

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Business Mathematics		Module Delivery
Module Type	B		☒ Theory ☐ Lecture ☐ Lab ☐ Tutorial ☒ Practical ☐ Seminar
Module Code	MMOG1104		
ECTS Credits	6		
SWL (hr/sem)	150		
Module Level	1	Semester of Delivery	
Administering Department	Business Administration	College	SAUC
Module Leader	Elaf najm al-deen abdullah	e-mail	pgs.elaf.najm@uobasrah.edu.iq
Module Leader's Acad. Title	Assistant Lectuer	Module Leader's Qualification	ماجستير
Module Tutor	Elaf najm al-deen abdullah	e-mail	pgs.elaf.najm@uobasrah.edu.ia
Peer Reviewer Name		e-mail	E-mail
Scientific Committee Approval Date	2025/9/1	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 أهداف المادة الدراسية	1-Introduce students to the fundamental principles of Business Mathematics. 2-Familiarize students with the applications of algebraic operations and set theory in solving mathematical problems. 3-Introduce students to functions, linear equations, and methods for solving them, with applications in business. 4-Familiarize students with the practical applications of set theory and algebraic operations in business decision-making and problem-solving.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1- Understand the concept of a set and its elements. 2- Identify finite sets, infinite sets, empty sets, equal sets, and subsets. 3- Apply set operations, including set difference, complement, and the distributive laws of sets. 4- Understand the concept of a limit and its importance in mathematics. 5- Evaluate limits as a variable approaches a specific value and as it approaches infinity. 6- Understand the concept of a function and its main types, including linear, quadratic, polynomial, and exponential functions. 7- Represent functions graphically and interpret the relationships between variables. 8- Understand the concept of a matrix and its different types, including square and rectangular matrices. 9- Organize and represent data using matrices. 10- Understand the concept and general form of a linear equation. 11- Solve and graph linear equations and interpret the relationships between variables. 12- Understand the concept of differentiation and its role in mathematics. 13- Compute derivatives using basic differentiation techniques. 14- Understand the concept of integration and its importance in mathematics. 15- Distinguish between definite and indefinite integrals and identify appropriate applications for each.

	16- Apply mathematical concepts and techniques to solve .business-related problems
Indicative Contents المحتويات الإرشادية	The study guide outlines the main components that are intended to guide and organize the teaching and learning process. These components generally include: 1- Learning Objectives 2- Key Concepts 3- Teaching Methods 4- Learning Materials 5- Learning Activities 6- Assessment Methods 7- Academic Guidance These components serve as a roadmap for both instructors and students, helping them understand the progression of the course and ensuring that the intended learning outcomes are achieved. Total Self-Study Hours: 147 hours Calculation: Total Study Hours: 150 hours Examination Hours: 3 hours Self-Study Hours: 147 hours (150 – 3 = 147) Formula: Self-Study Hours = Total Study Hours – Examination Hours = 150 – 3 = 147 hours (based on a 15-week semester)

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Teaching and Learning Methods 1- Delivering lectures. 2- Classroom discussions. 3- Solving exercises during class. 4- Discussing and analyzing mathematical problems in the classroom.
	Assessment Methods 1- Continuous assessment through students' daily participation and engagement during lectures. 2- Daily quizzes

Student Workload (SWL) الحمل الدراسي للطلاب محسوب ل ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطلاب خلال الفصل	63	Structured SWL (h/w) الحمل الدراسي المنتظم للطلاب أسبوعيا	7
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطلاب خلال الفصل	87	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطلاب أسبوعيا	6
Total SWL (h/sem) الحمل الدراسي الكلي للطلاب خلال الفصل	150		

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
Week	Material Covered
Week 1	Mathematical Sets
Week 2	Sets and Set Operations
Week 3	Limits
Week 4	Partial Limits and One-Sided Limits
Week 5	Functions
Week 6	Functions
Week 7	Midterm Examination
Week 8	Matrices
Week 9	Matrix Operations
Week 10	Matrix Operations
Week 11	Linear Equations
Week 12	Differentiation
Week 13	Differentiation
Week 14	Integration
Week 15	Integration
Week 16	Final Examination

Delivery Plan (Weekly Lab. Syllabus)	
المنهاج الاسبوعي للمختبر	
Week	Material Covered
Week 1	-
Week 2	-
Week 3	-
Week 4	-
Week 5	-
Week 6	-
Week 7	-

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	1	10% (10)	7	LO #1, #2 and #4
	Assignments	1	10% (10)	Continuous	LO #3, #4
	Seminars	1	10% (10)	Continuous	All
	Report	1	10% (10)	12	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Learning and Teaching Resources		
مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	Fundamentals of Mathematics, by Dr. Mohammed Al-Qadi and Prof. Ahmed Abu Bakr.	Yes
Recommended Texts		
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: Decimals above or below 0.5 will be rounded to the highest or lowest full mark (e.g. a mark of 54.5 will be rounded to 55, while a mark of 54.4 will be rounded to 54). The University has a zero tolerance policy for 'near-pass failures', so the only adjustment to marks awarded by the original examiners will be the automatic rounding described above.

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رئيس قسم إدارة الأعمال

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مدرس المادة
م.م. ايلاف نجم

م.م. وفاء سعيد حسن