



## Course Weekly Outline

Course Instructor	Sema Hassan aziz				
E_mail	Sema.1983@yahoo.com				
Title	mathematics				
Course Coordinator					
Course Objective	ان الهدف من المادة هو اعطاء جميع القوانين والمعادلات الرياضية وتطبيقها والتي لها علاقة وثيقة مع باقي المناهج				
Course Description	Matrix, function, graph function, limits, continues function , derivatives, series, integration				
Textbook	1. Thomas, G. Calculus and Analytic Geometry, 5th Edition, Addison Wesley, 1999.				
References	Advance mathematics				
Course Assessment	Term Tests	Laboratory	Quizzes	Project	Final Exam
	30%	-	As (10%)	----	As (40%)
General Notes	Type here general notes regarding the course				



## Course weekly Outline

week	Date	Topics Covered	Lab. Experiment Assignments	Notes
1	4/11 5/11	Matrix <ul style="list-style-type: none"> <li>• Types of matrix</li> <li>• Matrix addition, subtraction, and multiplication</li> <li>• Determinant, transpose, symmetric of matrix and rank of matrix</li> </ul>	- -	
2	11/11 12/11	Inverse of matrix, absolute value, and polynomials <ul style="list-style-type: none"> <li>• Grammar rule for solving system of equation.</li> </ul>	-	
3	18/11 19/11	Functions <ul style="list-style-type: none"> <li>• Function numbers, type of numbers, theorems'' of numbers</li> </ul>	-	
4	25/11 26/11	Definition of function domain and range of functions	-	
5	2/12 3/12	Graphing of function	-	
6	9/12 10/12	Limits <ul style="list-style-type: none"> <li>• Definition of limits</li> <li>• Theorems' of limits</li> <li>• Type of limits</li> </ul>	-	
7	16/12 17/12	One side and two sides limits	-	
8	23/12 24/12	<ul style="list-style-type: none"> <li>• Limits as infinity</li> </ul>	--	
9	30/12 31/12	<ul style="list-style-type: none"> <li>• Sandwich theorem</li> </ul>	-	
10	7/1 8/1	<ul style="list-style-type: none"> <li>• continues functions</li> </ul>	-	
11			-	
12			-	
13			-	
14			-	
15			-	

<b>16</b>			-	
<b>Half-year Break</b>				
<b>17</b>	<b>17/2 18/2</b>	➤ Derivation • Mathematical definition of derivation, rule of derivation	-	
<b>18</b>	<b>24/2 25/2</b>	• Derivation of trigonometric, inverse trigonometric,	-	
<b>19</b>	<b>3/3 4/3</b>	• Derivation logarithm, exponential hyperbolic, inverse of hyperbolic function	-	
<b>20</b>	<b>10/3 11/3</b>	• Implicit derivation, chain rule, higher derivation	-	
<b>21</b>	<b>17/3 18/3</b>	• L'hôpital rule	-	
<b>22</b>	<b>24/3 25/3</b>	• Application of derivation, velocity and acceleration	-	
<b>23</b>	<b>31/3 1/4</b>	➤ Series	-	
<b>24</b>	<b>7/4 8/4</b>	Test of series	-	
<b>25</b>	<b>14/4 15/4</b>	• <b>exam</b>	-	
<b>26</b>	<b>21/4 22/4</b>	➤ Integration, indefinite integral, rules of integral	-	
<b>27</b>	<b>28/4 29/4</b>	• method of integration,	-	
<b>28</b>	<b>5/5 6/5</b>	• method of integration,	-	
<b>29</b>	<b>12/5 13/5</b>	• multiple integral	-	
<b>30</b>	<b>19/5 20/5</b>	➤ Definite integral, application of integral area under the curve	-	
<b>31</b>	<b>26/5 27/5</b>	➤ Definite integral, application of integral area under the curve	-	
<b>32</b>	<b>2/6</b>	➤ Area between two curves	-	

**Instructor Signature:**

**Dean Signature:**