Course Title: Engineering Applications Lab Ill for Mathematics
Course Prefix: GNEG Course No.: 2021 Section No.: P01

Department of I Electrical and Computer Engineering I College of I Engineering

Instructor Name:	*Ramesh C. Dwivedi*
Office Location:	*Room 351 ECE Bldg.*
Office Phone:	*(936)261-9786)*
Email Address:	*rcdwivedi@pvamu.edu*
U.S. Postal Service Address:	Prairie View A&M University P.O. Box 591 Mail Stop 2520 Prairie View, TX 77446

Office Hours: Tu: 1:00 p.m.– 3:00 p.m.; Th: 3:00 -5:00 p.m,

Course Location: S.R. Collins Bldg. Room 116
Class Meeting Days & Times: T 3:00 pm – 5:50 pm

Catalog Description: ELEG 2021 Engineering Applications Lab Ill for Mathematics. (1-0) Credit 1 semester hour

Practical applications of the 2"d level Calculus for problems in engineering, computer science, and technology. The 2nd level Calculus concepts will be reinforced through hands- on, physical application in the laboratory.

Prerequisites/Co-requisites: MATH 2024

Recommended Text/Readings: Calculus, 10th edition, by Ron Larson & Bruce Edwards, Brooks Cole Publishing Company, ISBN 13: 978-1-285-05709-5
Lectures, assignments, handouts, and class notes

Access to Learning Resources: PVAMU Library:
phone: (936) 261-1500;
web: http://www.tamu.edu/pvamu/library/
University Bookstore
phone:(936) 261-1990

web: https://www. bkstr.com/Home/1 0001-10734-1?demoKey=d

Course Goals or Overview:

The goal of this course is to introduce applications of engineering, engineering technology, and computer science while enhancing the students' mathematics skills.

Course Outcomes/Objectives
The contents of this course are designed to

1	Convey the importance and application of mathematics in engineering, engineering technology, and computer science.
2	Introduce team-based projects in engineering, engineering technology, and computer science.
3	Reinforce the students' learning of mathematics concepts that will help the students be successful in the corresponding math course.
4	Introduce multiple integrals and their applications.

Course Requirements & Evaluation Methods

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

Exams -written tests designed to measure knowledge of presented course material
Homework- assignments from text designed to supplement and reinforce course material
Projects- assignments designed to measure ability to apply presented course material (optional)

ecourse: Please check your ecourse for assignments and the solutions.

Task Stream: Students must upload task stream assignment in ecourse. The instructor will make the assignment and announce the due date.

Grading Matrix

Instrument	Value (percentages)
Mid semester exams (3 exams)	20% each (60% total)
Homework; Quizzes, Project	20% (10% + 10%)
Final Exam (Comprehensive)	20%
Total:	100%

Grade Determination:

A = 90% or better
B = 80-89%
C = 70-79%
D = 60-69%
F = Less than 60%

Course Procedures

Submission of Assignments and reports:
All assignments should be submitted by the due date. Late assignments will not be accepted. Each assignment will be page numbered. To begin with I will put page number in the assignment. If you add more pages or shuffle pages of the assignment then make sure the page numbers have correct order. Page numbers allow me to grade your faster and accurately for proper credit to you.

Each assignment will have a cover page. The cover page should be simple. Same rules apply to lab reports. We expect two lab reports for the entire semester. The lab reports are different from assignments. The lab reports will be written for the design of experiments.

Please do not put out-size university seal/logo on the cover page. It may cause distraction from the main information on the cover page. If you prefer you may put border on the cover page. Additionally you may write the name of the university, name of the instructor, but these two items are optional. The cover page for assignments and project reports should have the following information in that order:

Assignment No./if Lab report, then title:
Your Name: (last, First, Middle initial)
Your Major:
GNEG 2021-P01
Fall 2018
Date of Turn in: month/date/year
Instructor: (optional)

A printed cover sheet is preferred, though a neatly hand-written cover sheet for assignments and reports will be acceptable.

Exam Policy

Exams should be taken as scheduled. Exams will be closed book unless said otherwise. No makeup examinations will be allowed except under documented emergencies (See Student Handbook). If you miss work because of university assigned activity away from campus in sports, music etc., then you inform me the dates you will miss the class and the date you will return to class, so a make up work may be assigned to you upon your return.

Attendance Policy: Prairie View A&M University expects your full attendance in class. Your grade may be lowered by one level (A to B, B to C, C to D and D to F) if you have 3 un-excused absences. It is advised that you sign in the attendance sheet for each class as it is routed.

Tentative Course Schedule
by the week

Week	Topics
1	Review Differentiation
2	The Inverse of Differentiation (Anti-differentiation)
3	Applications of Anti-differentiation
4	Integrals
5	Applications of Integration
6	Test 1 (Midterm)
7	Techniques of Integration
8	Partial Derivatives
9	Introduction to Multiple Integrals
10	Test 2
11	Applications of Double Integrals
12	Applications of Triple Integrals
14	Course Review
15	Final Exam (Comprehensive)

Special Note to students: Normally double integrals and the multiple integrals are not included in calculus II. Your cooperation inthese topics will be highly appreciated. See the weekly calendar above.

,

University Rules and Procedures

Disability statement (See Student Handbook):
Students with disabilities, including learning disabilities, who wish to request accommodations in class should register with the Services for Students with Disabilities (SSD) early in the semester so that appropriate arrangements may be made. In accordance with federal laws, a student requesting special accommodations must provide documentation of their disability to the SSD coordinator.

Academic misconduct (See Student Handbook):
You are expected to practice academic honesty in every aspect of this course and all other courses. Make sure you are familiar with your Student Handbook, especially the section on academic misconduct. Students who engage in academic misconduct are subject to university disciplinary procedures.

Forms of academic dishonesty:

1. Cheating: deception in which a student misrepresents that he/she has mastered information on an academic exercise that he/she has not mastered; giving or receiving aid unauthorized by the instructor on assignments or examinations.

2. Academic misconduct: tampering with grades or taking part in obtaining or distributing any part of a scheduled test.

3. Fabrication: use of invented information or falsified research.

4. Plagiarism: unacknowledged quotation and/or paraphrase of someone else's words, ideas, or data as one's own in work submitted for credit. Failure to identify information or essays from the Internet and submitting' them as one's own work also constitutes plagiarism.

Nonacademic misconduct (See Student Handbook)
The university respects the rights of instructors to teach and students to learn. Maintenance of these rights requires campus conditions that do not impede their exercise. Campus behavior that interferes with either (1) the instructor's ability to conduct the class, (2) the inability of other students to profit from the instructional program, or (3) campus behavior that interferes with the rights of others will not be tolerated. An individual engaging in such disruptive behavior may be subject to disciplinary action. Such incidents will be adjudicated by the Dean of Students under nonacademic procedures.

Sexual misconduct (See Student Handbook):
Sexual harassment of students and employers at Prairie View A&M University is unacceptable and will not be tolerated. Any member of the university community violating this policy will be subject to disciplinary action.

Attendance Policy:
Prairie View A&M University requires regular class attendance. Excessive absences will result in lowered grades. Excessive absenteeism, whether excused or unexcused, may result in a student's course grade being reduced or in assignment of a grade of "F". Absences are accumulated beginning with the first day of class.

Student Academic Appeals Process
Authority and responsibility for assigning grades to students rests with the faculty. However, in those instances where students believe that miscommunication, errors, or unfairness of any kind may have adversely affected the instructor's assessment of their academic performance, the student has a right to appeal by the procedure listed in the Undergraduate Catalog and by doing so within thirty days of receiving the grade or experiencing any other problematic academic event that prompted the complaint.