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**CIHAN UNIVERSITY-SULAIMANIYA**

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# **Course Outline**

**2023-2024**

**Address: Chwarchra-Opposite to Family Mall  
Sulaymaniyah City  
Kurdistan Region-Iraq  
Tel: 07714695656,  
email: [presidency@sulicihan.edu.krd](mailto:presidency@sulicihan.edu.krd)**

# MODULE DESCRIPTION FORM

Module Information			
<b>Module Title</b>	Financial Mathematics		
<b>Module Type</b>	Degree	<input type="checkbox"/> Theory <input type="checkbox"/> Lecture <input type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar <input type="checkbox"/> Report <input type="checkbox"/> Extra activity	
<b>Module Code</b>			
<b>Language</b>	English		
<b>ECTS Credits</b>			
<b>Module Level</b>		<b>Semester of Delivery</b>	2 <sup>nd</sup> Semester
<b>Administering Department</b>	Accounting	<b>College</b>	Administration and Finance
<b>Lecturer</b>	Dr. Obaid Mahmood Mohsin		
<b>Academic Title</b>	Professor	<b>Qualification</b>	PHD. Statistics
<b>Module Tutor</b>	Dr. Obaid Mahmood Mohsin	<b>e-mail</b>	Obaid.mohsin808@gmail.com
<b>Peer Reviewer Name</b>		<b>e-mail</b>	
<b>Scientific Committee Approval Date</b>		<b>Version Number</b>	
<b>Cycle of Study</b>	Bachelor	<b>Form of Education</b>	Full time

Relation with other Modules			
<b>Prerequisite module</b>		<b>Semester</b>	
<b>Co-requisites module</b>		<b>Semester</b>	

**Cihan University Sulaimaniya?**  
**College of Administration & Finance.....**



**Department: ...Accounting.....**

**Discipline:**

**Stage: 1<sup>st</sup> stage**

<b>Total Contact Hours:</b>	<b>25</b>
<b>Total Self Study Hours:</b>	<b>56</b>
<b>Total No. Hours:</b>	<b>81</b>
<b>ECTS:</b>	<b>3</b>

No. of Weeks	Contact Hours					Self-Study					
	Theoretical	Practical	Lab	Project	Visit	Quiz	Reading	Assignment	Report	Midterm Exam.	Final Exam.
<b>1<sup>st</sup> Week (Registration)</b>	-	-	-	-	-	-	-	-	-	-	-
<b>2<sup>nd</sup> Week</b>	1						1			12	25
<b>3<sup>rd</sup> Week</b>	1	1					1				
<b>4<sup>th</sup> Week</b>	1	1				2	1				
<b>5<sup>th</sup> Week</b>	1	1									
<b>6<sup>th</sup> Week</b>	1	1					1	2	2		
<b>7<sup>th</sup> Week</b>	1	1				2					
<b>8<sup>th</sup> Week</b>	0	2					1				
<b>9<sup>th</sup> Week</b>	1	1									
<b>10<sup>th</sup> Week</b>	0	2					1				
<b>11<sup>th</sup> Week</b>	1	1									
<b>12<sup>th</sup> Week</b>	0	2						2			
<b>13<sup>th</sup> Week</b>	1	1				2					
<b>14<sup>th</sup> Week</b>	1	1					1				
<b>15<sup>th</sup> Week (Final Exam.)</b>											
<b>16<sup>th</sup> Week (Final Exam.)</b>											
<b>TOTAL</b>	<b>10</b>	<b>15</b>				<b>6</b>	<b>7</b>	<b>4</b>	<b>2</b>	<b>12</b>	<b>25</b>

## Delivery Plan (Weekly Syllabus)

	Material Covered
<b>Week 1</b>	<p><b>Chapter One</b> <b>Simple Interest</b></p> <p>Interest Interest ...Definition and elements. Examples</p>
<b>Week 2</b>	<p>The types of Interest How to find Simple interest Examples</p>
<b>Week 3</b>	<p>The Amount in Simple interest: Calculate the period: Examples</p>
<b>Week 4</b>	<p>Types of Simple Interest: -- Standard interest-- Commercial interest—and- Exact interest The Relationship between Commercial Interest &amp; Exact Interest: Examples</p>
<b>Week 5</b>	<p>The difference between Commercial Interest &amp; Exact Interest: The Numbers Method: Examples</p>
<b>Week 6</b>	<p>Problems &amp; solutions</p>
<b>Week 7</b>	<b>Mid-Term Exam</b>
<b>Week 8</b>	<p><b>Chapter Two</b> <b>Commercial discount with simple interest.</b></p> <p>The concept of trade discount. Definition of trade discount. Examples</p>
<b>Week 9</b>	<p>Trade discount account. -- The normal Method: -- The Constant denominator method Current value of a commercial paper Examples</p>
<b>Week 10</b>	<p>Rational (Correct) Discount Examples</p>
<b>Week 11</b>	<p>Problems &amp; solutions</p>
<b>Week 12</b>	<p><b>Chapter Three</b> <b>Compound Interest</b></p> <p>Compound Interest Effective Rate of Interest: Examples</p>

<b>Week 13</b>	The actual interest on simple interest rate that is equivalent to compound interest rate is called the effective rate. Depreciation: --- The straight -line method - The Constant -Percentage Method Examples
<b>Week 14</b>	Problems & solutions
<b>Week 15</b>	<b>Preparatory Week</b>
<b>Week 16</b>	<b>Final Exam</b>

<b>Delivery Plan (Weekly Lab. Syllabus)</b>	
	<b>Material Covered</b>
<b>Week 1</b>	
<b>Week 2</b>	
<b>Week 3</b>	
<b>Week 4</b>	
<b>Week 5</b>	
<b>Week 6</b>	
<b>Week 7</b>	
<b>Week8</b>	
<b>Week9</b>	
<b>Week 10</b>	
<b>Week 11</b>	
<b>Week 12</b>	
<b>Week 13</b>	
<b>Week 14</b>	
<b>Week 15</b>	
<b>Week 16</b>	

<b>Module Aims, Learning Outcomes and Indicative Contents</b>	
<b>Module Objectives</b>	Sophisticated mathematical models, whose solution often requires computers, are important in finance. This course will give students the basic

	numerical tools and practice solving financial problems on computers. students will be expected to implement basic algorithms in a high-level programming language.
<b>Module Learning Outcomes</b>	<p>On completion of this course, students should be able to</p> <p>1-given any two of interest rate, present value, or future value, calculate .the third based on simple interest</p> <p>2-Given any one of the effective interest rates, the nominal .interest m-they, or the force of interest, calculate all of the other items</p> <p>3-Write the equations of value given a set of each flow and interest rate</p>

<b>Learning and Teaching Strategies</b>	
<b>Strategies</b>	Whiteboard, whiteboard maker, data show, course note. Assessment scheme.

<b>Module Evaluation</b>					
<b>Assessment Types</b>		<b>Time/Number</b>	<b>Weight (Marks)</b>	<b>Week Due</b>	<b>Relevant Learning Outcome</b>
<b>Formative assessment</b>	<b>Quizzes</b>	5/3	15	4,7,13	
	<b>Assignments</b>	2/5	10	6,12	
	<b>Projects / Report</b>	1/5	5	6	
<b>Summative assessment</b>	<b>Midterm Exam</b>	2hr	20	8	
	<b>Final Exam</b>	3hr	50	15	
<b>Total assessment</b>			100% (100 Marks)		

<b>Learning and Teaching Resources</b>		
	<b>Text</b>	<b>Available in the Library?</b>
<b>Required Texts</b>	Financial math. By Dr. Clarence H. Richardson. Mastering Financial mathematics by Alastair I ..day	
<b>Recommended Texts</b>	Lectures gave to students	

Websites	
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Grading Scheme مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
<b>Success Group (50 - 100)</b>	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
<b>Fail Group (0 – 49)</b>	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required
<p><b>Note:</b> 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.</p>				

<b>Approved by Head of the Branch / Department</b>	
Signature	
Date	<b>6/3/2024</b>
Name	<i>Ass Prof. Dr.Munadhil Abd-Aljabar</i>

<b>Approved by Curriculum Development Committee and Bologna Process Committee</b>	
Signature	
Date	
Name	