

Code	Subject Title		Cr. Hrs	Semester
MATH-211	MATH-211 Elementary Mathematics-II (Calculus)		3	III
Year		Discipline		
2		Botany, Zoology, Chemistry-I, Political Science		

Preliminaries: Real-number line, functions and their graphs, solution of equations involving absolute values, inequalities. Limits and Continuity: Limit of a function, left-hand and right-hand limits, continuity, continuous functions.

Derivatives and their Applications: Differentiable functions, differentiation of polynomial, rational and transcendental functions, derivatives.

Integration and Definite Integrals: Techniques of evaluating indefinite integrals, integration by substitution, integration by parts, change of variables in indefinite integrals.

Recommended Books:

- 1. Anton H, Bevens I, Davis S, *Calculus: A New Horizon* (8th edition), 2005, John Wiley, New York
- 2. Stewart J, *Calculus* (3rd edition), 1995, Brooks/Cole (suggested text)
- 3. Swokowski EW, Calculus and Analytic Geometry, 1983, PWS-Kent Company, Boston
- 4. Thomas GB, Finney AR, *Calculus* (11th edition), 2005, Addison-Wesley, Reading, Ma, USA