

<b>Module Title:</b>	<b>Calculus 2</b>
<b>Module ID:</b>	<b>Math 102</b>
<b>Prerequisite:</b>	<b>Math 101</b>
<b>Level:</b>	<b>2</b>
<b>Credit Hours:</b>	<b>3 (3+0+1)</b>

**Module Description:**

Definition - Definite integration – Definite integration properties - Infinite integration  
 - The mean value theorem for integration – Fundamental theorem of calculate  
 integration - Methods of integration (substitution, parts, partial fractions) -  
 Trigonometric substitutions - Integration applications ( L'Hôpital's rule -Line integral)  
 - Calculate of integration for (Surface area - Volumes of solids of revolution ) -  
 polar coordinates .

**Module Aims:**

- Student's ability to integrate functions
- Identify integration applications

**Learning Outcomes:**

- To accommodate students the basic concepts and terminology integration
- Be able to describe methods of solving integration
- Solving integration issues

**Textbook:**

Calculus, Early Transcendental Functions, Robert Smith, Roland Minton, McGraw-Hill Science Engineering, 2007.

