

章節	週次	課程進度	
1. Functions and Models	第一週 9/17、9/19	[1.5] Exponential Functions [1.6] Inverse Functions and Logarithms	
2. Limits and Derivatives		第二週 9/24、9/26	[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 [2.5] Continuity		
	第三週 10/1、10/3	[2.6] Limits at Infinity; Horizontal Asymptotes [2.7] Derivatives and Rates of Change	
		[2.8] The Derivative as a Function [3.1] Derivatives of Polynomials and Exponential Functions [3.2] The Product and Quotient Rules [3.3] Derivatives of Trigonometric Functions	
	3. Differentiation Rules	第四週 10/8、10/10	[3.4] The Chain Rule [3.5] Implicit Differentiation 10/10(五)國慶紀念日放假一天
第五週 10/15、10/17			[3.6] Derivatives of Logarithmic Functions [3.7] Rates of Change in the Natural and Social Sciences (※) [3.8] Exponential Growth and Decay
		[3.9] Related Rates [3.10] Linear Approximations and Differentials [3.11] Hyperbolic Functions (※)	
		4. Applications of Differentiation	第六週 10/22、10/24
第七週 10/29、10/31			
	第八週 11/5、11/7		[4.8] Newton's Method (※) [4.9] Antiderivatives [5.1] Areas and Distances
緩衝時間			
5. Integrals	<b>期中考 11/8(六) 09:00~11:30 考試範圍 1.5~4.9 (英文命題)</b>		
	第九週 11/12、11/14	[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	

6. Applications of Integration	第十週 11/19、11/21	[6.1] Areas Between Curves
		[6.2] Volumes
7. Techniques of Integration	第十一週 11/26、11/28	[6.3] Volumes by Cylindrical Shells
		[6.4] Work (※)
	[6.5] Average Value of a Function	
	第十二週 12/3、12/5	[7.1] Integration by Parts
		[7.2] Trigonometric Integrals
		[7.3] Trigonometric Substitution
		[7.4] Integration of Rational Functions by Partial Fractions
[7.5] Strategy for Integration		
8. Further Applications of Integration	第十三週 12/10、12/12	[7.6] Integration Using Tables and Computer Algebra Systems (※)
		[7.7] Approximate Integration (※)
		[7.8] Improper Integrals
		[8.1] Arc Length
		緩衝時間
9. Differential Equations	第十四週 12/17、12/19	[8.2] Area of a Surface of Revolution
		[8.3] Applications to Physics and Engineering
		[8.4] Applications to Economics and Biology (※)
	第十五週 12/24、12/26	[8.5] Probability (※)
		[9.1] Modeling with Differential Equations
		[9.2] Direction Fields and Euler's Method
10. Parametric Equations and Polar Coordinates	第十六週 12/31、1/2	[9.3] Separable Equations
		[9.4] Models for Population Growth
		[9.5] Linear Equations
		[9.6] Predator-Prey Systems (※)
	第十七週 1/7、1/9	緩衝時間
		緩衝時間
<b>期末考 1/10(六) 09:00~11:30 考試範圍 5.1~10.6 (英文命題)</b>		