



Course Specification

Course Name:[Object Oriented Database]

Course Code:[IS415]

I. Basic Course Information

Major or minor element of program:[Major]

Department offering the course:[Information Systems Department]

Academic level:[400 Level]

Semester in which course is offered:[First (Fall) Semester]

Course pre-requisite(s): [IS312 Database Systems - 2]

Credit Hours:3

Contact Hours Through:

Lecture	Tutorial*	Practical*	Total
2.5	0.0	1.5	4.0

* 1.5 hours for **either** Tutorial or Practical

Approval date of course specification: September 2014

II. Overall Aims of Course

[Introduce object-oriented databases to Information systems students and show the advanced research and writings in this field.]

III. Program ILOs covered by course

Program Intended Learning Outcomes (By Code)			
Knowledge & Understanding	Intellectual Skills	Professional Skills	General Skills
[K1,K17,K21]	[I14,I16,I18]	[P12,P15]	[G1,G2,G6]



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IV. Intended Learning Outcomes of Course (ILOs)

a. Knowledge and Understanding

On completing the course, students should be able to:

- K.1 Explain the basic concepts of object-oriented databases.
- K.2 Difference between relational and object oriented databases.
- K.3 Explain the different approaches for implementing object-oriented database management systems.]

b. Intellectual/Cognitive Skills

On completing the course, students should be able to:

- I.1 Model the world according to the object-oriented model.
- I.2 Write object-oriented queries to extract the intended data from the model.
- I.3 Design object-oriented database.]

c. Practical/Professional Skills

On completing the course, students should be able to:

- P.1 Use different object-oriented databases implementations.
- P.2 Construct programs to use object-oriented database systems.]

d. General and Transferable Skills

On completing the course, students should be able to:

- G.1 Read and present academic papers.
- G.2 Enhance presentation skills.
- G.3 Enhance team working skills.]

V. Course Matrix Contents

	Main Topics / Chapters	Duration (Weeks)	Course ILOs Covered by Topic (By ILO Code)			
			K & U	I.S.	P.S.	G.S.
1-	[Introduction To Object-Oriented Databases]	[2]	[K1]	[]	[]	[]
2-	[Comparing RDBMS, ODBMS, and ORDBMS]	[2]	[K2]	[]	[]	[]
3-	[Converting Relational to OODB]	[1]	[K2]	[I2]	[]	[]
4-	[Logical Foundation of Object-Oriented Databases (FLogic)]	[2]	[K1,K3]	[I1]	[]	[]
5-	[The story of O2]	[1]	[K1]	[]	[]	[]
6-	[UML-OODB]	[1]	[K3]	[]	[]	[]
7-	[Graphical user Interface for OODB]	[1]	[K3]	[I3]	[P1,P2]	[]
8-	[OODB Design by DotNet]	[1]	[K3]	[]	[P1]	[G2]
9-	[XML as an object Interchange format]	[1]	[K3]	[]	[]	[G1,G3]
10-	[Trends]	[1]	[K3]	[]	[]	[]
	Net Teaching Weeks	13				



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VI. Course Weekly Detailed Topics / hours / ILOs

Week No.	Sub-Topics	Total Hours	Contact Hours	
			Theoretical Hours	Practical Hours*
1	Introduction	2,5	2.5	
2	Introduction	4	2.5	1.5
3	Comparing RDBMS, ODBMS, and ORDBMS	4	2.5	1.5
4	Comparing RDBMS, ODBMS, and ORDBMS	4	2.5	1.5
5	Converting Relational to OODB	4	2.5	1.5
6	Logical Foundation of Object-Oriented Databases (FLogic)	4	2.5	1.5
7	Midterm Exam			
8	Logical Foundation of Object-Oriented Databases (FLogic)	4	2.5	1.5
9	The story of O2	4	2.5	1.5
10	UML-OODB	4	2.5	1.5
11	Graphical user Interface for OODB	4	2.5	1.5
12	OODB Design by DotNet	4	2.5	1.5
13	XML as an object Interchange format	4	2.5	1.5
14	Trends	4	2.5	1.5
15	Final Exam			
Total Teaching Hours		51	33	18

* No Practical/Tutorial during the first week of the semester

VII. Teaching and Learning Methods

Teaching/Learning Method	Selected Method	Course ILOs Covered by Method (By ILO Code)			
		K & U	Intellectual Skills	Professional Skills	General Skills
Lectures & Seminars	<input checked="" type="checkbox"/>	All			
Tutorials	<input type="checkbox"/>				
Computer lab Sessions	<input type="checkbox"/>				
Practical lab Work	<input checked="" type="checkbox"/>		All	All	
Reading Materials	<input checked="" type="checkbox"/>	All			All
Web-site Searches	<input checked="" type="checkbox"/>				All
Research & Reporting	<input type="checkbox"/>				
Problem Solving / Problem-based Learning	<input type="checkbox"/>				
Projects	<input type="checkbox"/>				
Independent Work	<input type="checkbox"/>				
Group Work	<input checked="" type="checkbox"/>			All	
Case Studies	<input checked="" type="checkbox"/>		I1,I2		
Presentations	<input type="checkbox"/>				
Simulation Analysis	<input type="checkbox"/>				
Others (Specify):	<input type="checkbox"/>				



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VIII. Assessment Methods, Schedule and Grade Distribution

Assessment Method	Selected Method	Course ILOs Covered by Method (By ILO Code)				Assessment Weight / Percentage	Week No.
		K & U	I.S.	P.S.	G.S.		
Midterm Exam	X	All	I1,I2			20%	7
Final Exam	X	All	I1,I2			60%	15
Quizzes							
Course Work	X			All	All	20%	3,5,9,11,13
Report Writing							
Case Study Analysis							
Oral Presentations							
Practical			I3				
Group Project							
Individual Project							
Others (Specify):							

IX. List of References

Essential Text Books	<ul style="list-style-type: none"> Object-Oriented Database Design: Concepts and Application by Kenmore S. Brathwaite Hardcover: 323 pages Publisher: Academic Press (1993) ISBN-10: 0121258823 ISBN-13: 978-0121258825
Course notes	• None
Recommended books	• None
Periodicals, Web sites, etc ...	• www.drehab.net

X. Facilities required for teaching and learning

<p>List the facilities required</p> <ul style="list-style-type: none"> Computer Data show

Course coordinator: Ass. Prof. Ehab Ezzat

Head of Department: Ass. Prof. Ehab Ezzat

Date: September 2014