

## ME2002 工程數學下 Engineering Mathematics (2)

### Instructors:

- Prof. Jia-Yang Juang (莊嘉揚), 工綜 713, 02-33669406, jiayang@ntu.edu.tw
- Teaching Assistant, 蔡青芳, 工綜 410, r09522526@ntu.edu.tw

### Class Meetings:

- Lecture, Monday 34, 工綜 211 and Wednesday 2, 工綜 211
- Office Hours, 莊嘉揚: Mondays 1-3 pm, or by appointment  
蔡青芳: TBD, or by appointment

**Course Website:** <http://homepage.ntu.edu.tw/~jiayang/me2002/2021s/syllabus.htm>  
NTU COOL

### Textbook:

- Zill, Advanced Engineering Mathematics 6th

### Grading:

- 60% three midterm exams: 20% each, closed book (open one handwritten A4 sheet), no make-up
- 20% final exam: closed book (open one handwritten A4 sheet), no make-up
- 20% quizzes: 4次, 隨機隨堂考。另外, 考試全勤額外獲得 2%

Tentative Schedule:

Week	Dates	Topics	Chapters
1	2/22, 2/24	- Course outline - Vector differential calculus	9
2	3/1, 3/3	- 3/1 no class - Vector differential calculus	9
3	3/8, 3/10	- Vector integral calculus	9
4	3/15, 3/17	- Vector integral calculus - Fourier series	9 12
5	3/22, 3/24	- 3/22 Midterm 1 - Fourier series	12
6	3/29, 3/31	- Sturm-Liouville Theory	12
7	4/5, 4/7	- 4/5 no class - Fourier integral	15
8	4/12, 4/14	- Fourier transform	15
9	4/19, 4/21	- 4/19 Midterm 2 - Boundary-value problem/PDE	13
10	4/26, 4/28	- Boundary-value problem/PDE	13
11	5/3, 5/5	- Boundary-value problem/PDE	13
12	5/10, 5/12	- Boundary-value problem/PDE	14
13	5/17, 5/19	- 5/17 Midterm 3 - Complex analysis (variable and property)	17
14	5/24, 5/26	- Complex analysis	17 18
15	5/31, 6/2	- Complex analysis (integration in the complex plane)	18
16	6/7, 6/9	- Complex analysis (residue theorem)	19
17	6/14, 6/16	- 6/14 no class - Complex analysis	
18	6/21	Final Exam	