MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information				
معلومات المادة الدراسية				
Module Title	**Mathematics**		**Module Delivery**	
Module Type	**Core learning activity**		☒ Theory ☐ Lecture ☒ Tutorial ☒ Practical ☐ LSeminar	
Module Code				
ECTS Credits	**4**			
SWL (hr/sem)	**00**1			
Module Level	UGI	**Semester of Delivery**		1
Administering Department	EOG	**College**	CIMOG	
Module Leader	**Name: Aleia Hussein**	**e-mail**	Aleia.h@uowa.edu.iq	
Module Leader's Acad. Title	Ass. Lec.	**Module Leader's Qualification**		MSc.
Module Tutor	Name (if available)	**e-mail**	E-mail	
Peer Reviewer Name	Name	**e-mail**	E-mail	
Scientific Committee Approval Date	12/12/2025	**Version Number**	1.0	

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	**Semester**	
Co-requisites module	None	**Semester**	

Module Aims, Learning Outcomes and Indicative Contents	
أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives	1. Master the basic concepts of groups and subgroups. 2. Understand limits and investigate some of their basic properties. 3. Understand the solution of linear equations. 4. Master the techniques of differentiation and integration. 5. Learn to draw functions. 6. Learn the basic parts of matrices.
Module Learning Outcomes	**Knowledge and understanding** 1- The student learns the most important basics of mathematics 2- The student learns the concept of set and subset 3- The student learns how to use the derivative and integration 4- The student learns how to solve equations

	5- The student learns about matrices 6- The student learns how to draw functions
Indicative Contents	1- Sets, subsets, relationship between sets [6 hours], operations on sets [3 hours] 2- Solving algebraic equations with one variable, solving algebraic equations with two variables, solving inequalities [12 hours] 3- Calculating domain and range and graphing functions [9 hours] 4- Basic rules of differentiation, chain rule, implicit differentiation, basic rules of integration [12 hours] 5- Definition of matrix, operations on matrices, inverse of matrix [9 hours] 6- Solving equations using matrices [9 hours]

Learning and Teaching Strategies
استراتيجيات التعلم والتعليم

Strategies	1- Subject-specific skills 2- Theoretical aspect 3- Elasticity of demand and supply

Student Workload (SWL)			
الحمل الدراسي للطالب محسوب لـ ١٥ أسبوعا			
Structured SWL (h/sem)	63	**Structured SWL (h/w)**	4
Unstructured SWL (h/sem)	37	**Unstructured SWL (h/w)**	3
Total SWL (h/sem)	100		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	**Weight (Marks)**	**Week Due**	**Relevant Learning Outcome**
Formative assessment	**Quizzes**	1	10% (10)	11	All
	Assignments	1	10% (10)	Continuous	All
	Onsit Assignments	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	All
Summative assessment	**Midterm Exam**	2hr	10% (10)	8	All
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)
المنهاج الاسبوعي النظري

	Material Covered
Week 1	Algebraic operations on groups
Week 2	Linear equation with one unknown
Week 3	Solve a system of linear equations
Week 4	Quadratic equation, Linear equation with one unknown
Week 5	Inequalities
Week 6	Graph functions
Week 7	Domain and Range
Week 8	Derivatives
Week 9	Chain rule, Implicit differentiation
Week 10	Integration
Week 11	Matrix
Week 12	Inverse matrix
Week 13	Solving equations using matrices
Week 14	Solving equations using matrices
Week 15	**Preparatory week before the final Exam**

Delivery Plan (Weekly Lab. Syllabus)
المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	None
Week 2	None
Week 3	None
Week 4	None
Week 5	None
Week 6	None
Week 7	None

Learning and Teaching Resources
مصادر التعلم والتدريس

	Text	Available in the Library?

Required Texts		Yes
Recommended Texts	Principles of Mathematics / Written by: Dr. Muhammad Al -Qadi and a. Ahmed Abu Bakr	No
Websites		

Grading Scheme مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	**A** - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX** – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.