

Course information: Math 202/ Calculus II.
Second semester 1437/1438 (2016/2017)

The total of 100 marks are distributed as follows:

Exam 1= 20% (Includes 3.11, 4.4, 4.9, 5.1 and 5.2)
Exam 2= 20% (5.3, 5.4, 5.5, 7.1, 7.2)
Exam 3= 20% (7.3, 7.4, 7.5 and 7.8)
Assignments= 10%
Final Exam= 30% (The whole course contents are included)

Important dates:

<u>Exam 1</u>	<u>Sunday 20/06/1438, 19/03/2017, 2-3:30pm</u>
<u>Exam 2</u>	<u>Tuesday 21/07/1438, 18/04/2017, 2-3:30pm</u>
<u>Exam 3</u>	<u>Sunday 18/08/1438, 14/05/2017, 2-3:30pm</u>
<u>Final Exam</u>	<u>TBA</u>

No makeup tests will be given. If a student misses a test *with instructor's approval*, the score on the final exam will be used to replace the missing test score. In the event that a student misses a test without instructor's approval, a zero will be assigned for that test score. Approval must be obtained **in advance** if at all possible, otherwise, the absence reason must be provided within, at most, one week following the exam.

Expectations from students: I aim to treat all students with respect and fairness. Since I expect the same consideration, please observe the following courtesies:

Attendance at each scheduled class meeting is expected. A DN will be given if the student misses 25% of the classes

Arrive for class on time. Late class arrivals are disruptive and inconsiderate; moreover, they may be regarded as absences.

Silence cell phones. Use of cell phones in the classroom will not be permitted; you should not bring one into the classroom unless the ringer is turned OFF. Students in violation of this policy may be asked to leave class.

Math 202

CALCULUS II

King Abdulaziz University.

Department of Mathematics.

Second Semester 1437/1438 (2016/2017)

Math 202 Syllabus.

Textbook : Calculus Early Transcendental, seventh Edition, Author: James Stewart.

ملاحظة مهمة: سوف يتم تدريس الباب السابع قبل الباب السادس

Chapter	Section	Definitions & Theorems	Examples	HW على الطالبات
Chapter 3	3.11 Hyperbolic Function	Definition of the Hyperbolic functions, hyperbolic identities, derivatives, inverse hyperbolic functions, their derivatives. Tables 1-6. Figures 1-3,8-10	1-5	1-21 (odd),31-45(odd),38,42
Chapter 4	4.4 Indeterminate forms and L'Hospital's Rule	All Forms	1-9	7-65 (odd),8,54
	4.9 Antiderivatives	Definition, theorem 1, table 2	1-4,6-7	1-47 (odd), 59, 61

Chapter 5	5.1 Areas and Distances	The area problem: Figures 1-6,8-13. Definition 2	1	
	5.2 The Definite Integral	Definition 2. Note 1-3,5. Figures 1-4. Theorem 3,4. Equations 8-11. Properties 1-8.	1,4,6-8	17-20,35,39,41,42,47-50,53 59-63 (odd)
	5.3 The Fundamental Theorem of Calculus	Equation 1,5.FTC1,FTC2 (No proofs)	2,4-9	7-43 (odd),55-59 (odd)
	5.4 Indefinite Integrals and the Net Change Theorem	Indefinite integral, table 1.Applications, equations 2,3	1-6	5-17 (odd),21-45 (odd)
	5.5 The substitution Rule	Equations 1-7. The substitution rule. The substitution rule for definite integral. Symmetry	1-11	7-47 (odd),53-73(odd),24,40,44,48
Chapter 7 Techniques of integration	7.1 Integration by Parts	Equations 1,2,6	1-5	3-41 (odd),14
	7.2 Trigonometric Integrals	All strategy	1-9	1-49 (odd),44

	7.3 Trigonometric Substitution	All	1-7	5-29 (odd),24
	7.4 Integration of Rational function by Partial Fractions	All	1-6,8,9	7-33 (odd), 39-51
	7.5 Strategy for Integration	All with "Can we integrate all continuous functions?"	1-5	1-81 (odd)
	7.8 Improper Integrals	Type 1 and 2. Comparison Theorem.	1-10	5-39 (odd),41,49-55
Chapter 6 Applications of integrals	6.1 Areas Between Curves	Rules 2,3	1-2,5-6	1-17 (odd),21-29(odd)
	6.2 Volumes	Definition of volume. Disk and washer	2-6	1-17
Chapter 8 Further Applications of Integrations	8.1 Arc Length	Formulas 2-6	1,2,4	7-15,17,19-20,33,35
	8.2 Area of a Surface of Revolution	Formulas 4-8	1-3	5-16