

工程數學—微分方程

Differential Equations

授課：王奕翔

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Logistics

- Lecturer: 王奕翔 ihwang@ntu.edu.tw
 - Office: 電機二館 508
 - Office hour: Wed. 14:00 – 15:30
- Lecture Hours: Wed. 10:20 – 12:10; Fri. 9:10 – 10:00
- Lecture Location: 電機二館 106
- Course Website:
<http://homepage.ntu.edu.tw/~ihwang/Teaching/Fall13/DE.html>
- Textbook:
Dennis G. Zill and Warren S. Wright, Differential Equations with Boundary-Value Problems, 8th ed., Brooks/Cole, 2013.

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- Grading Policy:
 - Homework 15%; Midterm 42.5%; Final 42.5%
- 本班與丁建均老師班和黃鼎偉老師班同步
 - 教學範圍相同
 - 考試共同出題
- 注意事項：
 - 作業抄襲以零分計
 - 歡迎同學踴躍出席
 - 歡迎多加利用 office hour

Course Outline

Topic	Textbook Chapters
Introduction	Chapter 1*
First-order DE's	Chapter 2-1*, 2-2 – 2-5, 2-6*, 3
Higher-order DE's	Chapter 4-1 – 4-7, 4-9, 5-1, 5-3
Series Solutions of Linear DE's	Chapter 6-1 – 6-3, 6-4*
The Laplace Transform	Chapter 7
Systems of Linear First-order DE's	Chapter 8*
The Fourier Series	Chapter 11-1 – 11-3
Partial DE's	Chapter 12-1, 12-2, 12-4, 12-5
The Fourier Transform	Chapter 14-3, 14-4

*只教不考

Course Schedule

Week	Date (Wed., Fri.)	Remark
1	9/11, 9/13	
2	9/18	9/20彈性放假
3	9/25, 9/27	
4	10/2, 10/4	
5	10/9, 10/11	
6	10/16, 10/18	
7	10/23, 10/25	
8	10/30, 11/1	
9	11/6 Midterm , 11/8	Midterm: Chapter 1–5

Course Schedule

Week	Date (Wed., Fri.)	Remark
10	11/13	11/15校慶放假
11	11/20, 11/22	
12	11/27, 11/29	
13	12/4, 12/6	
14	12/11, 12/13	
15	12/18, 12/20	
16	12/25, 12/27	
17	1/3	1/1元旦放假
18	1/8 Final	Final: Chapter 6, 7, 11, 12, 14