

Faculty of Computers & Information Technology

Data Warehousing

Information :

Course Code : ISY 442

Level : Undergraduate

Course Hours : 3.00- Hours

Department : Department of Information Systems

Instructor Information :

Title	Name	Office hours
Lecturer	Ahmed Elsayed Mahmoud Yakoub	1
Assistant Lecturer	Mohamed Attia Mohamed	2

Area Of Study :

This course introduces the basic concepts of data warehouse applications and lifecycle. The Design Concepts of Data Warehouse. Designing a Dimensional Model. Introducing Business Intelligence Applications. Also, the course equips students with some hands-on example of a simple data warehouse implementation.

Description :

Introduction to Data Warehousing, Evolution of DSS, DW General Topics, Data Warehouse Structure: Granularity, Data Warehouse Design, Building Dimensional DW, OLAP tools, Aggregates, ELT Extraction/Transformation/ Load processes and tools, Issues of DW Architecture, Enterprise DW vs. Data Marts, DW and Data Mining

Course outcomes :

a.Knowledge and Understanding: :

1 -	Be conversant in the basic concepts of Data Warehouse
2 -	Be familiar with the Data Warehouse Lifecycle
3 -	Be familiar with basic concepts of Data Warehouse design
4 -	Be familiar with the basic concepts of designing Dimensional Model
5 -	Be familiar with Business Intelligence applications

b.Intellectual Skills: :

1 -	Describe and evaluate a real Data Warehouse applications in local Business community
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c.Professional and Practical Skills: :

1 -	Develop a working application using a commercial data warehouse software tool
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d.General and Transferable Skills: :

1 -	Think logically, manage time effectively and work independently
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Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Data Warehouse Concepts	3	2	2
Data Warehouse Design Concepts	3	2	2
Data Warehouse Lifecycle	3	2	2
Dimensional Model Concepts	3	2	2
Dimensional Model Design	3	2	2
Midterm Exam I	2	1	2
Designing the Physical Database	3	2	2
Concepts of Extract, Transform	3	2	2
Concepts of Load (ETL)	3	2	2
Concepts of Business Intelligence Applications	3	2	2
Concepts of Business Intelligence Applications	3	2	2
Midterm Exam II	2	1	2
Designing and Developing Business Intelligence Applications	3	3	3
Presentation/Discussion of Case Studies	3	3	3

Teaching And Learning Methodologies :

- Lectures
- Practical training
- Self-Study
- Open Discussion
- Presentation
- Project
- Web site searches

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
Final Exam	40.00	15	
Mid-Term Exam1	15.00	6	
Mid-Term Exam2	15.00	12	
Project	20.00	14	
Research/Presentation	10.00	14	

