dynamics (queries, Algebra & SQL)		X			Work on laboratory assignment	1,66	
5	9	Item 4 (II): Advanced Relational Item 5 (I): Introduction and Basic Concepts on File Structures	X				Learn up compulsory materials.	1,66	2
5	10	Item 3P: Relational Dynamics: from algebra to SQL. Queries and testing. Workload.		X	Computer Room		Exercise solving.	1,66	
6	11	Theoretical Test (continuous assessment). Item 5 (II): Introduction and Basic Concepts on File Structures	X				Learn up compulsory materials. Complementary readings.	1,66	5
6	12	Item 4R: Examples and Exercises on Triggering. Examples and Exercises on External Design.		X			Work on laboratory assignment	1,66	
7	13	Item 5 (III): Introduction and Basic Concepts on File Structures Item 6 (I): Base Organizations	X				Learn up compulsory materials.	1,66	6
7	14	Item 4P: Views. Blocks in SQL (named and y not-named). Exceptions. User and system Packages. Resources and Syntax. Triggers design and implementation (examples).		X	Computer Room		Exercise solving. Work on laboratory assignment	1,66	
8	15	Item 6 (II): Base Organizations.	X				Learn up compulsory materials.	1,66	6
8	16	Item 6R (I): Exercises on costs and space use (Base Organizations).		X			Exercise solving. Work on laboratory assignment	1,66	
9	17	Item 6 (II): Base Organizations. Item 7 (I): Auxiliary Organizations.	X				Learn up compulsory materials. Complementary readings.	1,66	7
9	18	Labwork: Individual Exam (continuous assessment).		X	Computer Room	YES	Exercise solving. Work on laboratory assignment	1,66	
9	19	Item 6P: Optative labwork (continuous assessment).		X	Computer Room	YES	Work on laboratory assignment	1,66	
10	20	Item 7 (II): Auxiliary Organizations.	X				Learn up compulsory materials.	1,66	7
10	21	Item 7R (I): Exercises on base and auxiliary organizations.		X			Work on laboratory assignment	1,66	
11	22	Item 7 (III): Auxiliary Organizations.	X				Learn up compulsory materials.	1,66	7
11	23	Item 7R (II): Exercises on auxiliary organizations.		X			Exercise solving.	1,66	

12	24	Item 8 (I): Database Management Systems	X				Learn up compulsory materials.	1,66	7
12	25	Item 8P: Fourth labwork: measuring performance with Oracle. Physical design with DBMS Oracle.		X	Computer Room		Work on laboratory assignment	1,66	
13	26	Item 8 (II): Database Management Systems. Item 9: Storage Paradigms.	X				Learn up compulsory materials. Complementary readings.	1,66	7
13	27	Reviewing exercises: file structures complete problems.		X			Exercise solving. Work on laboratory assignment	1,66	
14	28	Theoretical Test (continuous assessment). Course Review: Question answering. Exercise solving.	X				Go over the contents of the second block.	1,66	7
14	29	Reviewing exercises (all items).		X			Work on laboratory assignment	1,66	
								48,33	80
Total 1 (classroom hours and student's standalone work in weeks 1-14)								128,33	
15		Optional labwork deliverance and exam		X	Computer Room	YES		1	
16		Preparation for examination and exam						3	32
17									
18									
Subtotal 2								4	32
Total 2 (classroom hours and student's standalone work in weeks 15-18)								36	
TOTAL (Total 1 + Total 2. <u>maximum 180 horas</u>)								164,33	