

MATHEMATICS2 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
3. Course title/code	Mathematics 2/112 CMA2
4. Programme(s) to which it contributes	
5. Modes of Attendance offered	Actual attendance in lectures
6. Semester/Year	First year/ first semester
7. Number of hours tuition (total)	30 hours

8. Date of production/revision of this specification	4-4-2016
9. Aims of the Course	
The course aims to put laws and the basic concepts and axioms in mathematics complement to what came in the first semester through the material on how to distinguish types of equations and solve various methods of integration as well as to identify the simplest ways to solve them in the course.	

10. Learning Outcomes, Teaching ,Learning and Assessment Method
<p>J- Knowledge and Understanding</p> <p>A1- identify optimal ways to solve mathematical problems A2- identify complementary functions and ways to solve them A3- to identify the kinds of matrices and methods to solve A4- identify vectors and laws and prepare Streptococcus and polar coordinates in addition to many other topics within the course .</p>
<p>B. Subject-specific skills</p> <p>B1 - choose how best solution to the issue of mathematics after displaying different methods have the solution B 2 Knowledge of a way to simplify math problems based on the foundations of mathematics task</p>
Teaching and Learning Methods
<ul style="list-style-type: none"> • Education: provide lectures and printed sources from the modern and diverse and rich including examples • Education: Harnessing smart blackboard to the goal of teaching students and explain the steps the solution and extraction results • Education: resolving some questions, with intent to contain mistakes and make the students extracted error • Learning: asking questions and inquiries and making the student turn into a teaching explanation and solution on the blackboard at that point • Learning: questions directly and gradually all students to learn the extent of interaction and

the rest to be paid attention to

- Learning: Each specific group and explain its interaction between students with questions and answers and provide an environment that enables the student to lecture management or debate

Assessment methods

- Quizzes (quiz) semi- weekly
- Reporting and in the form of aggregates by a report for each set and dropped over students
- Questions sudden and overlapping put up with to explain Article
- monthly and quarterly tests

C. Thinking Skills

C1 - ask range solutions to the same problem and discussed separately 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- put forward solutions contain inaccuracies and identifying these mistakes After discussion and processed
C 3 - asked questions that oral exceptional need exceptional answers as be of a specific weight in terms of calendar and grades which are strong hoof for the participation of students and compete and compete to solve
C4- choose the most appropriate way to solve mathematical problems after displaying different ways of solutions

Teaching and Learning Methods

Discussions that arise in the course of the lecture , and an attempt 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)

- exams monthly and quarterly

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

D1- distribution of specific topics for each group of students to prepare research reports on the World Wide Web , the sources or the library and drafted in accordance with the basis of the approved formulation research

D2 - giving leadership debate administration , however, the group discussion and enable them to drive and manage the dialogue

D3- alert on errors in students' oral answers and discussion to see her fault

D4- alert on errors in the answers the students and editorial marking them to clarify to the student.

11. Course Structure					
Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
1	2	Matrices and their properties	Matrices and its properties	According to pt 10	According to pt 10
2	2	Use matrices to solve linear equations system	Solution of the system of linear equations by matrices	According to pt 10	According to pt 10
3	2	How to calculate the inverse square matrices	The inverse of square matrices	According to pt 10	According to pt 10
4	2	Determinants and ways of simplifying	Determinants	According to pt 10	According to pt 10
5	2	Recognize the laws of integrations	Integrations	According to pt 10	According to pt 10
6	2	Laws needed to resolve the integration of trigonometric functions	Integral rules for solving trigonometric functions	According to pt 10	According to pt 10
7	2	Laws needed to resolve the integration of exponential and logarithmic functions	Integral rules for solving exponential and logarithmic functions	According to pt 10	According to pt 10
8	2	Integrals inverse trigonometric functions	Integrals of the inverse of trigonometric functions	According to pt 10	According to pt 10
9	2		First seasonal exam	According to pt 10	According to pt 10
10	2	Multiple integrals	Multiple integrals	According	According to pt

				to pt 10	10
11	2	Application of multiple integrals	Application of multiple integrals	According to pt 10	According to pt 10
12	2	Vectors analysis	Vectors analysis	According to pt 10	According to pt 10
13	2	Complex numbers	Complex numbers	According to pt 10	According to pt 10
14	2	Polar coordinates	Polar coordinates	According to pt 10	According to pt 10
15	2		Second seasonal exam	According to pt 10	According to pt 10

12. Infrastructure

<p>Required reading:</p> <ul style="list-style-type: none"> · CORE TEXTS · COURSE MATERIALS · OTHER 	<p>Calculus, Anton, Bivens and Davis, 7th edition, 2012</p> <p>Any other edition of calculus is necessary to understand the subjects of this stage of study</p>
<p>Special requirements (include for example workshops, periodicals, IT software, websites)</p>	<p>Viewing periodically on the rich resources of websites and books related to the subject as well as attendance and participation in the patrols and workshops held</p>
<p>Community-based facilities (include for example, guest Lectures , internship , field studies)</p>	<p>Calculus, Anton, Bivens and Davis, 7th edition, or any other edition</p> <p>of calculus is necessary to understand the subjects of this stage of study.</p>

13. Admissions

Pre-requisites	Intermittent structures , a good knowledge of the basics of math and other concepts of derivatives and methods of integration
Minimum number of students	Depending on the size of the classroom and on the division of the people, 30 students .
Maximum number of students	Depending on the size of the classroom and on the division of the people, 35 students .