

## Course Description Form

<b>1. Course Name:</b>					
Mathematic -1					
<b>2. Course Code:</b>					
MATH130					
<b>3. Semester / Year:</b>					
First course 2023-2024					
<b>4. Description Preparation Date:</b>					
1/9/2023					
<b>5. Available Attendance Forms:</b>					
presence					
<b>6. Number of Credit Hours (Total) / Number of Units (Total)</b>					
45 hours /2 units					
<b>7. Course administrator's name (mention all, if more than one name)</b>					
Name: Shamil Mohammed Saleh Hassan Email: eng.sh.hassn@uomosul.edu.iq					
<b>8. Course Objectives</b>					
<b>Course Objectives</b>			<ul style="list-style-type: none"> <li>• The student uses understanding and of basic concepts of engineering mathematics</li> <li>• So that the student can develop his mental abilities when solving exercises and making connections with information to reach a solution and benefit from it in other transactions .</li> </ul>		
<b>9. Teaching and Learning Strategies</b>					
<b>Strategy</b>		<ul style="list-style-type: none"> <li>- Interactive lecture</li> <li>- Brainstorming</li> <li>- Dialogue and discussion</li> <li>- Assigning tasks</li> </ul>			
<b>10. Course Structure</b>					
<b>Week</b>	<b>Hours</b>	<b>Required</b>	<b>Unit or</b>	<b>Learning</b>	<b>Evaluation</b>

		Learning Outcomes	subject name	method	method
1	3Theoretical	a12:Knowledge Of graphing functions laws of logarithms, and asian Function laws	Types functions (exponential and logarithmic function	presence	Quiz discussion
2	3Theoretical	a37:Knowledge the laws of triangles and how to solve algebraic functions	Trigonometric Function and algebraic function	presence	Quiz discussion
3	3Theoretical	a3:Knowledge of Trigonometric facts and Their uses in engineering mathematics	Trigonometric facts, continuation of topic	presence	Quiz discussion
4	3Theoretical	a12:Know how to find the equation of a line and a slope	Equation line and slope	presence	Quiz discussion
5	3Theoretical	a37:Learn about The rules of the derivative and the derivative of algebraic functions	Derivative (derivative rules and their applications in algebraic functions)	presence	Quiz discussion
6	3Theoretical	c24:Types derivatives (algebraic functions)	Solving exercises	presence	Quiz discussion

7	3Theoretical	a37:Rules for solving derivative trigonometric functions	Derivative trigonometric functions	presence	Quiz discussion
8	3Theoretical	a12:Derivative trigonometric functions	Derivative of logarithmic functions	presence	Quiz discussion
9	3Theoretical	c23:How to solve the derivative logarithmic functions	Complement of the derivative logarithmic functions	presence	Quiz discussion
10	3Theoretical	a12:Know the rules for solving the derivative of exponential functions	Derivative exponential functions	presence	Quiz discussion
11	3Theoretical	a3:Learn how to solve higher Order derivatives	Derived from the highest order	presence	Quiz discussion
12	3Theoretical	c24:Derived from The higher ranks	Derived from the higher ranks	presence	Quiz discussion
13	3Theoretical	a12:How to find Velocity and acceleration using derivative	Applications on the derivative (speed And acceleration	presence	Quiz discussion
14	3Theoretical	a37:Inflection point	Applications to the derivative the inflection points)	presence	Quiz discussion
15	3Theoretical	a57:Learn how to find the upper and lower inflection points	Complement applications To the derivative (points inflection)	presence	Quiz discussion

11. Course Evaluation					
5% short test 5% short test 15% for the first semester exam 15% second semester exam Total 40% Final exam 60% Final grade 100%					
12. Learning and Teaching Resources					
Required textbooks (curricular books, if any)			. Mathematics for the first grades , administration and economics 1980, Ali Aziz Ali/Assistant Professor Mathematics, University of Mosul And Dr. Ali Al-Hasswan/Assistant Professor of Mathematics /Al-Mustansiriya University		
Main references (sources)			Engineering Mathematics, fourth edition, John Bird		
Recommended books and references (scientific journals, reports...)					
Electronic References, Websites					



مدرس المادة النظري

م. شامل محمد صالح حسن



رئيس قسم المكنان والآلات الزراعية  
أ.م. نوافل عيسى محميد



رئيس اللجنة العلمية  
أ.د. أركان محمد أمين صديق



