Course Syllabus

Course Information

ENGR 3300 Linear Algebra for Engineers

Summer 2021 Semester

Professor

Dr. Mohammed Zamshed Ali
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Physical Office: ECSN 3.516**;** Online office: eLearning Blackboard Collaborate
Blackboard Collaborate Office Hours: Monday 2:00-3:00pm and/or by appointment

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Course Modality and Expectations

Instructional Mode	Mode # 4 "Remote"
Course Platform	Lectures will be delivered via Blackboard Collaborate. Synchronous live sessions on Blackboard Collaborate. Lectures will be recorded.
Expectations	Students are expected to have a mic and webcam (for exams). Regular attendance is expected unless asynchronous option is chosen by students in outside USA. For asynchronous, students must watch the recorded lectures within 24 hours of the actual class and report to instructor. Zero tolerance for cheating in exams. Must abide by Comets Creed "As a Comet, I pledge honesty, integrity, and service in all that I do."
Asynchronous Learning Guidelines	Lectures will be recorded for asynchronous access. Any student living in non-Central time zones can select the asynchronous option; and must inform the Instructor at the beginning (1st week) of the semester.

COVID-19 Guidelines and Resources

The information contained in the following link lists the University's COVID-19 resources for students and instructors of record.

Please see http://go.utdallas.edu/syllabus-policies.

Classroom Conduct Requirements Related to COVID-19

UT Dallas requires that all students must wear a face covering that covers the nose and mouth in all university buildings and classrooms. To help protect the health and safety of students, instructors, and the University community, students who choose not to wear a face covering may not attend class in person but may attend a course remotely. Anyone attending class in person without a face covering will be asked to put one on or leave. Instructors may end the class if anyone present refuses to appropriately wear a face covering for the duration of class. Students should also be sure they are at least six feet away from their fellow students and faculty, and seated in a seat that is designated to ensure that distance. Students who either refuse to wear face coverings appropriately or to adhere to other social distancing protocols may face disciplinary action for Student Code of Conduct violations. Students who are unable to comply with the university policies including wearing a face covering should consult the Comets United webpage for further instructions.

Students who have tested positive for COVID-19 or may have been exposed should not attend class in person and should instead follow required disclosure notifications as posted on the university's website (see "What should I do if I become sick?" webpage)

Class Attendance

The University's attendance policy requirement is that individual faculty set their course attendance requirements. Regular and punctual class attendance is expected regardless of modality. Students who fail to attend class regularly are inviting scholastic difficulty. In some courses, instructors may have special attendance requirements; these should be made known to students during the first week of classes. These attendance requirements will not be used as part of grading (see Class Participation below for grading information).

In-person participation records may be used to assist the University or local public health authorities in performing COVID-19 occurrence monitoring. Please note – in-person attendance requires consistently adhering to University requirements, including wearing a face covering and other public safety requirements related to COVID-19, as presented in this syllabus. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

Class Participation

Regular class participation is expected regardless of course modality. Students who fail to participate in class regularly are inviting scholastic difficulty. A portion of the grade for this course is directly tied to your participation in this class. It also includes engaging in group or other activities during class that solicit your feedback on homework assignments, readings, or materials covered in the lectures (and/or labs). Class participation is documented by faculty. Successful participation is defined as consistently adhering to University requirements, as presented in this syllabus. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

Class Recordings

Students are expected to follow appropriate University policies and maintain the security of passwords used to access recorded lectures. Unless the Office of Student AccessAbility has approved the student to record the instruction, students are expressly prohibited from recording any part of this course. Recordings may not be published, reproduced, or shared with those not in the class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

The instructor may record meetings of this course. Any recordings will be available to all students registered for this class as they are intended to supplement the classroom experience. Students are expected to follow appropriate University policies and maintain the security of passwords used to access recorded lectures. Unless the Office of Student AccessAbility has approved the student to record the instruction, students are expressly prohibited from recording any part of this course. Recordings may not be published, reproduced, or shared with those not in the class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. If the instructor or a UTD school/department/office plans any other uses for the recordings, consent of the students identifiable in the recordings is required prior to such use unless an exception is allowed by law. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

Class Materials

The Instructor may provide class materials that will be made available to all students registered for this class as they are intended to supplement the classroom experience. These materials may be downloaded during the course, however, these materials are for registered students' use only. Classroom materials may not be reproduced or shared with those not in class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

Course Detail on ENGR 3300 Advanced Engineering Mathematics

Scope: Survey of advanced mathematics topics needed in the study of engineering. Topics include review of complex numbers and complex valued functions, scalar and vector fields, introduction to partial differential equations, and Fourier series. Examples are provided from electromagnetic, fluid mechanics, physics and engineered systems.

- **Course Learning Objectives:**
  1. Understand and solve problems in physical space and time domain
  2. Understand and solve problems in frequency space and complex domain
  3. Ability to formulate engineering problems using advanced engineering math
  4. Ability to solve engineering problems using advanced engineering math

- **Prerequisite:** MATH 2415/MATH 2419 and ENGR 2300

- **Text Book:** Advanced Engineering Mathematics, 10th Edition, Wiley
  - ISBN 978-0-470-45836-5
  - Author: Erwin Kreyszig

- **Homework:** There will be 5-6 homework problem sets for this course. No late homework submission will be accepted.
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- **Tests/Final exam:** There will be two tests (mid terms) and one final exam for this course. All tests/exams will be conducted via eLearning. Tentative schedules:
  - Test 1: Jun 16th, 2021
  - Test 2: July 12th, 2021
  - Final exam: tbd

- **Grading Distribution:**

Test #1	25%
Test #2	25%
Final Exam	30%
Homework	15%
Attendance	5%
Total	100%

Make-up Exams	No makeup exams will be given. In the event of unavoidable medical emergencies the credit for an exam or quiz will roll over to the next exam or quiz.

Tentative distribution of topics to be covered

Timing	Major Topic	Chapters	CLOs will be tested
Week 1	Review of Vector Differential Calculus, grad, div, curl	Chap 9	Test1, Final
Week 2	Review of Vector Integral Calculus, Line Integrals, Multiple Integrals	Chap 10	Test1, Final
Week 3-5	Complex Numbers and Functions	Chap 13-14	Test1, Final
Week 6	Power series, Taylor series	Chap 15	Test2, Final
Week 7-8	Fourier Series and Analysis	Chap 11	Test2, Final
Week 8-9	Partial Differential Equation	Chap 12	Final

Technical Requirements
In addition to a confident level of computer and Internet literacy, certain minimum technical requirements must be met to enable a successful learning experience. Please review the important technical requirements on the Getting Started with eLearning webpage.

Course Access and Navigation
This course can be accessed using your UT Dallas NetID account on the eLearning website.

Please see the course access and navigation section of the Getting Started with eLearning webpage for more information.

To become familiar with the eLearning tool, please see the Student eLearning Tutorials webpage.

UT Dallas provides eLearning technical support 24 hours a day, 7 days a week. The eLearning Support Center includes a toll-free telephone number for immediate assistance (1-866-588-3192), email request service, and an online chat service.

Communication
This course utilizes online tools for interaction and communication. Some external communication tools such as regular email and a web conferencing tool may also be used during

the semester. For more details, please visit the Student eLearning Tutorials webpage for video demonstrations on eLearning tools.

Student emails and discussion board messages will be answered within 3 working days under normal circumstances.

Distance Learning Student Resources
Online students have access to resources including the McDermott Library, Academic Advising, The Office of Student AccessAbility, and many others. Please see the eLearning Current Students webpage for more information.

Server Unavailability or Other Technical Difficulties
The University is committed to providing a reliable learning management system to all users. However, in the event of any unexpected server outage or any unusual technical difficulty which prevents students from completing a time sensitive assessment activity, the instructor will provide an appropriate accommodation based on the situation. Students should immediately report any problems to the instructor and also contact the online eLearning Help Desk. The instructor and the eLearning Help Desk will work with the student to resolve any issues at the earliest possible time.

Comet Creed
This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:

"As a Comet, I pledge honesty, integrity, and service in all that I do."

Academic Support Resources
The information contained in the following link lists the University's academic support resources for all students.

Please go to Academic Support Resources webpage for these policies.

UT Dallas Syllabus Policies and Procedures
The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.

Please go to UT Dallas Syllabus Policies webpage for these policies.

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.