Course Specifications of MATH 3112

Course No.	Course Title	No. of Units			Pre-requisites
		Th.	Pr.	Credit	
MATH 3112	Calculus II	3	-	3	Calculus I

Course Objectives:

On completion of the course, the students should be able to:

- The concept of the definition of integration and the fundamental theorem of calculus.
- The concept, calculation integration of functions using integration techniques.

Course Description:

Calculus II of Mandatory course in the third level of the common first year and serves other programs that are physics, chemistry, engineering, and Computer Science. The course is concerned with the definition of Integration (The area under the curve (Riemann Sums), Riemann Theorem (Evaluate Integrals using Limits), The Fundamental Theorem of Calculus (Table of Integrations, Differentiation of the Integration), and Integration techniques of one-variable functions (Substitution, Integration by Parts, Reduction Formula, Trigonometric Integrals, Trigonometric Substitutions, Partial Fractions, Strategy for Integration).

Main Textbook:

- Stewart, J. Calculus: Early Transcendental, 9th Edition, Cengage Learning, 2019.

Subsidiary Books:

- Rogawski, J. and Adams, C. Calculus: Early Transcendental, 3rd Edition, Macmillan Education, 2015.