

Module Documentation



INFO07018

Database Management Systems

Contents of this document are copyright of Galway Mayo Institute of Technology



INFO07018

Database Management Systems

Short Title	Database Management Systems		
Full Title	Database Management Systems		
Attendance	N/A	Discipline	482 COMPUTER USE (INFO TECH)
Coordinator	Clare OConnor	Department	Business
Official Code	INFO07018	NFQ Level	07
		ECTS Credit	05

Module Description

The aim of this module is to develop the students knowledge and ability in relational database design and development. The module also aims to develop the students ability in Structured Query Language and introduce them to transaction management systems.

Learning Outcomes

On completion of this module the learner will/should be able to

1. Describe the principles of the relational database.
2. Create and modify tables, queries, forms and reports using a relational database
3. Demonstrate proficiency retrieving and manipulating information using a relational database
4. Analyse information using the functions of a relational database
5. Access, define, and manipulate data using SQL.

Teaching and Learning Strategies

This module will be taught by a combination of lectures, practicals and self directed learning.

Assessment Strategies

100% Continuous Assessment

The learner will be assessed on their practical ability and theoretical knowledge of Database Systems. Lab assessments will evaluate ability to use SQL. Assessments will be clearly linked to learning outcomes

Repeat Assessment Procedures

2 hour practical exam

Module Dependencies

Prerequisite Modules

None

Corequisite Modules

None

Incompatible Modules

None

Indicative Syllabus

- Create new databases, create databases using templates, create databases in older formats, create databases using wizards
- Edit references between tables, create and modify relationships, set primary key fields, enforce referential integrity, set foreign keys, view relationships
- Navigate to specific records, set a form as the startup option, use navigation forms, set navigation options, change views
- Create new tables, import external data into tables, create linked tables from external sources, import tables from other database, create tables from templates and application parts
- Hide fields in tables, change data formats, add total rows, add table descriptions, rename tables
- Update records, add new records, delete records, append records from external data, find and replace data, sort records, filter records, group records
- Add fields to tables, add a validation rules to fields, change field captions, change field sizes, change field data types, configure fields to auto-increment, set default values, use input masks, delete fields
- Run queries, create crosstab queries, create parameter queries, create action queries, create multi-table queries, save queries, delete queries
- Rename queries, add new fields, remove fields, hide fields, sort data within queries, format fields within queries
- Add calculated fields, add conditional logic, group and summarize data, use comparison operators, use basic operators
- Create new forms, create forms with application parts, save forms, delete forms
- Move form controls, add form controls, modify data sources, remove form controls, set form control properties, manage labels
- Modify tab order in forms, format print layouts, sort records, apply themes, change margins, insert backgrounds, auto-order forms, insert headers and footers, insert images, modify existing forms
- Create new reports, create reports with application parts, delete reports
- Group data by fields, sort data, add sub-forms, modify data sources, add report controls, manage labels
- Format reports into multiple columns, add calculated fields, set margins, add backgrounds, change report orientation, change sort order, insert headers and footers, insert images, insert page numbers, apply themes, modify existing reports
- Introduction to Transaction Management Systems
- Access, define, and manipulate data using SQL.

CourseWork / Assessment Breakdown

CourseWork / Continuous Assessment	100 %
------------------------------------	-------

Coursework Assessment Breakdown

Description	Outcome Assessed	% of Total	Assessment Week
Continuous Assessment	1,2,3,4,5	100	OnGoing

End Exam Assessment Breakdown

Description	Outcome Assessed	% of Total	Assessment Week
-------------	------------------	------------	-----------------

ACCS Mode Workload

Type	Location	Description	Hours	Frequency	Avg Wkly Wrkld
------	----------	-------------	-------	-----------	----------------

Total Average Weekly Learner Workload 0.00 Hours

Open Learning Mode Workload

Type	Location	Description	Hours	Frequency	Avg Wkly Wrkld
------	----------	-------------	-------	-----------	----------------

Total Average Weekly Learner Workload 0.00 Hours

Distance Learning Mode Workload

Type	Location	Description	Hours	Frequency	Avg Wkly Wrkld
------	----------	-------------	-------	-----------	----------------

Total Average Weekly Learner Workload 0.00 Hours

Part Time Mode Workload

Type	Location	Description	Hours	Frequency	Avg Wkly Wrkld
------	----------	-------------	-------	-----------	----------------

Total Average Weekly Learner Workload 0.00 Hours

Full Time Mode Workload

Type	Location	Description	Hours	Frequency	Avg Wkly Wrkld
------	----------	-------------	-------	-----------	----------------

Laboratory Practical	Computer Laboratory	Laboratory Practical	3	Weekly	3.00
----------------------	---------------------	----------------------	---	--------	------

Total Average Weekly Learner Workload 3.00 Hours

Online Learning Mode Workload

Type	Location	Description	Hours	Frequency	Avg Wkly Wrkld
------	----------	-------------	-------	-----------	----------------

Total Average Weekly Learner Workload 0.00 Hours

Module Resources

Module Book Resources

None

Module Alternate Book Resources

None

Module Other Resources

None

Module URLs

<http://www.w3schools.com/sql/default.asp>

<http://www.gcflearnfree.org/access2010>

Additional Information

None

ISBN BookList

Book Details

Matthew MacDonald 2010 *Access 2010: The Missing Manual* Pogue Press

ISBN-10 1449382371 ISBN-13 9781449382377

Clare Churcher 2012 *Beginning Database Design: From Novice to Professional Apress*

ISBN-10 1430242094 ISBN-13 9781430242093

Thomas Connolly 2014 *Database Systems: A Practical Approach to Design, Implementation, and Management (6th Edition)* Addison-Wesley

ISBN-10 0132943263 ISBN-13 9780132943260

Approval Information

School Approval by Carmel Brennan on 27-03-2015

Academic Council on 01-04-2015

Programme Membership

Code	Intake Year	Programme Title
------	-------------	-----------------

GA_BBISG_H08	201500	Bachelor of Science (Honours) in Business Information Systems
GA_KCDAG_H08	201600	Bachelor of Science (Honours) in Computing and Digital Media
GA_KDIGI_H08	201600	Bachelor of Science (Honours) in Computing in Digital Media
GA_BBISG_B07	201500	Bachelor of Science in Business Information Systems
GA_KCDMG_B07	201600	Bachelor of Science in Computing and Digital Media