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| **Calculus 2** | **Module Title:** |
| **Math 102** | **Module ID:** |
| **Math 101** | **Prerequisite:** |
| **2** | **Level:** |
| **3 (3+0+1)** | **Credit Hours:** |

**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.