Kingdom of Saudi Arabia

Ministry Of Higher Education

Majmaah University

Deanship of Quality assurance

and Human Development

Course Specification

Discrete Mathematics CIS-283-Z

1431/1432

Course Specification

Institution ***Majmaah University***
College/Department : ***College of Science in AL-Zulfi /*** ***Computer Science& Information***

A- Course Identification and General Information

1. Course title and code: ***Discrete Mathematics CIS-283-Z***
2. Credit hours ***3***
4. Name of faculty member responsible for the course ***Mohammed Talat Hasan Mubarak***
5. Level/year at which this course is offered ***: 3 level / 2 year***
6. Co-requisites for this course (if any) ***Object oriented programming CIS-153-Z***
7. Location if not on main campus ***College of Science in AL-Zulfi***

B- Objectives

The main objective of this course is to provide students with the theoretical background and practical experience relating to the design and implementation of relational databases.The main objectives of the course are:

1. Learn the propositions , tautologies and contradiction and logical equivalence
2. Understand prdicate logic , quantifiers in predicate and negation of quantifiers
3. Understand stes, set identities

4.Understand Set partitions, Cartesian product of sets, Power sets

5.learn Operations on Relations

6. Equivalence Relations, Partial Orders and Total Orders

C- Course Description (Note: General description in the form to be used for the Bulletin or Handbook should be attached)

1. Topics to be Covered

List of Topics	No of Weeks	Contact hours
1) Propositional Logic: Statements and Truth Tables	**2**	**6**
2)Predicate Logic - Basic Definitions	**3**	**9**
3) Proofs	**3**	**9**
4) SETS	**2**	**6**
5) Set partitions, Cartesian product of sets, Power sets	**2**	**6**
6) Functions	**2**	**6**

2. Course components (total contact hours per semester):

Lecture: 42	Tutorial:	Laboratory 0	Practical/Field work/Internship	Other:

3. Additional private study/learning hours expected for students per week. (This should be an average :for the semester not a specific requirement in each week)

4. Schedule of Assessment Tasks for Students During the Semester

D- E Learning Resources.

Required Text(s) : Discrete Mathematics, 6th edition*, Prentice Hall*, 2005.
• 2. Essential References : Modern Database Systems, Jeffrey A. Hoffer, Mary Prescott, Fred McFadden, 7th Ed., Prentice Hall, 2004
3- Recommended Books and Reference Material (Journals, Reports, etc) (Attach List):
4-.Electronic Materials, Web Sites etc :
5- Other learning material such as computer-based programs/CD, professional standards/regulations

E- Assessment

Assessment Policy		
Assessment Type	**Week**	**Weight**
First Exam	**6**	**20%**
Second Exam	**12**	**20%**
Final Exam		**60%**
Total		**100%**