DISCRETE STRUCTURES COURSE SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	University of Baghdad/ College of Science for Women
2. University Department/Centre	Computer Science of Department
3. Course title/code	Discrete Structures / 115 CDS
4. Programme(s) to which it contributes	Mathematics
5. Modes of Attendance offered	Physical Attendance

6. Semester/Year	Semester/ Frist Year First
7. Number of hours tuition (total)	30hours (30 hours theoretical)
8. Date of production/revision of this specification	24/3/2016
9. Aims of the Course	
This course aims to enable the student to know the basic principles in Discrete Mathematics structures of groups and sports functions and sentences and the principle of mathematical induction and arrays.	

10· Learning Outcomes, Teaching ,Learning and Assessment Methods
E- Knowledge and Understanding A1. Identify the groups and what the intended group. A2. Identify the mathematical functions. A3. Identify the mathematical sentences. A4. Recognize the principle of mathematical induction. A5. Identify the matrices.
B. Subject-specific skills B1. Know the definition of the group. B2. Knowledge of mathematical functions. B3. Knowledge of mathematical sentences. B4. Knowledge of the principle of mathematical induction and arrays.
Teaching and Learning Methods
• Education: provide printed lectures and modern, diverse and rich sources of examples. • Education: Harnessing the blackboard to teach students the goal of clarifying the steps the solution and extraction results.

- Education: resolving some questions.
- Learning: asking questions and inquiries and make the student turn into a teaching explanation and solution on the blackboard at that point.
- Learning: direct questions and each student is experimenting to see how its interaction in order to pay attention to the rest.
- Learning: give the questions a group duty to students to encourage them to follow up article where by solving those questions to know whether he has been absorbing material or not.

Assessment methods

- Quizzes (quiz) semi-weekly.
- Questions sudden and overlapping put up with to explain Article.
- Monthly and Semester tests.

C. Thinking Skills

C1. Introducing a range of solutions to the same problem and discussed both individually and determine the appropriate method of solution to the problem at hand with a stand on the disadvantages of the rest of the roads.

C2. Asked questions that need to be exceptional oral answers where exceptional be specified in terms of the weight of the calendar and grades, which are a strong incentive for student participation, competition and the race to solve them.

Teaching and Learning Methods

Discussions that arise in the course of the lecture and try to involve the largest possible number of students, and touched on the details of things and discussed objectively and targeted discussion.

Assessment methods

- Oral evaluated by involving students in discussions.
- Quizzes (quiz).
- Monthly and Semester Tests.

D. General and Transferable Skills (other skills relevant to employability and personal development)

D1. Giving duties to students and ask them to solve them to know where the strengths and weaknesses.

D2. Alert on errors in students' oral answers and discussion to see her fault.

D3. Alert on errors in the answers written by students and notation to clarify the student.

11. Course Structure					
Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
1	2	Sets theory	Sets theory	According to point 10 above and as needed	According to point 10 above and as needed
2	2	Algebra of sets and Functions	Algebra of sets and Functions	According to point 10 above and as needed	According to point 10 above and as needed
3	2	Algebra of sets and Functions	Algebra of sets and Functions	According to point 10 above and as needed	According to point 10 above and as needed
4	2	Mathematica l Induction	Mathematical Induction	According to point 10 above and as needed	According to point 10 above and as needed
5	2	Mathematica l Induction	Mathematical Induction	According to point 10 above and as needed	According to point 10 above and as needed
6	2	Relations	Relations	According to point 10 above and as needed	According to point 10 above and as needed
7	2	Relations	Relations	According to point 10 above and as needed	According to point 10 above and as needed
8	2	First examination	First examination	According to point 10 above and as needed	According to point 10 above and as needed
9	2	Statements	Statements	According to point 10 above and as needed	According to point 10 above and as needed
10	2	Statements	Statements	According to point 10 above	According to point 10 above and as needed

				and as needed	
11	2	Equivalent Statements	Equivalent Statements	According to point 10 above and as needed	According to point 10 above and as needed
12	2	Equivalent Statements	Equivalent Statements	According to point 10 above and as needed	According to point 10 above and as needed
13	2	Matrices	Matrices	According to point 10 above and as needed	According to point 10 above and as needed
14	2	Matrices	Matrices	According to point 10 above and as needed	According to point 10 above and as needed
15	2	Final examination	Final examination	According to point 10 above and as needed	According to point 10 above and as needed

12. Infrastructure	
Required reading: · CORE TEXTS · COURSE MATERIALS · OTHER	• Graph Theory by Reinhard Diestel Third Edition Springer-Verlag,Heidelberg Graduate Texts in Mathematics, Volume 173 ,431 pages. • First Course in Discrete Mathematics *by* Ian Anderson Publisher: Springer- Verlag New York, LLC Pub. Date: January 2001 212pp.
Special requirements (include for example workshops, periodicals, IT software, websites)	First Course in Discrete Mathematics *by* Ian Anderson Publisher: Springer- Verlag New York, LLC Pub. Date: January 2001 212pp
Community-based facilities (include for example, guest Lectures , internship , field	No need her but no harm provided positive and usefulness

studies)	

13. Admissions	
Pre-requisites	Nothing
Minimum number of students	Depending on the size of the classroom, according to the division of the people, 25 students
Maximum number of students	Depending on the size of the classroom, according to the division of the people, 35 students