

Subject : Calculus II

Instructor : Cheng-Ying Yang, Ph.D.

Schedule : Tuesday 3:10PM to 6:00PM

Textbook :

Ron Larson and Bruce Edwards, *Essential Calculus: Early Transcendental Functions*, Metric Version, 5th ed., Cengage, 2024

Contents :

1. Exponential Function and Logarithmic Function
2. Multivariable Calculus
3. Differential Equations
4. Integration Techniques
5. Infinite Series
6. Functions of Several Variables
7. Multiple Integration

Grading :

Midterm	4/1; 5/6	50%
Final	6/3	30%
Assignment		10%
Participation		10%

參考書籍 :

1. Laurence D. Hoffmann, Gerald L. Bradley, Dave Sobecki and Michael Price, *Calculus for Business, Economics and the Social and Life Sciences*, 11th ed., McGraw Hill, 2024
2. Deborah Hughes-Hallett, Andrew M. Gleason, Patti Frazer Lock, Daniel E. Flath, *Applied Calculus*, 7th ed., 2022
3. James Stewart, Daniel Clegg and Saleem Watson, *Essential Calculus*, Metric Version, 2nd ed., Cengage, 2022
4. Murray R. Spiegel, Seymour Lipschutz and John Liu, *Schaum's Outline of Mathematical Handbook of Formulas and Tables*, 4th ed., McGraw Hill, 2013
5. 廖秋雄、鍾炎東、王清德、蕭家孟、劉柏宏、趙有光、林碧川、李念晨、陳東賢、洪國智著，初等微積分，滄海書局，2019
6. Ron Larson, *Calculus: An Applied Approach*, 10th ed., Brooks Cole, 2016
7. MIT 開放課程 <https://ocw.mit.edu/>
8. 哈佛大學線上課程 <https://pll.harvard.edu/course/calculus-applied>