

(M-106) Weekly Course Details

Book:

Calculus by Swokowski, Olinick, Pence (Sixth Edition)

Week 1	4.1. 4.2.	Antiderivatives and Indefinite Integrals. Change of Variables in Indefinite Integrals.
Week 2	4.3. 4.4 4.5	Summation Notation and Area. The Definite Integral. Properties of the Definite Integral.
Week 3	4.6. 4.7.	The Fundamental Theorem of Calculus. Numerical Integration.
Week 4	6.2. 6.3. 6.4. 6.5	The Natural Logarithm Function. The Exponential Function. Integration Using Natural Logarithm and Exponential Function. General Exponential and Logarithmic Functions.
Week 5	6.7 6.8	Inverse Trigonometric Functions. Hyperbolic and Inverse Hyperbolic Functions.
Week 6	6.9 7.1.	Indeterminate Forms and l'Hopital's Rule. Integration by parts.
Week 7	7.2. 7.3	Trigonometric Integrals. Trigonometric Substitutions.
Week 8	7.4.	Integrals of Rational Functions (Partial fractions).
Week 9	7.5. 7.7	Quadratic Expressions and Miscellaneous Substitutions. Improper Integrals.
Week 10	5.1. 5.2.	Area Between Curves. Volume (By Disk or Washer).
Week 11	5.3. 5.5	Volume(By Cylindrical Shells). Arc Length and Surfaces of Revolution.
Week 12	9.1. 9.2	Parametric Equations. Arc Length and Surface Area.
Week 13	9.3.	Polar Coordinates.
Week 14	9.4	Integrals in Polar Coordinates.
Week 15		REVISION