

## 11220 PME200202: Engineering Mathematics II

Spring, 2024

### Instructor

張敬 助理教授，email: [c.chang@pme.nthu.edu.tw](mailto:c.chang@pme.nthu.edu.tw)

Lecture: Monday 10:10 am -12 pm and Wednesday 9 -9:50 am

Room: 215 in Engineering Building 1

Office hours: Thursday 11 am -12 pm; or by appointment

My office: 516 Engineering Building 1

### Teaching assistants

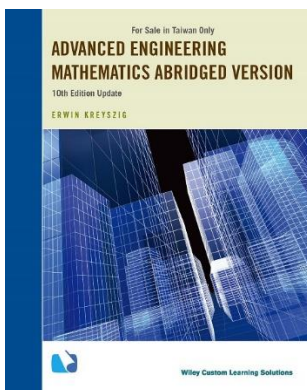
TBD

Recitation (演習課): TBD

TA Office hours: TBD

### Textbook

Kreyszig, "Advanced Engineering Mathematics", abridged version 10th ed., John Wiley (2018)



### Website

Homework, solutions, announcements... etc. will be posted on <https://eeclass.nthu.edu.tw/course/>

It is your responsibility to regularly check all updates, posts on this website.

### **Homework**

There will be 6 homework assignments. Every assignment will have 2 to 4 problems. They will be posted on the course website on Fridays, and due on the following Friday before 6 pm. You need to upload your homework to the course website on eclass. No late homework will be accepted.

### **Quizzes**

There will be 4 quizzes in this course. They will be conducted during lectures, tentative on Mondays. The problems in quizzes will come from or related to those in homework, so you should take the chance to practice.

### **Exams**

Midterm and final exams are closed book and closed note. Bring your own pens to the exams. No cellular/smart phone, or any types of communication/electronic device are allowed.

There will be no makeup for all the quizzes and exams.

### **Grades**

The performance evaluation is divided into 20%; 20%, 30%, 30% for homework, quizzes, midterm, and final exam respectively. Once an assessment (including homework, quizzes, exams) has been graded and returned, you have **3 days** to request a regrade. After the 3-day period, all grades are final.

### **Academic integrity**

Discussions on the material among yourselves are encouraged, but what you turn in should be your own. Collaboration is not permitted during quizzes and exams. Do not do it.

### **Syllabus**

1. Vector calculus
2. Fourier series and integral

3. Fourier transform

4. Partial differential equations

5. Complex analysis

Week	Date	Textbook	Topic	Assignment
1	2/19, 21	Ch. 9	Vector calculus	
2	2/26	Ch. 9, 10	Vector calculus	
3	3/4, 6	Ch. 10	Vector calculus	HW 1
4	3/11, 13	Ch. 10	Vector calculus	Quiz 1
5	3/18, 20	Ch. 10, 11	Vector calculus, Fourier series	HW 2
6	3/25, 27	Ch. 11	Fourier series	Quiz 2
7	4/1	Ch. 11	Fourier integral and transform	
8	4/8, 10	Ch. 11	Fourier transform	HW 3
9	4/15, 17	Ch. 11	Sturm-Liouville problem	
10	4/22, 24	Ch. 11	Sturm-Liouville problem	Midterm
11	4/29, 5/1	Ch. 12	Partial differential equations	
12	5/6, 8	Ch. 12	Partial differential equations	HW 5
13	5/13, 15	Ch. 12	Partial differential equations	Quiz 3
14	5/20, 22	Ch. 12	Partial differential equations	HW 6
15	5/27, 29	Ch. 13	Complex analysis	Quiz 4
16	6/3, 5	Ch. 15, 16	Complex analysis	HW 7
17	6/12	Ch. 16	Complex analysis	
18	6/17			Final

Updated Dec 7, 2023