



Course No.	Course Title	No. of Units			Pre-requisites
		Th.	Pr.	Credit	
MATH 203	Calculus III	3	-	3	MATH 102

Course Objectives:

After finishing the course, the student is expected to be familiar with the following:

- Show the importance of differentiation and integration in branches of science and Geometry and recognize the relationship between them.
- View basis of differentiation and integration of functions with multiple variables and their applications, and vector calculation.
- Developing the student's logical thinking and providing students with skills necessary to solve problems.

Course Description:

Functions of two and three variables, limits and continuity, partial derivatives, directional derivatives, extrema of functions of two variables; Double integrals in rectangular and polar coordinates. Triple integrals. Cylindrical and spherical coordinates. Triple integrals in cylindrical and spherical coordinates. Vector functions, line Integrals, Greens theorem, curl and divergence, surface integrals, Stoke's, the divergence theorem.

Main Text Book:

- Calculus: Early Transcendentals, by James Stewart, 8th Ed., Cengage Learning, 2016.

Subsidiary Books:

- Calculus: Early Transcendentals, by Jon Rogawski and Colin Adams, 3rd Ed., Macmillan Education, 2015.