

微積分 1	第一週	1.4	Exponential Functions
		1.5	Inverse Functions and Logarithms
		2.1	The Tangent and Velocity Problems
	第二週	2.2	The Limit of a Function
		2.3	Calculating Limits Using the Limit Laws
		2.4	The Precise Definition of a Limit
	第三週 9/24(一)中秋節	2.5	Continuity
		2.6	Limits at Infinity; Horizontal Asymptotes
		2.7	Derivatives and Rates of Change
		2.8	The Derivative as a Function
第四週	3.1	Derivatives of Polynomials and Exponential Functions	
	3.2	The Product and Quotient Rules	
	3.3	Derivatives of Trigonometric Functions	
	3.4	The Chain Rule	
第五週	3.5	Implicit Differentiation	
	3.6	Derivatives of Logarithmic Functions	
	3.8	Exponential Growth and Decay (*)	
第六週	3.9	Related Rates	
	3.10	Linear Approximations and Differentials	
	3.11	Hyperbolic Functions (*)	
第七週	4.1	Maximum and Minimum Values	
	4.2	The Mean Value Theorem	
	4.3	How Derivatives Affect the Shape of a Graph	
第八週	4.4	Indeterminate Forms and l'Hospital's Rule	
	4.5	Summary of Curve Sketching	
		4.7	Optimization Problems
		4.9	Antiderivatives
期考 11/3(六) 09:00~11:30 考試範圍 1.4~4.9(英文命題)			
	第九週	微積分1的彈性時間	
微積分 2	第十週 11/15(四)校慶停課	5.1	Areas and Distances
		5.2	The Definite Integral
	第十一週	5.3	The Fundamental Theorem of Calculus
		5.4	Indefinite Integrals and the Net Change Theorem
		5.5	The Substitution Rule
	第十二週	6.1	Areas Between Curves
		6.2	Volume
		6.3	Volumes by Cylindrical Shells
	第十三週	6.5	Average Value of a Function
		7.1	Integration by Parts
		7.2	Trigonometric Integrals
	第十四週	7.3	Trigonometric Substitution
		7.4	Integration of Rational Functions by Partial Fractions
		7.5	Strategy for Integration
	第十五週 12/22(六)補12/31(一)的課	7.8	Improper Integrals
		8.1	Arc Length
		8.2	Area of a Surface of Revolution
第十六週	9.1	Modeling with Differential Equations	
	9.3	Separable Equations	
	9.4	Models for Population Growth (*)	
	9.5	Linear Equations	
	10.1	Curves Defined by Parametric Equations	
第十七週 12/31(一)調整放假 1/1(二)開國紀念日	10.2	Calculus with Parametric Curves	
	10.3	Polar Coordinates	
	10.4	Areas and Lengths in Polar Coordinates	
期考 1/5(六) 09:00~11:30 考試範圍 5.1~10.4(英文命題)			

微積分 3	第一週	12.6	Cylinders and Quadric Surfaces
		13.1	Vector Functions and Space Curves
		13.2	Derivatives and Integrals of Vector Functions
	第二週 2/28(四)和平紀念日	13.3	Arc Length and Curvature
		13.4	Motion in Space: Velocity and Acceleration (*)
	第三週	14.1	Functions of Several Variables
		14.2	Limits and Continuity
		14.3	Partial Derivatives
	第四週	14.4	Tangent Planes and Linear Approximation
		14.5	The Chain Rule
		14.6	Directional Derivatives and the Gradient Vector
	第五週	14.7	Maximum and Minimum Values
		14.8	Lagrange Multipliers
	第六週	15.1	Double Integrals over Rectangles
		15.2	Double Integrals over General Regions
		15.3	Double Integrals in Polar Coordinates
	第七週 4/2(二)溫書假 4/4(四)兒童節	緩衝時間(4/1(一)經濟系要上課喔~)	
	第八週	15.4	Applications of Double Integrals (*)
		15.5	Surface Area
15.6		Triple Integrals	
第九週	15.7	Triple Integrals in Cylindrical Coordinates	
	15.8	Triple Integrals in Spherical Coordinates	
	15.9	Change of Variables in Multiple Integrals	
期考 4/20(六) 09:00~11:30 考試範圍 12.6~15.9(英文命題)			
微積分 4	第十週	16.1	Vector Fields
		16.2	Line Integrals
		16.3	The Fundamental Theorem for Line Integrals
	第十一週	16.4	Green's Theorem
		16.5	Curl and Divergence
		16.6	Parametric Surfaces and Their Areas
	第十二週	16.7	Surface Integrals
		16.8	Stokes' Theorem
		16.9	The Divergence Theorem
	第十三週	16.10	Summary
		11.1	Sequences
	第十四週	11.2	Series
		11.3	The Integral Test and Estimates of Sums
		11.4	The Comparison Tests
	第十五週	11.5	Alternating Series
		11.6	Absolute Convergence and the Ratio and Root Tests
		11.7	Strategy for Testing Series
	第十六週	11.8	Power Series
		11.9	Representations of Functions as Power Series
11.10		Taylor and Maclaurin Series	
第十七週	11.11	Applications of Taylor Polynomials	
	17.1	Second-Order Linear Equations	
	17.2	Nonhomogeneous Linear Equations	
期考 6/15(六) 09:00~11:30 考試範圍 Ch11+Ch16+17.1~17.2(英文命題)			

微積分 1	第一週	1.4	Functions
		1.5	Inverse Functions
	第二週	2.1	The Tangent and Velocity Problems
		2.2	The Limit of a Function
		2.3	Calculating Limits Using the Limit Laws
	第三週 9/24(一)中秋節	2.5	Continuity
		2.6	Limits at Infinity; Horizontal Asymptotes
		2.7	Derivatives and Rates of Change
		2.8	The Derivative as a Function
	第四週	3.1	Derivatives of Polynomials and Exponential Functions
		3.2	The Product and Quotient Rules
		3.3	Derivatives of Trigonometric Functions
		3.4	The Chain Rule
	第五週	3.5	Implicit Differentiation
		3.6	Derivatives of Logarithmic Functions
		3.8	Exponential Growth and Decay
	第六週	3.9	Linear Approximations and Differentials
		4.1	Maximum and Minimum Values
第七週	4.2	The Mean Value Theorem	
	4.3	How Derivatives Affect the Shape of a Graph	
第八週	4.4	Indeterminate Forms and L'Hospital's Rule	
	4.5	Summary of Curve Sketching	
	4.7	Optimization Problems	
	4.9	Antiderivatives	
期考 11/3(六) 09:00~11:30 (英文命題)			
第九週	微積分1的彈性時間		
微積分 2	第十週 11/15(四)校慶停課	5.1	Areas and Distances
		5.2	The Definite Integral
		5.3	The Fundamental Theorem of Calculus
		5.4	Indefinite Integrals and the Net Change Theorem
		5.5	The Substitution Rule
	第十一週	6.1	Areas Between Curves
		6.2	Volume
		6.3	Volumes by Cylindrical Shells
	第十二週	6.5	Average Value of a Function
		7.1	Integration by Parts
		7.2	Trigonometric Integrals
	第十三週	7.3	Trigonometric Substitution
		7.4	Integration of Rational Functions by Partial Fractions
		7.5	Strategy for Integration
	第十四週	7.8	Improper Integrals
			Applications of Integrals (in Mathematical Statistics)
	第十五週 12/22(六)補12/31(一)的課	9.1	Modeling with Differential Equations
		9.3	Separable Equations
9.4		Models for Population Growth	
第十六週	9.5	Linear Equations	
	10.1	Curves Defined by Parametric Equations	
第十七週 12/31(一)調整放假 1/1(二)開國紀念日	10.2	Calculus with Parametric Curves	
	10.3	Polar Coordinates	
	10.4	Areas and Lengths in Polar Coordinates	
期考 1/5(六) 09:00~11:30 (英文命題)			

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微積分3	第一週	12.6	Cylinders and Quadric Surfaces
		14.1	Functions of Several Variables
		14.2	Limit and Continuity
	第二週 2/28(四)和平紀念日	14.3	Partial Derivatives
		14.4	Tangent Planes and Linear Approximation
	第三週	14.5	The Chain Rules
		14.6	Directional Derivatives and the Gradient Vector
	第四週	14.7	Maximum and Minimum Values
		14.8	Lagrange Multipliers
	第五週	14.8	Lagrange Multipliers
		15.1	Double Integrals over Rectangles
	第六週	15.2	Double integrals over General Regions
		15.4	Applications of Double Integrals (*)
	第七週 4/2(二)溫書假 4/4(四)兒童節	15.6	Triple Integrals (with Applications in Statistics)
		15.9	Change of Variables in Multiple Integrals
	第八週		Geometric Series
			Taylor's Theorem
第九週		Taylor Series	
期考 4/20(六) 09:00~11:30 (英文命題)			
微積分4 - - 在經濟商管的應用	第十週	11.1	Sequences and Completeness of the Real Numbers
		11.2	Series
	第十一週	11.3	The Integral Test and Estimates of Sums
		11.4	The Comparison Tests
		11.5	Alternating Series
	第十二週	11.6	Absolute Convergence and the Ratio and Root Tests
		11.8	Power Series
		11.9	Representations of Functions as Power Series
	第十三週		Constrained Optimization: Inequality Constraints
			Constrained Optimization: Mixed Constraints
	第十四週		Kuhn-Tucker Formulation (and Shadow Prices)
			Envelope Theorems
	第十五週		Constrained Optimization: Second Order Conditions
			Constraint Qualifications
	第十六週		Concave and Convex Functions
	第十七週		Concave Programming
	期考 6/15(六) 09:00~11:30 (英文命題)		