

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

### Instructors:

- Prof. Jia-Yang Juang (莊嘉揚), 工綜 713, 02-33669406, jiaayang@ntu.edu.tw
- Teaching Assistant, 陳俞蓁, 工綜 410, r07522508@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  
陳俞蓁: Wednesdays 1-3 pm, or by appointment

**Course Website:** <http://homepage.ntu.edu.tw/~jiaayang/me2002/2019s/syllabus.htm>

### Textbook:

- Zill, Advanced Engineering Mathematics 6th

### Grading:

- 51% three midterm exams: 17% each, closed book (open one handwritten A4 sheet), no make-up
- 17% final exam: closed book (open one handwritten A4 sheet), no make-up
- 32% quizzes: 約 10-12 次，兩次最低分的成績不計入成績計算。另外，考試全勤額外獲得 2%

Tentative Schedule:

Week	Dates	Topics	Chapters
1	2/18, 2/20	- Course outline - Vector differential calculus	9
2	2/25, 2/27	- Vector differential calculus	9
3	3/4, 3/6	- Vector integral calculus	9
4	3/11, 3/13	- Vector integral calculus	9
5	3/18, 3/20	- <b>3/18 Midterm 1</b> - Fourier series	12
6	3/25, 3/27	- Fourier series	12
7	4/1, 4/3	- Sturm-Liouville Theory - 4/3 no class	12
8	4/8, 4/10	- Fourier integral	15
9	4/15, 4/17	- Fourier transform	15
10	4/22, 4/24	- <b>4/22 Midterm 2</b> - Boundary-value problem/PDE	13
11	4/29, 5/1	- Boundary-value problem/PDE	13
12	5/6, 5/8	- Boundary-value problem/PDE	13
13	5/13, 5/15	- Boundary-value problem/PDE	14
14	5/20, 5/22	- <b>5/20 Midterm 3</b> - Complex analysis (variable and property)	17
15	5/27, 5/29	- Complex analysis	17 18
16	6/3, 6/5	- Complex analysis (integration in the complex plane)	18
17	6/10, 6/12	- Complex analysis (residue theorem)	19
18	6/17	<b>Final Exam</b>	