

課程介紹

課程名稱：微積分二

開設班級：大學部電機系一年級丙班（必修）

課程時間：星期二 10:10-12:00; 星期五 13:10-15:00

教室：電機系館 92185

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辦公室：數學系館 402

Email：tengch@mail.ncku.edu.tw

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預備知識：高中數學。

指定教科書：“ Calculus- One and several variables ” (Ninth edition) by Salas, Hille and Etgen。

成績計算方式：期中考佔 35%，期末考佔 45%，平時成績佔 20%。

考時間與範圍：期中考大約於四月中，依進度於考前一週宣佈。

期末考日期由學校規定，範圍於考前一週宣佈。

課程內容：

本課程是針對工學院的學生以一個學年的時間介紹微積分理論及應用。課程內容將注重實際的應用和計算。對於一些微積分定理的證明也會說明，但不會特別強調。這學期我們預定教授級數及多變數微積分，即指定教材第八章到第十六章的部份。

上課方式：

上課將以講授課程內容為主，每兩星期將有一堂課作為習題的演練或小考。

習題建議：

§8.6. 3, 6, 11, 13, 15, 18, 20, 23, 25, 28, 31, 33, 36, 41, 43

§9.3. 7, 11, 19, 30, 33, 39, 41

§9.5. 5, 11, 15, 21, 23, 25, 31

§9.6. 1, 3, 7, 14, 16, 17, 19, 23, 25, 29

§9.7. 3, 5, 7, 13, 17, 19, 22, 23, 27, 33, 38

§9.8. 1, 3, 5, 6, 8, 11, 17, 20, 25, 31

§9.9. 3, 5, 9, 13, 15, 17

§10.1. 4, 9, 15, 21, 23

§10.2. 3, 5, 11, 15, 23, 27, 31, 33, 35, 45

§10.3. 1, 5, 7, 9, 11, 15, 19, 25, 27, 29, 33

§10.4. 3, 7, 11, 13, 15, 19, 27, 31, 34, 37, 39, 43, 45

§10.5. 1, 3, 5, 7, 11, 13, 15, 19, 23, 24, 26, 29, 31, 33

§10.6. 1, 5, 7, 13, 17, 19, 23, 29, 35, 37, 41, 45, 49

§10.7. 1, 3, 7, 11, 15, 19, 25, 29, 34

§11.1. 1, 7, 11, 15, 17

§11.2. 1, 5, 7, 9, 11, 13, 15, 17, 21, 27

§11.3. 1, 5, 7, 9, 13, 17, 19, 25, 27, 35, 37, 39

§11.4. 3, 5, 9, 13, 15, 25, 27

§11.5. 1, 5, 7, 11, 13, 25, 29, 35, 37, 39

§11.6. 1, 5, 9, 11, 15, 17, 19, 24, 25

§11.7. 3, 5, 9, 13, 15, 25, 27, 29, 35

§11.8. 1, 7, 9, 13, 17, 19, 23, 25, 26, 35, 37

§13.1. 1, 3, 7, 11, 15, 17

§13.2. 3, 5, 7, 11, 17, 19

§13.3. 7, 15, 23, 35

§13.4. 3, 5, 11, 19, 27

§13.5. 5, 7, 13, 15, 19, 23, 24, 26, 29, 33

§13.6. 1, 5, 7, 13, 17

§14.1. 9, 21, 22, 23, 30, 37

§14.2. 3, 15, 21, 23, 35, 38

§14.3. 9, 11, 23, 25, 28, 29

§14.4. 11, 17, 23, 31, 39, 41, 45

§14.6. 5, 9, 13, 15, 17, 20

§15.1. 7, 11, 16, 25

§15.2. 7, 9, 23, 25

§15.3. 7, 8, 13, 15, 18, 23

§15.4. 1, 3, 5, 7, 9, 11, 22

§15.5. 7, 11, 13, 16,18, 23, 29, 33

§15.6. 1, 5, 7, 9, 13, 17, 21, 25, 29, 33

§15.7. 7, 9, 10, 11, 12

§15.8. 1, 3, 5, 6, 8, 11, 17, 20, 25

§16.1. 2, 4, 8, 12

§16.2. 9, 18, 19, 21

§16.3. 1, 11, 17, 19, 21, 23, 26, 29, 31, 37, 39, 41, 43, 59

§16.4. 1, 5, 9, 13, 17, 21, 27, 29, 31

§16.6. 3, 6

§16.7. 3, 5, 7, 13, 23, 27, 32

§16.8. 1, 3, 5, 6, 8, 11, 17, 20, 25

§16.9. 3, 5, 9, 13, 15, 17,21

§16.10. 3, 7, 11, 13, 15, 17, 23, 25, 30