First Semester: 1439 -1440 (September 2018 -January, 2019)

MATH 203: Differential and Integral Calculus

Course details

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

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Books: **Calculus** by E. R. Swokowski, M. Olinic, and D. Pence, PWS Publishing Company, Boston.

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

STT (1 3 5) slot (**Group 33102**: 10.00 AM – 10.50 AM in Room 1A74 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
All the exam date will be announced whenever available