

Welcome to Math 1240

PRE-CALCULUS

INSTRUCTOR:

Precious Andrew
pandrew@unm.edu
Office: AS123



TUTORING/OFFICE HOURS:

I'm available via Zoom Tuesdays 3:30-5:30pm, or by appointment. Zoom hours will be facilitated using the link posted in Canvas.

COURSE DESCRIPTION:

We will expand our knowledge of functions and their graphs. We will analyze quadratic, polynomial, rational, exponential, and logarithmic functions in detail, including applications. We will further study functions in the context of rates of change, transformations, inverse functions, inequalities, and systems of two equations. We will introduce the conic sections and wrap up the course with an introduction to limits and the definition of the derivative. (3 Credit Hours).

PREREQUISITES:

C or better in Math 1220 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](https://canvas.unm.edu)

Here you will find course information and our textbook: *Pre-calculus Mathematics for Calculus*, 7th Edition, Stewart, Redlin, Watson.

THE GRADE YOU EARN WILL BE BASED ON THE FOLLOWING ASSIGNMENTS AND SCALE:

Two Exams (150 points each)	300 points
Final Exam	200 points
Worksheets & Assignments	200 points
Total	700 points

A+: 97-100%	A: 93-96%	A-: 90-92%
B+: 87-89%	B: 83-86%	B-: 80-82%
C+: 77-79%	C: 73-76%	C-: 70-72%
D+: 67-69%	D: 63-66%	D-: 60-62%
F: < 60%		



FOR THIS CLASS, YOU WILL NEED reliable internet access, access to a printer, a scanner or scanner app like AdobeScan or CamScanner, and a scientific 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 or quiz will be regarded as an absence.** Please communicate any special circumstances with me.

MECS DIVISION CHAIR:

Andrew Taylor

ataylor19@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, email tutor@unm.edu, call (505)228-8860, or visit the link to schedule an appointment –

[Pasos Resource Center: Tutoring Services](#)

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: <https://registrar.unm.edu/>

“You can totally do this!”

Here are some additional resources:

[UNM-Valencia Campus Library Home Page :: Valencia Campus | The University of New Mexico](#)

[Veteran & Military Resource Center | The University of New Mexico](#)

[Pasos Resource Center :: Valencia Campus | The University of New Mexico](#) (505) 925-8546.

The Resource Center is an on-campus center that serves as a “one-stop” for all non-academic needs of UNM-Valencia students.

[UNM IT Help Information](#): (505) 277-5757 for myUNM, NetID, and other IT needs.

Here are some of the student learning outcomes:

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

Course Goal 1: Communication

SLO 1: use correct mathematical notation and terminology.

SLO 2: read and interpret graphs.

Course Goal 2: Functions

SLO 1: evaluate functions and difference quotients for a variety of functions.

SLO 2: graph some basic functions; this includes power, root, reciprocal, and piecewise defined functions.

SLO 3: calculate an average rate of change of a function and to interpret its meaning.

SLO 4: shift, and reflect graphs, and to compress and stretch graphs horizontally and vertically.

SLO 5: set up models using functions in word problems.

SLO 6: find extreme values of quadratic functions.

SLO 7: compose functions and to express a given functions as a composition of two simpler functions.

SLO 8: identify one-to-one functions and find and graph their inverses.

Course Goal 3: Polynomial and Rational Functions

SLO 1: determine the end behavior and the zeros of polynomial functions. They will be able to use this to graph the function.

SLO 2: divide polynomials and to understand the Division Algorithm. Students will be able to solve quadratic equations with complex roots.

SLO 3: find horizontal, vertical, and skew asymptotes of rational functions. They will be able to graph rational functions.

Course goal 4: Exponential and Logarithmic Functions

SLO 1: graph exponential and logarithmic functions.

SLO 2: solve a variety of exponential and logarithmic equations.

SLO 3: set up exponential growth and decay models and to solve the associated word problems.

Course goal 5: Analytic Geometry

SLO 1: identify and graph the conic sections..

University Policies:

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 (Sarah Clawson, Coordinator), at (505) 925-8840 or by email at sjclawson@unm.edu. Also available is the Accessibility Resource Center at UNM-Albuquerque at arcsrvs@unm.edu or 505-277-3506.

UAP 2720 and 2740. Our classroom and university should foster mutual respect, kindness, and support. If you have concerns about discrimination, harassment, or violence, please seek [support](#) and [report](#) incidents. Find confidential services at [LoboRESPECT Advocacy Center](#), the [Women's Resource Center](#), and the [LGBTQ Resource Center](#). UNM prohibits discrimination on the basis of sex (including gender, sex stereotyping, gender expression, and gender identity). All instructors are "responsible employees" who must [communicate reports](#) of sexual harassment, sexual misconduct and sexual violence to [Compliance, Ethics and Equal Opportunity](#). For more information, please see [UAP 2720](#) and [UAP 2740](#).

Credit-hour statement: This is a three credit-hour course delivered in an entirely asynchronous online modality over 8 weeks during the Summer 2026 semester. Please plan for a minimum of 18 hours per week to learn course materials and complete assignments.



Schedule of Topics:

Week of	Topics	Textbook Practice Problems
June 1	2.1 What is a Function?	11,17-25 all, 27, 29, 31-41 all,47-61
	2.2/2.3 Graphs of Functions	2.2:17,19,25,35-41,49,53; 2.3:5, 7,9,11,15,31,43
	2.4 Average Rate of Change	5,7,11,13-20 all,23-31
	2.6 Transformations of Functions	5-13,23-29,33,39-43,55-65,75,83,95
June 8	2.7 Combining Functions	11-15,16,27-31,35-41,45,49,51,61-65,67
	2.8 One-to-One, Inverse Functions	13,15,21,31-35,43,45,49-57,61,63,85,95
	3.1 Quadratic Functions/Models	15-33,39-43,49,51-65
	3.2 Polynomial Functions/Graphs	5-9,13,18,25,27,28,29,33-39,43,51
June 15	3.3 Dividing Polynomials	3-19,47-67, (replace synthetic div. with long div.)
	Review	
	Exam 1 Wednesday, June 17th 4:00-5:30pm (This exam must be taken IN-PERSON, see details in Canvas)	
	3.6 Rational Functions	9,11,13,19,23,25,29,31-37,43,49,54,58,69-73
	Juneteenth Holiday, June 19th	
June 22	3.6 Rational Functions	9,11,13,19,23,25,29,31-37,43,49,54,58,69-73
	1.8 Inequalities	51,55-65,73-85
	4.1 Exponential Functions	21-30 all, 31-41,44
	4.2 Natural Exponential Function	9-15,24,25(a-c),33-37
June 29	4.3 Logarithmic Functions	9-19,27,29,33,53,55,63-77
	4.4 Laws of Logarithms	15-19,32,39,45,53,61
	4.5 Exp. /Log. Equations	15,21,35,39,45,61,65,67,89-97
	July 4th holiday (July 3rd)	
July 6	4.6 Modeling with Exponential Fun.	3-27
	11.2 Ellipses	5-13,23-27,33,39,51-55
	11.3 Hyperbolas	3-7,11,15,17,23,25,37-39
	Review	
	Exam 2 Friday, July 10th 4:00-5:30pm (This exam must be taken IN-PERSON, see details in Canvas)	
July 13	10.8 Systems of Nonlinear Equations	3,9,15,17,21,23,27,31,45
	13.1 Limits: Numerically/Graphically	5-9, 17-19, 29,31
	13.2 Limits: Algebraically	5-30 all,33,43,35,37,39,41,43
	13.4 Limits at Infinity	5-15,19-21 (table only) 23-27,31,33
July 20	13.3 Tangent Lines and Derivatives	11-17, 21,23,25,39,41,43,45
	Review	
July 27	Final Exam Monday, July 27th, 4:00-5:30pm (This exam must be taken IN-PERSON, see details in Canvas)	