國立台灣科技大學 114學年 第2學期　課程大綱

Spring 2026 NTUST Course Outline

授課教師：謝松年

Instructor:Sung-Nien Hsieh

課程名稱：微積分(下)

Course Title：Calculus (II)

2026/11/4

課程代號： ET161B001 Course Code 學分數： 4 Credits	必選修：必修/全學年 Required/Electve:Required/Full Yr. 先修課程： Prerequisites
節次教室： Time/Location	R6(IB-503) R7(IB-503) T6(IB-503) T7(IB-503) W10(IB-503)
專業核心能力： Core Professional Competencies	
課程網址： Course Website	
課程宗旨： Course Objectives	To study basic mathematical tools frequently used in engineering. This semester includes the following topics: [1] Transcedental functions --- [2] Integration Techniques --- [3] Infinite Series and Taylor Series --- [4] Parametric Equations and Polar Coordinates --- [5] Partial Differentiation --- [6] Multiple Integrlas
課程大綱： Outline of Lectures	Estimated schedule: (based on the progress during 2025.02 - 2025.06. It might be different for this semester.) ------ [Week 01]: 7.3, 7.4, 7.5 [Week 02]: 7.5, 7.6, 7.7 [Week 03]: 7.7, 7.8, 8.2 [Week 04]: 8.2, 8.3, 8.4, 8.5 [Week 05]: 8.5, 8.8 [Week 06]: 8.8, 9.8, 9.9, 10.1, 10.2 [Week 07]: 10.2, 10.3, 10.4 [Week 08]: 10.4, 10.5, 13.1 [Week 09]: 13.1, 13.2 [Week 10]: 13.3, 13.4, 13.5 [Week 11]: 13.5, 13.6, 13.7 [Week 12]: 13.7, 13.8, 14.1, 14.2 [Week 13]: 14.2, 14.3, 14.4 [Week 14]: 14.5, 14.8 [Week 15]: 14.8, 14.7
授課方式： Method of Instruction	講授 Lecture：80% 分組討論 Group discussion：0% 案例研討 Case study：0% 操做練習 Practical exercises：20%

	講授 Lecture：%
教科書： Textbooks	Thomas' Calculus (in SI Units), 14th edition, Pearson, 2019. ISBN:978-1-292-25322-0 (高立圖書公司代理) (Tel: (02)22900318)
參考書目： References	Calculus, 9th. edition, by James Stewart, ISBN:978-0-357-11346-2
修課須知： Notice	
評量方式： Grading	Quiz: 35% Mid-term: 30% Final exam: 30% Class participation and others: 5%
備註說明： Notes	Calculus (I) and Basic high school mathematics