

1. Functions and models	第一週 9/14, 9/16	1.4	Exponential Functions	
		1.5	Inverse Functions and Logarithms	
		9/16(五)中秋節調整放假		
2. Limits and derivatives	第二週 9/21, 9/23	2.1	The Tangent and Velocity Problems	
		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 9/28, 9/30	2.5	Continuity	
		2.6	Limits at Infinity; Horizontal Asymptotes	
		2.7	Derivatives and Rates of Change	
		2.8	The Derivative as a Function	
3. Differentiation rules	第四週 10/5, 10/7	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 10/12, 10/14	3.5	Implicit Differentiation	
		3.6	Derivatives of Logarithmic Functions	
		3.8	Exponential Growth and Decay	
		3.9	Related Rates	
	第六週 10/19, 10/21	3.10	Linear Approximations and Differentials	
4. Applications of differentiation	第七週 10/26, 10/28	4.1	Maximum and Minimum Values	
		4.2	The Mean Value Theorem	
	第八週 11/2, 11/4	4.3	How Derivatives Affect the Shape of a Graph	
		4.4	Indeterminate Forms and l'Hospital's Rule	
		4.5	Summary of Curve Sketching	
			4.7	Optimization Problems
			4.9	Antiderivatives
			緩衝時間	
期中考 11/5(六) 09:00~11:30 考試範圍 1.4~4.9(英文命題)				
5. Integrals	第九週 11/9, 11/11	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	
6. Applications of integration	第十週 11/16, 11/18	5.5	The Substitution Rule	
		6.1	Areas Between Curves	
		6.2	Volume	
7. Techniques of integration	第十一週 11/23, 11/25	6.3	Volumes by Cylindrical Shells	
		6.5	Average Value of a Function	
		7.1	Integration by Parts	
	第十二週 11/30, 12/2	7.2	Trigonometric Integrals	
		7.3	Trigonometric Substitution	
		7.4	Integration of Rational Functions by Partial Fractions	
		7.5	Strategy for Integration	
		7.8	Improper Integrals	
8. Further applications of integration	第十三週 12/7, 12/9	8.1	Arc Length	
		8.2	Area of a Surface of Revolution	
		8.3	Applications to Physics and Engineering	
9. Differential equations	第十四週 12/14, 12/16	9.1	Modeling with Differential Equations	
		9.2	Direction Fields and Euler's Method	
		9.3	Separable Equations	
	第十五週 12/21, 12/23	9.4	Models for Population Growth	
		9.5	Linear Equations	
		9.6	Predator-Prey Systems	
10. Parametric equations and polar coordinates	第十六週 12/28, 12/30	10.1	Curves Defined by Parametric Equations	
		10.2	Calculus with Parametric Curves	
		10.3	Polar Coordinates	
	第十七週 1/4, 1/6	10.4	Areas and Lengths in Polar Coordinates	
		10.6	Conic Sections in Polar Coordinates	
				緩衝時間
期末考 1/7(六) 13:30~16:00 考試範圍 5.1~10.6(英文命題)				