

Class meets MW 1:30-2:45p

Prerequisites: Grade of C or higher in Math 1220 (College Algebra) or Math 1240 (Pre-Calculus), or minimum ACCUPLACER score of 249 (A&F) or Math ACT score of 26+ or math SAT score of 600+.

Professor's help-times M 2:45-3:15, 5:15-5:45; T 4:15-5:45; W 2:45-3:15, 5:15-5:45; Th 11:45-12:15, 1:30-3:00, 4:15-5:45
wcmurray@unm.edu

Required Items:

Text: Calculus with Applications, 11th ed., by Lial, Greenwell, Ritchey

Scientific Calculator ("Scientific" means it has powers-of-ten notation capability, and trig functions). If it has Graphing capability, that will be useful on occasion. (An Online calculator is Not recommended, because cell-phones and internet access are Not allowed on tests.)

Student Learning Goals & Objectives: Acquire the ability to

- Find the limit, as a variable approaches a specific value, of functions.
- Distinguish between, and calculate, average and instantaneous rates of change.
- Interpret the Derivative as the limit of rate-of-change.
- Find the derivative of an assortment of function types: variables raised to powers, polynomials, products and quotients of functions, composite functions, exponential and logarithmic functions.
- Use the derivative as a tool to determine function behavior.
- Use the derivative as a tool for finding function extrema.
- Use the limit and derivative as tools for solving applied problems.
- Solve problems involving rates of change of two variables (Related Rate problems.)
- Find the Antiderivatives of functions.
- Use antiderivatives to evaluate Integrals (via the Fundamental Theorem of Calculus.)
- Use antiderivatives/integration for finding the area between a graphed and an axis, and also between two graphed curves.
- Use antiderivative and integration techniques to solve applied problems.

Policies and Notices:

**After four accumulated absences, the student may be dropped by the instructor without further notice.*

**Missed tests:* If a test is missed, the score for that test will be zero, and that will be the one score dropped at semester's end. Note that a missed test disqualifies the student from receiving an A or A+ in the course, regardless of overall points earned.

**Late homework.* Credit may be reduced by 50% if one day late; minus 100% if two or more days late. Homework due dates are indicated on the schedule accompanying this syllabus. (Extensions may be granted if late turn-in is due to emergency, and Instructor has been notified.)

**Persistent disruptive behavior,* such as loud talking, ridiculing or intimidating the instructor or other students, or other forms of distraction, will result in the offender being dismissed and dropped from the class.

**Reporting Sexual Misconduct:* Any report of sexual misconduct or gender discrimination made to a UNM faculty member, TA, or GA must be reported to the Office of Equal Opportunity and the Title IX Coordinator (acatena@unm.edu, 505-277-5251). For more information on UNM policy re sexual misconduct see <https://policy.unm.edu/university-policies/2000/2740.html>

Homework Format: Homework problems should be clearly separated, either by whitespace (that means more space between main problems than within the problem), or by a separation line between main probs (not between subprobs a, b, c...). Turn homework in by *day*—not by section. That is, if sec 3.1 and 3.2 are presented on the same day, 3.1 and 3.2 should be grouped together. Only one turn-in is allowed, 2nd partial submissions will not be scored.

Also, please make the **main** prob #--**5, 11, 21, ... (not a,b,c...)** extra **BIG**. This is to help make the separation between main problems really obvious, so the instructor can find and check the main problems fast.

A *Formula/Equation sheet* will be provided before each test. Only minor notations on the sheet are allowed. No example problems are permitted.

Tutoring, free. <https://valencia.unm.edu/campus-resources/the-learning-center/learning-center.html> for hours;
<https://esurvey.unm.edu/opinio/s?s=131505> ,form to request an appointment.

***Final Exam Minimum Grade is 70%** in order to receive above a “D”, regardless of other test or homework scores.

Grading:	Maximum points
Homework	100
4 tests	400
Drop lowest one of tests or homework:	-100
Final exam (not dropped)	<u>150</u> (min 105 (70%) to receive higher than a “D”.)
	550 Max poss course total

(“x” = student’s total accumulated points)

$536 \leq x \leq 550$ A+ (unless a test is missed, or homework score is less than 50%).

$509 \leq x < 536$ A (unless a test is missed, or homework score is less than 50%)

$495 \leq x < 509$ A-

$481 \leq x < 495$ B+

$454 \leq x < 481$ B

$440 \leq x < 454$ B-

$426 \leq x < 440$ C+

$399 \leq x < 426$ C

$385 \leq x < 399$ C- *Note: a C- may not meet the prereq for some courses or requirements of some programs

$330 \leq x < 385$ D

$x < 330$ F

No “Incomplete” (I) grades will be given.