Representative MATH 2326 Syllabus

Instructor Information

This is an example of a syllabus that is typical for the class. An official syllabus will be provided by the faculty member teaching the specific section of the course for which students have enrolled.

Course Information

Section Information

[SAMPLE]

Course Description

Course Title: CALCULUS III

Vectors, dot product, cross product, planes, quadric surfaces, partial differentiation, multiple integrals (with applications), line integrals, Green's Theorem, surface integrals, Stokes' Theorem, divergence theorem.

Prerequisites: C or better in MATH 2425 or HONR-SC 2425, or student group.

Time and Place of Class Meetings

[SAMPLE]

This course operates on Central Time. All times listed for class meeting times, exams, and assignment deadlines are in Central Time (CT).

Classroom/Lecture Recording Policy

Faculty maintain the academic right to determine whether students are permitted to record classroom and online lectures. Recordings of classroom lectures, if permitted by the instructor or pursuant to an ADA accommodation, may only be used for academic purposes related to the specific course. They may not be used for commercial purposes or shared with non-course participants except in connection with a legal proceeding.

Recording of classroom and online lectures in this course is not allowed.

Student Learning Outcomes

By the end of this course, students will be able to:

1. Students will correctly answer questions and solve problems about vectors, lines, planes, cylinders, and quadric surfaces.
2. Students will develop well-supported answers and solve problems about vector-valued functions of one variable.
3. Students will properly answer questions and solve problems about scalar-valued functions of a vector, including limits, continuity, partial differentiation, and optimization.

4. Students will correctly answer questions and solve problems about double and triple integrals of a scalar-valued function of a vector.
5. Students will appropriately construct answers and solve problems about vector fields, including line and surface integrals and the Stokes and Divergence theorems.

Course Materials & Technology

Textbook Information

This course is participating in a program to provide digital course materials on or before the first day of class at a reduced cost. The cost for these materials will be automatically charged to your UTA student account and you'll have access to the materials through Canvas. Course fees are associated with course registration.

Digital Access (Required Course Materials): Access to Knewton Alta for homework and other digital materials is included in the $30 fee. Every student has full access to course materials through Canvas as soon as the course is available, so you can start working on your course right away. Knewton Alta is designed to enrich student success by providing instant feedback on your assignments plus on-demand access to problem examples, tutorials, and more.

Knewton Alta follows closely the OpenStax book Calculus Volume 3. You can download it for free from https://openstax.org/details/books/calculus-volume-3

For more information about this program, please see the Course Resources page in your Canvas course and then for further questions, contact your campus bookstore at uta@bkstr.com or 817-272-2785.

Technology & Equipment Requirements

We will use Canvas, the homework is done in Knewton Alta accessed through Canvas, and Teams. You can access tutorials on these tools by clicking on the "Get Started" Box on your Canvas Homepage. You will need a computer, tablet, or smartphone to access Canvas.

The approved calculators for use in exams are TI-30XA, the TI-30X IIS or IIB, and the TI-30XS MultiView. Cost: $10-$30.

Visit the OIT Services page for a list of Applications and Software available through UTA.

Visit the UTA Libraries Technology page for a list of items that can be checked out or used at the library.

Assignments & Exams

Exams

There will be two midterm exams during class time lasting 75 minutes, and one final exam lasting 145 minutes. They consist of multiple choice questions with no partial credit given, and some show your work problems with partial credit given for correct work. You will not be allowed to take the exam if more than 30 minutes late.

Homework

Homework consists of assignments in Knewton Alta. Only correct answers get credit.

Signature Assignment

The course includes an assignment submitted via Canvas that shows critical thinking, problem solving, and communication skills. It involves solving several problems and explaining the reasoning steps and results.

Grading Information

Assignments	Values (**pts**)
Exam 1	20 pts
Exam 2	20 pts
Final Exam	30 points
Homework	27 pts
Signature Assignment	3 pts
	Total: **100 pts**

Students are expected to track their performance throughout the semester, which Canvas facilitates, and seek guidance from available sources, including the instructor, if their performance drops below satisfactory levels. Refer to the Student Support Services section below.

Final Grade Calculations

Earned **pts**	Letter Grade
90-100	A
80-89	B
70-79	C
60-69	D
0-59	F

Grading Standards

You must earn a letter grade of C or higher to pass this class, but this may vary by department. Grading rubrics are provided for all assignments in Canvas.

Late Work Policy

Late homework is not accepted unless you have a university valid excuse.

Make-Up Exams Policy

You will need a university valid excuse in order to have a make-up exam.

Extra Credit Policy

None

Grade Grievance Policy

Any appeal of a grade in this course must follow the procedures and deadlines for grade-related grievances as published in the current University Catalog: Grades and Grading Policies. If you experience a conflict with your instructor, first try and resolve the matter with your instructor. For issues that remain unresolved after this contact, including grade discrepancies or complaints, a grievance may be filed with the Mathematics Department by completing the departmental Grievance form at https://go.uta.edu/mathgrievance. Students not satisfied with the departmental decision may appeal to the College of Science. It is imperative for students to follow the proper procedure for their grievances to be reviewed.

Course & University Policies

Attendance Policy

Students should review the University Class Attendance Policies on the Class Attendance Policies page. The following attendance policy will be applied in this course.

[Varies by instructor]

The U.S. Department of Education requires that UT Arlington have a mechanism in place to verify Federal Student Aid recipients' attendance in courses. UT Arlington instructors are expected to report the last date of attendance when submitting students' final course grades; specifically, when a student earns a course grade of F, instructors must report the last date a student attended their class. For on-campus classes, last date of attendance can be based on attendance rosters or on academic engagements—a test, participation in a class project or presentation, or Canvas-based activity. Online or distance education courses require regular and substantive online interaction and participation. Students must participate in online course activities in Canvas to demonstrate attendance; logging into an online class is not sufficient by itself to demonstrate attendance. The last date of attendance is reported to the U.S. Department of Education for federal financial aid recipients.

Institutional Policies

UTA students should review the University Catalog and the Syllabus Institutional Policies page for institutional policies and contact the specific office with any questions. The institutional information includes the following policies, among others:

- Drop Policy
- Disability Accommodations
- Academic Integrity
- Electronic Communication

UTA Honor Code

UTA students are expected to adhere to and observe standards of conduct compatible with the University's functions as an educational institution and live by the University of Texas at Arlington's Honor Code. It is the policy of The University of Texas at Arlington to uphold and support standards

of personal honesty and integrity for all students consistent with the goals of a community of scholars and students seeking knowledge and responsibility.

Student Support Services

Student Services Page

The Student Services page provides links to many resources available to UTA students, including:

- Academic Success
- Counseling and Psychological Services (CAPS)
- Health Services
- Students with Disabilities
- Veteran Services

Students are also encouraged to check out Career Center resources to enhance their career-readiness, find student employment, search for internships, and more. We encourage Major Exploration and the use of Experiential Major Maps to keep students on track for graduation. Refer to the Graduation Help Desk for more details.

Online Academic Success Guide

Visit the Online Academic Success Guide to explore a list of helpful tips and resources to help you succeed in your online journey.

PLEASE SEE NEXT PAGE FOR COURSE SCHEDULE

Course Schedule

Module and Dates	Topics	Assignments Due
Week 1	Vectors and Vector Products.	1 week after assigned
Week 2	Lines and Planes. Surfaces. Calculus of Vector-Valued Functions.	
Week 3	Motion in Space. Length of Curves. Curvature.	
Week 4	Functions of Several Variables. Limits. Partial Derivatives. Chain Rule.	
Week 5	Gradient. Tangent plane. Review.	
Week 6	Extrema of Functions. Test 1.	
Week 7	Lagrange Multipliers. Multiple Integrals.	
Week 8	Double Integrals in Polar Coordinates. Triple Integrals.	
Week 9	Cylindrical and Spherical Coordinates. Mass. Review.	
Week 10	Change of variables. Test 2.	
Week 11	Vector Fields. Line Integrals.	
Week 12	Conservative Vector Fields. Green's Theorem.	
Week 13	Divergence and Curl. Surface Integrals.	
Week 14	Stokes Theorem. Divergence Theorem. Review.	