Welcome to

MATH 1430

APPLICATIONS OF CALCULUS I

INSTRUCTOR:
Precious Andrew
pandrew@unm.edu
Office: AS123

OFFICE HOURS:
Tuesdays and Thursdays 12:30-1:30pm and Tuesdays 2:45-4:45pm in-person at Valencia Campus, Room Arts and Sciences 123 (A123). I'm also available via Zoom during these times, or by appointment.

COURSE DESCRIPTION:
An algebraic and graphical study of derivatives and integrals, with an emphasis on applications to business, social science, economics and the sciences. Meets New Mexico General Education Curriculum Area II: Mathematics and Statistics. (3 Credit Hours).

PREREQUISITES:
C or better in Math 1220, 1240, or 1250 or an appropriate placement test. Check with your advisor to make sure you meet the requirements.

Start by *exploring* our course at canvas.unm.edu.

Here you will find course information and the link to our textbook: *Calculus with Applications*, 12th edition, by Lial, M. L., Greenwell R. N., & Ritchey N. P. Pearson Publishing.

In Canvas you can also access your online MyMathLab homework.

The *grade you earn* will be based on the following assignments:

2 Exams (150 pts. each)	300 points
MyMathLab Onine HW	150 points
Additional Assignments	100 points
Final Exam	200 points
Total	750 points

For this class, *you will need* reliable internet access, access to MyMathLab, a scanner or scanner app like AdobeScan or Camscanner, and a basic 4-function calculator.

Late work is generally not accepted, but please contact me if you have special circumstances.

Attending class is essential. Please commit to attend every class meeting, unless there is an emergency. If you miss three classes, you may be dropped from the course. This is because students who miss this many class meetings rarely successfully complete the course. In an online course, not submitting an assignment will be regarded as an absence. Please communicate any special circumstances with me.

MYMATHLAB COURSE ID:
andrew11571

MECS DIVISION CHAIR:
Ariel Ramirez
aramirez8@unm.edu

ABOUT YOUR INSTRUCTOR:

I hope to see you in office hours! For now, here is a little about me. My name is Precious Andrew. Most students call me my first name, Precious, or Ms. Andrew if you prefer. I have been teaching mathematics at UNM since 2007. I have lived in *New Mexico* since I was a child, I studied at UNM, I love red chile, and I enjoy powerlifting.

TUTORING:

You can schedule an appointment for free in-person or online *tutoring.* Stop by the Learning Center in the UNM-Valencia Campus library, email tutor@unm.edu, call (505)228-8860, or visit the link to schedule an appointment –

https://outlook.office365.com/owa/calendar/TESTLearningCommons@unmm.onmicrosoft.com/bookings/Links to an external site.

"You can totally do this!"

Here are some additional *resources:*

UNM Valencia Library - http://valencia.unm.edu/library/

UNM Valencia Life Resources - http://valencia.unm.edu/students/student-resources.html

Veteran's Resource Center - vrc@unm.edu

PASOS Resource Center - (505) 925-8546, pasos@unm.edu. The Resource Center is an on-campus center that serves as a "one-stop" for all non-academic needs of UNM-Valencia students.

Here are some of the *student learning outcomes:*

By the end of the semester, students should be able to:

A. State, motivate and interpret the definitions of continuity, the derivative, and the definite integral of a function, including an illustrative figure, and apply the definition to test for continuity and differentiability. In all cases, limits are computed using correct and clear notation. Student can interpret the derivative as an instantaneous rate of change, and the definite integral as an averaging process.

B. Use the derivative to graph functions, approximate functions, and solve optimization problems. In all cases, the work, including all necessary algebra, is shown clearly, concisely, in a well-organized fashion. Graphs are neat and well-annotated, clearly indicating limiting behavior. English sentences summarize the main results and appropriate units are used for all dimensional applications.

C. Graph, differentiate, optimize, approximate and integrate functions containing parameters, and functions defined piecewise. Differentiate and approximate functions defined implicitly.

D. State the main theorems of calculus correctly, including all conditions, and give examples of applications. These include the Intermediate Value Theorem, the Extreme Value Theorem, and the Fundamental Theorem of Calculus.

E. Compute integrals using the method of substitution, including changing the bounds in the case of definite integrals
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University Policies:

Title IX:
Our classroom and our university should always be spaces of mutual respect, kindness, and support, without fear of discrimination, harassment, or violence. Should you ever need assistance or have concerns about incidents that violate this principle, please access the resources available to you on campus. Please note that, because UNM faculty, TAs, and GAs are considered "responsible employees" by the Department of Education, any disclosure of gender discrimination (including sexual harassment, sexual misconduct, and sexual violence) made to a faculty member, TA, or GA must be reported by that faculty member, TA, or GA to the university's Title IX coordinator. For more information on the campus policy regarding sexual misconduct, please see: https://policy.unm.edu/university-policies/2000/2740.html.

Grade mode and Withdrawals: You must select your grade mode (Letter Grade, CR/NC, or Audit) within the first 2 weeks of the semester. Students who withdraw after the deadline will receive a grade of W. If you do not withdraw (but stop attending), you may receive a failing grade. Make sure to drop the class on my.unm if you wish to do so. See the list of all deadlines: www.registrar.unm.edu

Accessibility Statement and Accommodations: UNM is committed to providing equitable access to learning opportunities for students with documented disabilities. As your instructor, it is my objective to facilitate an inclusive classroom setting, in which students have full access and opportunity to participate. To engage in a confidential conversation about the process for requesting reasonable accommodations for this class and/or program, please contact the UNM-Valencia Equal Access Services, at (505) 925-8910 and/or The Accessibility Resource Center at arcsrvs@unm.edu or by phone at 505-277-3506

Schedule of Topics: