

# MODULE DESCRIPTION FORM

## نموذج وصف المادة الدراسية

Module Information				
معلومات المادة الدراسية				
Module Title	<b>Mathematics for Business</b>		Module Delivery	
Module Type	<b>B</b>		<input checked="" type="checkbox"/> Theory <input type="checkbox"/> Lecture <input type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input checked="" type="checkbox"/> Practical <input type="checkbox"/> Seminar	
Module Code	<b>BA1104</b>			
ECTS Credits	<b>6</b>			
SWL (hr/sem)	<b>150</b>			
Module Level	1	Semester of Delivery		1
Administering Department	Business Administration	College	SAUC	
Module Leader	Alia Majed Dakhil		e-mail	alia.majed.dakhil@sa-uc.edu.iq
Module Leader's Acad. Title	Assistant Lecturer	Module Leader's Qualification	M.Sc.	
Module Tutor	Alia Majed Dakhil		e-mail	alia.majed.dakhil@sa-uc.edu.iq
Peer Reviewer Name	Prof. Dr. Muhammed Abood Taher	e-mail		
Scientific Committee Approval Date	2025/1/1	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

<p><b>Module Objectives</b> أهداف المادة الدراسية</p>	<ol style="list-style-type: none"> <li>1- This definition provides the definition of some basic principles in the mathematics of tasks</li> <li>2- Introducing them to the periods of application of these principles and algebraic operations on sets</li> <li>3- Introducing them to functions, ends, linear equations and methods of solving them.</li> <li>4- Introducing them to the periods of application of these principles and algebraic operations on sets</li> </ol>
<p><b>Module Learning Outcomes</b> مخرجات التعلم للمادة الدراسية</p>	<ol style="list-style-type: none"> <li>1. Understand the concept of a set and its elements. In addition to learning about finite and infinite sets, empty sets, equal and partial sets</li> <li>2. Learn how to solve the difference of sets, the inverse difference, and the rules of group distribution</li> <li>3. Understand the concept of limit and its importance in mathematics</li> <li>4. Identify the ends when approaching a certain number, as well as the ends when approaching infinity</li> <li>5. Understand the concept of function and its types (linear functions, quadratic functions, polynomial functions, exponential functions)</li> <li>6. The ability to represent a function graphically and understand the relationship between variables</li> <li>7. Understand the concept of matrix and its types (square, rectangular, etc.).</li> <li>8. Learn how to organize elements within an array.</li> <li>9. Understand the concept of linear equation and its general form</li> <li>10. The ability to represent linear equations graphically and understand the relationship between variables.</li> <li>11. Understand the concept of differentiation and its role in mathematics</li> <li>12. Learn about derivatives and how to calculate them.</li> <li>13. Understand the concept of integration and its role in mathematics</li> <li>14. Learn about definite and indefinite integration and when to use each.</li> </ol>
<p><b>Indicative Contents</b> المحتويات الإرشادية</p>	<p>The contents of the guidance study include the outlines that aim to guide and plan the educational process. These contents generally include</p> <ol style="list-style-type: none"> <li>1. Educational objectives</li> <li>2. Main concepts</li> <li>3. Curricula</li> <li>4. Educational materials</li> <li>5. Educational activities</li> <li>6. Evaluation methods</li> <li>7. Academic guidelines</li> </ol> <p>These contents are a roadmap that helps the teacher and student understand the progress of the study material and ensure the achievement of the intended educational objective.</p>

Total hours = 147 = Self-study hours - (Exam hours) = 150 - 3 = 147 hours  
(Timetable hours x 15 weeks)

### Learning and Teaching Strategies

#### استراتيجيات التعلم والتعليم

#### Strategies

Teaching and learning methods

- 1- Giving lectures.
- 2- Discussion inside the hall.
- 3- Solving exercises inside the hall.
- 4- Discussing mathematical problems inside the hall.

Evaluation methods:

- 1- Daily participation of students through the method of explaining the subject.
- 2- Daily tests.

### Student Workload (SWL)

#### الحمل الدراسي للطلاب محسوب لـ ١٥ اسبوعا

<b>Structured SWL (h/sem)</b> الحمل الدراسي المنتظم للطلاب خلال الفصل	63	<b>Structured SWL (h/w)</b> الحمل الدراسي المنتظم للطلاب أسبوعيا	7
<b>Unstructured SWL (h/sem)</b> الحمل الدراسي غير المنتظم للطلاب خلال الفصل	87	<b>Unstructured SWL (h/w)</b> الحمل الدراسي غير المنتظم للطلاب أسبوعيا	6
<b>Total SWL (h/sem)</b> الحمل الدراسي الكلي للطلاب خلال الفصل	<b>150</b>		

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
Week	Material Covered
Week 1	Sports groups
Week 2	Sets and mathematical operations on them
Week 3	The purpose
Week 4	The radical purpose and the purpose of both sides
Week 5	Functions
Week 6	Functions
Week 7	Mid- term Exam
Week 8	Matrices
Week 9	Mathematical operations on matrices
Week 10	Mathematical operations on matrices
Week 11	Mathematical equations
Week 12	differentiation
Week 13	differentiation
Week 14	integration
Week 15	integration
Week 16	Final Exam

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	Principles of Mathematics / Written by: Dr. Muhammad Al-Qadi and Mr. Ahmed Abu Bakr	Yes
Recommended Texts		
Websites		

## Grading Scheme

### مخطط الدرجات

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