King Saud University
Department of Mathematics, College of Science
First Semester: 1435-1436
MATH 203: Differential and Integral Calculus

Course Outline

Name of Instructor: Prof. Dr. T. M. G. Ahsanullah

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You may consult Lecture Notes on Math 203 by Dr. Asif Qureshi as supporting materials

STT (1 3 5) slot (Group 1753): 9.00 AM – 9.50 AM in Room 1A95 Building 4; Group 1757: 10.00 AM –10.50 AM in Room 1A 95 Building 4)

Chapter 8: Infinite Series

- Sequences
- Convergence or Divergence Series
- Positive-term Series
- The Ratio and Root Tests
- Alternating Series and Absolute Convergence
- Power Series
- Power Series Representation of Functions
- Maclaurin and Taylor Series

Chapter 13: Multiple Integrals

- Double Integrals
- Area and Volume
- Double Integrals in Polar Coordinates
- Surface Area
- Triple Integrals
• Moments and Center of Mass
• Cylindrical Coordinates
• Spherical Coordinates

Chapter 14: Vector Calculus
• Vector fields
• Line Integrals
• Independence of Path
• Green’s Theorem
• Surface Integrals
• The Divergence Theorem
• Stockes’s Theorem

Mark Distribution:
MT 1: 25
MT2: 25
Tutorial: 10
Final: 40
Total: 100

Mid-Term Exam 1: 4-1-1436 H (Tuesday, October 28, 2014 G) 7.00 PM – 8.30 PM
Mid-Term Exam 2: 17-2-1436 H (Tuesday, December 9, 2014 G) 7.00 PM-8.30 PM

Final exam date will be announced when available