

MATH 351-010
MWF 9:05–9:55, PRN 236

Engineering Mathematics
Fall 2022

Web Page: <http://sites.udel.edu/dedwards/classes/m351f22>

(also referenced from QR code at end of document)

Instructor: Prof. D. A. Edwards
EWG 511

Office Hours: T 9:30–10:30, R 2–3 or by appointment
x1871, dedwards@udel.edu

Introduction (9/5 Revision)

Welcome to Engineering Mathematics I! Since the course is designed for engineering majors, many of the examples in class presentations and homework assignments will be from the areas of circuit theory and mechanical oscillators.

The texts for this course are

P) *Linear Algebra: A Modern Introduction*, 4th ed., by Poole

Z) *Advanced Engineering Mathematics*, 7th ed., by Zill

If you have any questions, contact me during my office hours or make an appointment. **Extra copies of handouts are available at the Web page listed above or referenced at the QR code at the end of the document.**

If you have to miss class one day, just get the notes from someone. If you are in isolation, let me know and I will stream the class over Zoom.

Assessment

Your grade for the course will be determined in two stages. First your *raw score* will be calculated using the *higher* of the two algorithms:

- 1) The exams will count for 90% of your grade (final counts double), and the homework counts 10%.
- 2) The exams will count for 80% of your grade (final counts double), and the homework counts 20%.

Therefore, performing well on the homework will not only help you learn the material, it can also directly help your grade. (The vast majority of students improve their grades by using their homework scores.) Then each of the raw scores will be scaled to determine final grades.

Homework

In most cases, homework will be distributed every Friday during lecture, and it will be due at the beginning of class the following Friday. The homework will cover material up through the Monday after it is distributed. **ABSOLUTELY NO LATE HOMEWORK WILL BE ACCEPTED!** If you must miss a due date because of University business, it is your responsibility to make sure the homework gets to me *before* the due date. However, I will drop your two lowest homework scores.

Though you may not copy directly from another's paper or use someone else's ideas as your own¹, I encourage you to discuss the homework problems with your classmates. Model homework solutions will be posted online after the assignment is due. Hopefully these will assist you in learning the material.

Homework assignments should be folded like a book with the following information on the "front cover:"

Name
Math 351-010—Edwards
Assignment Number
Date

You will turn in your assignments this way so that your grade may be written on the inside, thus ensuring your privacy. I will make every effort to ensure that your graded homework is returned in a timely manner.

Each homework assignment will consist of ten questions. Of those, some randomly selected problems will *not* be graded. For these questions, you will receive one point if you attempted the problem. For the problems that will be graded, you may receive up to four points, depending on the completeness and accuracy of your solution.

The examinations will largely be based on the material covered in the homework assignments. However, you are encouraged to try other problems in the book for practice.

¹ For more details regarding academic dishonesty, see the Student Handbook (<http://www.udel.edu/stuguide/>).

Exams

Exam dates are listed on the attached schedule. **You will need a small blue book for each exam. NO MAKEUP EXAMS WILL BE GIVEN!**

When the exams are returned, they will have a numerical score and a letter grade on them. The numerical score is your score for the exam; *the letter grade is your grade for the course* to that point, including all homework scores.

Attached to each examination will be a course evaluation form, so that I may receive your suggestions for how the course could be improved.

Electronic Communication

Important announcements (corrections to typographical errors, etc.) will be handled by e-mail. Also at the URL

<https://sites.udel.edu/dedwards/classes/suggest/>

you will find an anonymous suggestion box.

Tentative Schedule

Note: This is only a tentative schedule; there may be deviations from it.

August 31–September 2: Sections Z1.1, Z1.2, Z2.3

August 31: Homework 1 distributed

September 5: Labor Day (no school)

September 7–9: Sections Z1.2, Z2.2, Z2.8, Z3.1

September 9: Homework 1 due; homework 2 distributed

week of September 12: Sections Z3.1, Z3.3

September 16: Homework 2 due; homework 3 distributed

week of September 19: Sections Z3.2–3.4, Z3.8

September 23: Homework 3 due; homework 4 distributed

week of September 26: Sections Z3.4, Z3.5, Z3.8, P2.1

September 30: Homework 4 due; homework 5 distributed

October 3: Exam I (covers chapters Z1, Z2, sections Z3.1–3.4, Z3.8)

October 5–7: Sections P2.1, P2.2, P3.1, P3.2

week of October 10: Sections P3.1–3.3

October 14: Homework 5 due; homework 6 distributed

week of October 17: Sections P3.3, P4.2

October 21: Homework 6 due; homework 7 distributed

week of October 24: Sections P2.3, P3.5, P4.2, P6.1, P6.2

October 28: Homework 7 due; homework 8 distributed

October 31: Exam II (covers sections Z3.5, Z3.8, P2.1, P2.2, P3.1–3.3, P4.2)

November 2–4: Sections P3.5, P6.2, P6.3

week of November 7: Sections P4.1, P4.3, P4.4, P6.3

November 11: Homework 8 due; homework 9 distributed

week of November 14: Sections P4.4, Z2.9, Z10.1, Z10.2.1, Z11.2

November 18: Homework 9 due; homework 10 distributed

week of November 21: Thanksgiving Recess

week of November 28: Sections Z10.2, Z10.3, Z11.2

November 30: Exam III (covers sections P2.3, P3.5, P6.1–6.3, P4.1, P4.3, P4.4)

December 5: Section Z10.3

December 7: Formal review session

December 7: Homework 10 due; supplemental study materials distributed

TBA: Final Exam (covers entire class, but especially chapter Z10, Z11.2)

