Welcome to Math 1220

COLLEGE ALGEBRA

INSTRUCTOR:

Precious Andrew
pandrew@unm.edu
Office: AS123

TUTORING/OFFICE HOURS:

Tuesdays 12:30-1:30pm and Tuesdays and Thursdays 4:15-5:45pm, or by appointment.

OFFICE: Arts and sciences 123 (A123). Zoom hours will be facilitated using the link posted in Canvas. I am typically in my office during these hours, and can also facilitate virtual meetings.

COURSE DESCRIPTION:

The study of equations, functions and graphs, reviewing linear and quadratic functions, and concentrating on polynomial, rational, exponential and logarithmic functions. Emphasizes algebraic problem-solving skills and graphical representation of functions. (3 Credit Hours).

PREREQUISITES:

C or better in MATH 1215X and 1215Y and 1215Z or MATH 1170 + MATH 1215Z or MATH 1215 or an appropriate placement test.

START BY EXPLORING OUR COURSE AT CANVAS.UNM.EDU

Here you will find course information and the link to our textbook: Openstax *College Algebra*, 2nd edition, Abramson. ISBN 9781711494029. https://openstax.org/details/books/college-algebra-2e.

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

Midterm Exam	**22.5%**
Final Exam	**27.5%**
Assignments & Reviews	**40%**
Poster Project	**10%**
Total	**100%**

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 so we can discuss a plan to support your success.

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, as absences for professional events, religious or cultural holidays, athletics competitions, etc. can sometimes be excused with an alternative plan. Let's talk!

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.



"You can totally do this!"

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 – 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/

AI Policy: Using generative AI to complete submitted coursework in this course will interfere with the advantages in learning and understanding that this course offers you. You are expected to complete submitted work without any generative AI assistance. The assignments in this course are aligned with specific learning processes and outcomes that support your future learning and expertise. Submitting AI-generated work in this course is inconsistent with course expectations and may violate UNM's academic integrity standards and Student Code of Conduct. If AI use is suspected, I will use submitted coursework, conversations with you about your work and process, and this syllabus to determine whether academic misconduct occurred. If you are unsure if a tool or use is allowed, please ask before submitting the assignment.

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.

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. Communication is key. Please let me know early in the semester how I can best support your success in the course.

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. Class meets for two 75-minute sessions for sixteen weeks during the Fall 2026 semester. Please plan for a minimum of 6 hours of out-of-class work each week.

Here are the student learning outcomes and essential skills:

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

1. Use function notation; perform function arithmetic, including composition; find inverse functions.

2. Identify functions and their transformations given in algebraic, graphical, numerical, and verbal representations, and explain the connections between these representations.

3. Graph and interpret key feature of functions, e.g., intercepts, leading term, end behavior, asymptotes.

4. Solve equations algebraically to answer questions about graphs and use graphs to estimate solutions to equations.

5. Solve contextual problems by identifying the appropriate type of function given the context and creating a formula based on the information given.

6. Communicate mathematical information using proper notation and verbal explanations.

The New Mexico Higher Education Department (HED) defines the following three essential skills for general education mathematics courses. The unit assignments and assessments, including worksheets, exams, and the poster presentation, are designed to allow students the opportunity to demonstrate developing skills in these areas, as well as to demonstrate mastery of the student learning outcomes described above.

1. Communication
    a. Genre and Medium Awareness, Application, and Versatility: Identify and communicate in various genres and mediums (oral, written, and digital) using strategies appropriate for the rhetorical situations (i.e., attending to audience, purpose, and context).
    b. Strategies for Understanding and Evaluating Messages: Apply strategies such as reading for main points; seeking key arguments, counterarguments, rebuttals; locating supportive documentation for arguments; reading with a specific stakeholder lens; applying a theoretical lens (e.g. cultural, political, economic) to understand and evaluate messages in terms of the rhetorical situation (audience, purpose, and context).
    c. Evaluation and Production of Arguments: Evaluate the authority of sources in their own arguments and those of others; distinguish among supported claims, unsupported claims, facts, inferences, and opinions.

2. Quantitative Reasoning

    a. Communication/Representation of Quantitative Information: Express quantitative information symbolically, graphically, and in written or oral language.
    b. Analysis of Quantitative Arguments: Interpret, analyze and critique information or a line of reasoning presented by others.
    c. Application of Quantitative Models: Apply appropriate quantitative models to real world or other contextual problems.

3. Critical Thinking

    a. Problem Setting: Delineate a problem or question. Students state problem/question appropriate to the context.
    b. Evidence Acquisition: Identify and gather the information/data necessary to address the problem or question.
    c. Evidence Evaluation: Evaluate evidence/data for credibility (e.g. bias, reliability, and validity), probable truth, and relevance to a situation.
    d. Reasoning/Conclusion: Develop conclusions, solutions, and outcomes that reflect an informed, well-reasoned evaluation.

Schedule of Topics:

Week of	Topics	Textbook Reference Section
Aug 17	Functions	3.1/3.2
Aug 24	Graphs of Functions	3.2/3.3
	Properties of Functions	3.2/3.3
Aug 31	Library of Functions and Piecewise	3.1
	Transformations	3.5
Sep 7	Linear Functions	4.1/4.2
	Quadratic Functions (zeros)	5.1
Sep 14	Quadratic Functions (properties)	5.1
	Quadratic Functions (models)	5.1
Sep 21	Absolute Value	3.6
	Polynomials	5.3/5.5
Sep 28	Review	
	Midterm Exam Thursday, Oct 1st	
Oct 5	Rational Functions	5.6
	Fall Break	
Oct 12	Rational Functions Continued	5.6
	Graphing Rational Functions	5.6
Oct 19	Compositions	3.4
	Inverses	3.7
Oct 26	Exponential Functions	6.1/6.2
	Logarithms	6.3/6.4
Nov 2	Properties of Logarithms	6.5
Nov 9	Logarithmic and Exponential Equations	6.6
	Exponential Growth Models (financial)	6.7
Nov 16	Exponential Growth and Decay Models (other)	6.7
	Systems of Linear Equations	7.1
Nov 23	Systems of Linear Equations	7.1
	Thanksgiving Break	
Nov 30	**Poster Project due November 30th**	
	Review	
Dec 7	**Final Exam Thursday, December 10th, 1:30-3:30pm**	