



Department of Basic and Applied Science
Smart Village Campus

BA124

Math 2

Spring 2013

Course Outline

Instructor:	Dr. Ahmed Mostafa																		
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Objective:	<ul style="list-style-type: none">• Introduce students to understand the basics of Integration.• Introduce students to solve simple systems of linear equations.																		
Text:	Calculus by R.T. Smith and R.B. Minton, 4 th edition, 2012																		
Grading:	<p><u>Evaluating system</u></p> <table><tr><td>1- Quiz 1</td><td>4th week</td><td>10 marks</td></tr><tr><td>2- 7th Week Exam</td><td></td><td>20 marks</td></tr><tr><td>3- Quiz 2</td><td>10th week</td><td>10 marks</td></tr><tr><td>4- 12th Week Exam</td><td></td><td>20 marks</td></tr><tr><td>5- Final Exam</td><td></td><td>40 marks</td></tr><tr><td></td><td>Total</td><td>100 marks</td></tr></table>	1- Quiz 1	4 th week	10 marks	2- 7 th Week Exam		20 marks	3- Quiz 2	10 th week	10 marks	4- 12 th Week Exam		20 marks	5- Final Exam		40 marks		Total	100 marks
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5- Final Exam		40 marks																	
	Total	100 marks																	

Week of		E V E N T	
1	Feb. 16 th	Lecture	Basic Integration Rules: Antiderivative
		Tutorial	Problems: Sec.4.1 : 5 – 43 odd
2	Feb. 23 th	Lecture	Basic Integration Rules: Fundamental Theorem of Calculus + Integration by Substitution + Completing the squares
		Tutorial	Problems: Sec. 4.5: 1 – 18 + Sec. 4.6: 1 – 39 + Sec.6.1: 12, 14, 16
3	Mar. 2 nd	Lecture	Review of Formulas and Techniques
		Tutorial	Problems : Sec. 6.1: 1 – 39 odd + Review Exercises P.374: 1 – 13 odd, 18, 20, 47 – 57 odd
4	Mar. 9 th	Lecture	Integration Techniques: Integration by Parts + Quiz No. 1 (10 marks)
		Tutorial	Problems : Sec. 6.2: 1 – 60 + Sec.6.3 47, 49
5	Mar. 16 th	Lecture	Integration Techniques: Integration Involving Powers of Trigonometric Functions
		Tutorial	Problems : Sec.6.3: 1 – 20
6	Mar. 23 rd	Lecture	Integration Techniques: Trigonometric Substitution
		Tutorial	Problems : Sec. 6.3: 21 – 44
7	Mar. 30 th	Lecture	Seventh Exam (20 marks)
		Tutorial	
8	Apr. 6 th	Lecture	Integration Techniques: Integration of Rational Functions Using Partial Fractions
		Tutorial	Problems : Sec. 6.4: 1 – 36 + Review Exercise page 496: 37 – 40
9	Apr. 13 th	Lecture	Applications of Definite Integral: Area between Curves
		Tutorial	Problems : Sec. 5.1: 1 – 25 + Review Exercise page 443: 1 – 8
10	Apr. 20 th	Lecture	Applications of Definite Integral: Volume by Disc Method + Quiz No. 2 (10 marks)
		Tutorial	Problems : Sec. 5.2: 17 – 20, 25 – 28 + Review Exercise page 443: 14 – 18
11	Apr. 27 th	Lecture	Applications of Definite Integral: Arc Length and Surface Area
		Tutorial	Problems : Sec. 5.4: 5 – 14, 29 – 36
12	May 4 th	Lecture	Twelfth Exam (20 marks)
		Tutorial	
13	May 11 th	Lecture	Conic Sections
		Tutorial	Problems : Problem Sheet 1
14	May 18 th	Lecture	Solution of Linear Equations
		Tutorial	Problems : Problem Sheet 2
15	May 27 th	Lecture	Revision
		Tutorial	Revision
16	Jun. 1 st	Final Exam	

Good Luck