COURSE FILE SUMMARY

COURSE INFORMATION			
College / Institute / Center:	Management & Technology	**Department:**	E-Commerce
Program Title:	Bachelor of E-Commerce	**Program Code:**	ECR
Course Title:	**Discrete Mathematics**	**Course Code:**	**CR115 (CR111)**
# Hours:	------- 32 hr ---------	------ 28 hr -------	------- 3 hr ---------
	Lecture	Lab / Tutorial	Credit
Pre Requisites: EB127			

COURSE AIM

This Course aims to introduce students to some basic mathematical concepts, such as sets and functions. The course also presents the idea of an algorithm; a description of how to perform certain calculations. The course covers those topics: truth tables, sets and functions, algorithms, relations, graph theory, trees, network models, and optimization.

COURSE OBJECTIVES

This course provides foundation materials and builds basic mathematical skills for several courses in the areas of programming, intelligent computing, data communications and networking.

STAFF REQUIREMENTS

	Qualifications	Special Skills	Number
Lectures	Ph.D. CS or MIS		1
Tutorials	B.Sc. or M. Sc. CS or MIS		1
Laboratories / Workshops			

LECTURE SCHEDULE

#	Lecture Week	Hrs	Description
1	1st.	2	Course Overview, Propositional Logic, and Logical Operators
2	2nd.	2	Implication and Double Implication
3	3rd.	2	Logical Equivalence
4	4th.	2	Translating English Sentences and Bit Operations
5	5th.	2	Predicates and Quantifiers
6	6th.	2	Sets
7	7th	2	**7th Week Exam.**
8	8th.	2	Set Operations
9	9th.	2	Functions
10	10th.	2	Relations and their Properties
11	11th.	2	n-ary Relations and their applications
12	12th.	2	Representing relations
13	13th.	2	Introduction to Graphs
14	14th.	2	Trees
15	15th.	2	Revision
16	16th.	2	**Final Exam.**

TEXT BOOKS

Code*	Description
TB	Discrete Mathematics and its Applications by Kenneth H. Rosen, McGraw-Hill.

REFERENCE BOOKS

Code*	Description
RB	Discrete Mathematics by Johnson Baugh, ISBN: #0131277677, Pearson Education.

TUTORIAL SCHEDULE

#	Tutorial Week	Hrs	Topic
1	2nd.	2	Propositional Logic, and Logical Operators
2	3rd.	2	Implication and Double Implication
3	4th.	2	Logical Equivalence
4	5th.	2	Translating English Sentences and Bit Operations
5	6th.	2	Predicates and Quantifiers
6	7th	2	Sets
7	8th.	2	Set Operations
8	9th.	2	Functions
9	10th.	2	Relations and their Properties
10	11th.	2	n-ary Relations and their applications
11	12th.	2	Representing relations
12	13th.	2	Introduction to Graphs
13	14th.	2	Trees
14	15th.	2	Revision

LABORATORY WORKSHOP SCHEDULE

#	Laboratory Week	Hrs.	Code	Description

COMPUTER USAGE

GRADING AND ASSESSMENT METHOD
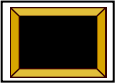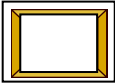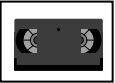
Week #	Points	Written	Oral	Term Paper	Continuous	Thesis	Practical		
7	30	30							
12	0	0							
1-15	30				30				
16	40	40							

READING MATERIAL

Code*	Description

* TB : Text Book   RB: Reference Book   ST: Standards / Codes   LN: Lecture Notes

SUPPLEMENTARY MATERIAL

Code*	Description

*PR: Periodical   SW: Software   VT: Video Tape   OS: Overhead Slide Projector
MD: Model   AC: Audio Cassette   NC: Notebook Computer

EDUCATIONAL RESOURCES

Prepared by:

Designation: Course Coordinator

Name: Dr. Mahmoud Youssef

Sign:

Date: 21/1/2009

Approved by:

Designation. Program Manager

Name: Dr. Mahmoud Youssef

Sign:

Date: 21/1/2009