AMITY GLOBAL INSTITUTE

Module Syllabus

Course	**BACHELOR OF SCIENCE (HONOURS) COMPUTING (UNIVERSITY OF NORTHAMPTON)**
Module Title	Database 2
Module Syllabus no. (if any)	CSY2029
Year Offered	2018
Start Date	February 2018 / September 2018
End Date	January 2019 / August 2019
Syllabus / Content / Learning Outcomes	On successful completion of the module students will be able to: Knowledge and Understanding a) Justify the major levels of metadata required in a modern relational database system. b) Assess the nature of the processing of metadata by a modern database management system (DBMS) in order to maintain a database's integrity and security. c) Discuss and appraise the overall function of a modern programming interface to access database data from a variety of client systems. e) Evaluate the overall function of a modern programming interface to access database data from a variety of client systems. Subject specific skills On successful completion of the module students will have demonstrated their ability to: f) Design simple examples of normalised relational metadata. g) Given client/server database requirements, design, build and test adequate metadata and/or software components for deployment on a client and/ or server. h) Evaluate the appropriate use of connectivity tools (e.g., ODBC, JDBC) Key Skills On successful completion of the module students will have had the opportunity to: i) Recognise major weaknesses and accept the need for further work in those areas j) Assess the nature and function of any designed meta data and/or software component
No of Teaching Hours	24 x 1hr lectures = 24 24 x 1hr practical = 24 24 x 1 hour unsupervised practical = 24 Independent study including revision = 78 1 assignment = 20 1 x 2 hour examination = 30 TOTAL = 200
Teaching Methods	Lectures, tutorials, case-studies analysis, research journals and group discussion.
Assessment Methods and Weightages	AS1 - Individual student assignment based on developing an efficient solution to a client-server application. (2,000 words or equivalent) = 40% EX1 - Examination (3 hours) = 60%

Skills for Maximising Learning Outcomes	Reading and research
Dates of Examinations, Major Assessments and Assignments	Please refer NILE at: https://nile.northampton.ac.uk
Recommended Text	This module is intended for students interested in the underlying Technology, which makes database application development possible and efficient. James Hamilton, Joseph M H , Michel Stonebraker - Architecture of a Database System (Foundations and Trends(r) in Databases) - Now Publishers Inc
Additional Reference Texts (if any)	
Additional Remarks (if any)	

Lesson No.	Learning Outcome
1	Connection with Application Programs using appropriate database connectivity
2	Practical work
3	ODBC, JDBC
4	Practical work
5	Client-server platforms and communication
6	Practical work
7	Nature and use of metadata
8	Practical work
9	Modern relational DBMS functionality
10	Practical work
11	SQL
12	Practical work
13	Compatibility between client and server based data types
14	Practical work
15	Operational characteristics for database deployment
16	Practical work