

MATH 3350: Higher Mathematics for Engineers and Scientists I
Section 101, M–F 8:00–9:50, MATH 112.

Course Information:

Instructor: Chris Monico
Email: c.monico@ttu.edu
Office: MA-252
Office Hours: M-F 12:00–2:00.
Required Text: *Advanced Engineering Mathematics*, 3rd Edition, by Zill and Cullen.

Course outline/Important Dates: We will cover the following sections of the textbook: 1.1, 1.2, 2.1–2.8, 3.1–3.6, 3.8, 5.1, 5.3, 4.1–4.5.

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| Exam 1 | Friday 6/11 |
| Exam 2 | Tuesday 6/22 |
| Last day to drop a course (without counting against drop-limit) | Monday, 6/7. |
| Last day to drop a course | Tuesday, 6/22. |
| Last day of classes | Thursday, 7/1 |
| Final Exam | Friday 7/2, 8:00–10:30. |

Calculator policy: Students will be allowed to use calculators on all exams, including the final exam.

Attendance: Class attendance is *mandatory*. It is assumed that you will attend, so I will not waste your time by taking attendance. However, keep in mind that it will be decidedly difficult for you to pass this course if you do not attend. If you miss a class, it is your responsibility to find out what you missed (assignments, notes,...); either ask a fellow student or come by my office to find out. If you are absent for an exam, you will be permitted to make it up *if and only if* you are absent for one of the following reasons:

- You are out of town performing duties on behalf of the university (i.e., athletics). Advance notification is required.
- Religious holiday (see below).
- **Severe** illness, documented by a physician.
- Death in the family.
- Other extenuating circumstances, at the instructor's discretion (I am *not* very generous with this).

Expected Learning Outcomes The students will understand the concept of differential equations, their solutions, and applications to physical sciences and engineering. In particular the students will learn to

- recognize a differential equation and its solution,
- compute solutions of first order differential equations,
- compute solutions of linear differential equations,

- use Laplace transforms,
- recognize Fourier series,
- find numerical solutions.

Assessment of learning outcomes The expected learning outcomes for the course will be assessed through scheduled exams and homework assignments. Homework will be assigned regularly (nearly every class meeting) through the WebWork system. Your final grade in this course will be determined by the weighted components and grading scale below.

| Grade components | | Grade Scale | |
|------------------|-----|-------------|---|
| Homework: | 10% | 90–100% | A |
| Exam 1: | 30% | 80–89% | B |
| Exam 2: | 30% | 65–79% | C |
| Final Exam: | 30% | 55–64% | D |
| | | 0–54% | F |

ADA Accommodation: Any student who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as soon as possible to make any necessary arrangements. Students should present appropriate verification from AccessTECH. No requirement exists that accommodations be made prior to completion of this approved university procedure.

Religious Holy Day Observance (OP 34.19)

1. “Religious holy day” means a holy day observed by a religion whose places of worship are exempt from property taxation under Texas Tax Code §11.20.
2. A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence.
3. A student who is excused under Section 2 may not be penalized for the absence; however, the instructor may respond appropriately if the student fails to complete the assignment satisfactorily.