

Math 1220 Intermediate Algebra (DUAL CREDIT) Spring 2024



Instructor: Precious Andrew

Email me with any questions at: pandrew@unm.edu

Course information, video lessons, and assignments can be found on Canvas.unm.edu.

The course format is simple! You are responsible for the 3 items below:

1 - You will submit written worksheets about once per week.

You need to print out these assignments posted on Canvas.unm.edu and fill them in. Once you finish each packet, create a pdf file of your work using an app like AdobeScan/Camscanner or a scanner. Upload your completed written assignments on Canvas.unm.edu before their due dates.

These must be organized and labeled, all work and steps must be shown, and must be presented consecutively, clearly, and legibly. I will be grading the written work for the correct answer, all steps, and for neatness and legibility.

Due dates are shown on Canvas.unm.edu

2. You will take a midterm and a cumulative final exam. You will need to come to UNM-Valencia Campus (280 La Entrada Rd, Los Lunas, NM 87031) to take these exams in person. You may use only a scientific (non-graphing) calculator. Bring your own.

Midterm Exam Thursday, February 29th, 5:00pm-7:00pm in-person at UNM-Valencia Campus (280 La Entrada Rd, Los Lunas, NM 87031) in room Arts & Sciences 101.

Final Exam Thursday, May 2nd, 5:00pm-7:00pm in-person at UNM-Valencia Campus (280 La Entrada Rd, Los Lunas, NM 87031) in room Arts & Sciences 101.

3. Your high school teacher will assign you a grade for additional assignments they ask you to complete, attendance, etc. This grade is worth 15% of your overall score in this college course. Discuss the requirements for earning these points with your high school teacher.

For more detailed information, read on.

Office Hours/Study Sessions (feel free to stop by and work with me!): Tuesdays and Thursdays 4:15-5:15pm and Tuesdays 1:00-3:00pm in-person at Valencia Campus, Room Arts and Sciences 123 (A123). I'm also available via Zoom during these times, or by appointment.

Free in-person or online tutoring is also available: 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 online appointment –

<https://outlook.office365.com/owa/calendar/TESTLearningCommons@unmm.onmicrosoft.com/bookings/>

Late work is generally not accepted. Contact me asap at pandrew@unm.edu with any issues, that way we can try to resolve the problem if there are special circumstances.

Calculator: You may use scientific (non-graphing) calculator for exams.

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.

MECS Division Chair: Ariel Ramirez, aramirez8@unm.edu

Textbook: Openstax [College Algebra](https://openstax.org/r/college-algebra), 2nd edition, Abramson. ISBN 9781711494029.

Pre/Corequisites: Grade of C or higher in MATH 1215X and 1215Y and 1215Z or MATH 1170 + MATH 1215Z or MATH 1215, or minimum ACCUPLACER score of ≥ 239 (A&F) or math ACT score of ≥ 22 , or math SAT score of ≥ 540 . Meets University of New Mexico Core Curriculum Area 2: Mathematics and Statistics. Check with your advisor to make sure you meet the requirements.

How Grades Are Determined:

Depending on the grading option you have chosen, your final course letter grade will be determined as shown:

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%

Grades: Your grade will be based on the following allocation of points.

Worksheets and Exam Reviews	40%
Grade Assigned by HS Teacher for Additional Assignments	15%
Midterm Exam	20%
Final Exam	25%
Total	100%

Student Learning Outcomes

Students will build on their knowledge of polynomial, rational, absolute value, radical, exponential and logarithm functions in the following contexts:

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.

Other Requirements:

- Reliable access to a computer or tablet, and Internet. A computer (laptop or desktop) is recommended. Preferred browsers are Chrome, Firefox, or Safari. The preferred operating systems are Windows or Apple.
- Access to UNM Canvas requires use your UNM NetID. You may access it directly via Canvas.unm.edu
- Basic scientific calculator. It cannot be an app on your cell phone.
- A scanner or scanner app like AdobeScan or CamScanner to create pdf files of your work.
- Adobe Reader (a free download), preferably version 11.0 or better.

Here are some of the reasons you may be dropped from the class:

- If you miss the first assignment of the semester.
- If you miss more than 3 assignments throughout the semester.
- If you miss an exam.

Time for This Course: Plan to spend a minimum of 9 to 12 hours per week for this class. There is no guarantee you will pass if you dedicate this amount of time, you still need to learn the material and use your time wisely, but those who pass generally are the ones who spend the time needed to do the work to learn the material.

Exams and Final:

There will be a written midterm and final exam during the semester that you will take in-person at UNM-Valencia Campus. These exams are worth 45% of your overall course grade. You can use a **scientific (non-graphing)** calculator. You can NOT use your phone for a calculator. You are allowed to take the exams and final only once.

Even if your final answer to a problem is correct, **if there is no work or explanation to support your solution you will NOT receive credit for that question.**

Support: If you are struggling in this course, do not be afraid to ask for help! Here are some options:

- Office Hours: my office hours listed at the beginning of this syllabus. Feel free to come by my office hours or make an appointment to get help.
- Study Groups: You may work together with other members of the class. However, if there is an assignment that is to be submitted individually, that assignment should be your work, not copies from your group.
- Free Tutoring: The Math Center at Valencia campus has free tutoring available online to help with your course content questions as well as question about using tools. Call (505)925-8907 or send an email to tutor@unm.edu to schedule an appointment.
- Student Services: There are various services provided in our Student Services Department. See below about equal access. Also, we have a testing center, advising, and career placement available: [Valencia Student Services](#)

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.

UNM-Valencia Equal Access Services, at (505) 925-8910 and/or Accessibility Resource Center (<https://arc.unm.edu/>) at arcsrvs@unm.edu (505) 277-3506.

Extra Help and Resources: In addition to your instructor's office hours, there is extra help available at:

- The Learning Center - <https://valencia.unm.edu/campus-resources/the-learning-center/index.html>
- UNM Valencia Library - <http://valencia.unm.edu/library/>
- "Life Resources" - <http://valencia.unm.edu/students/student-resources.html>
- Veteran's Resource Center - vrc@unm.edu
- PASOS Resource Center (505) 925-8546, <mailto: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.
- Student Health and Counseling (SHAC) at (505) 277-3136. If you are having active respiratory symptoms (e.g., fever, cough, sore throat, etc.) AND need testing for COVID-19; OR If you recently tested positive and may need oral treatment, call SHAC.
- LoboRESPECT Advocacy Center (505) 277-2911 can offer help with contacting faculty and managing challenges that impact your UNM experience.

Academic Integrity: Having academic integrity is paramount to your success in any class. Plagiarism or cheating is not tolerated. Any instance of this will result in a grade of zero for that assignment. Here is the link to the UNM Academic Dishonesty Policy: <https://policy.unm.edu/regents-policies/section-4/4-8.html>. The policy states:

Each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, up to and including dismissal, against any student who is found guilty of academic dishonesty or who otherwise fails to meet the expected standards. Any student judged to have engaged in academic dishonesty in course work may receive a reduced or failing grade for the work in question and/or for the course.

Academic Dishonesty is defined as:

"Academic dishonesty" includes, but is not limited to, dishonesty in quizzes, tests, or assignments; claiming credit for work not done or done by others; hindering the academic work of other students; misrepresenting academic or professional qualifications within or without the University; and nondisclosure or misrepresentation in filling out applications or other University records.

Title IX Reporting Obligations: 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>.

COVID-19 Health and Awareness: UNM is a mask friendly, but not a mask required, community. To be registered or employed at UNM, Students, faculty, and staff must all meet UNM's Administrative Mandate on Required COVID-19 vaccination. If you are experiencing COVID-19 symptoms, please do not come to class. If you have a positive COVID-19 test, please stay home for five days and isolate yourself from others, per the Centers for Disease Control (CDC) guidelines. If you do need to stay home, please communicate with me; I can work with you to provide alternatives for course participation and completion. UNM faculty and staff know that these are challenging times. Please let me, an advisor, or another UNM staff member know that you need support so that we can connect you to the right resources. Please be aware that UNM will publish information on websites and email about any changes to our public health status and community response

For military-connected students: There are resources on campus designed to help you succeed. You can approach any faculty or staff for help with any issues you may encounter. Many faculty and staff have completed the GREEN ZONE training to learn about the unique challenges facing military-connected students. If you feel that you need help beyond what faculty and/or staff can give you, please reach out to the Veterans Resource Center on main campus at 505-277-3181, or by email at vrc@unm.edu. The Veterans Coordinator at UNM-Valencia is in the Student Services Office, at 505-925-8560.

Schedule of Topics:

Note: The instructor for this class reserves the right to change the syllabus at any point during the semester.

Week of	Topics	Reference Sections in Textbook
Jan 15	Functions	3.1/3.2
Jan 22	Graphs of Functions Properties of Functions	3.2/3.3 3.2/3.3
Jan 29	Library of Functions Transformations	3.1 3.5
Feb 5	Linear Functions Quadratic Functions (zeros)	4.1/4.2 5.1
Feb 12	Quadratic Functions (properties) Quadratic Functions (models)	5.1 5.1
Feb 19	Absolute Value Polynomials	3.6 5.3/5.5
Feb 26	Review Midterm Exam Thursday, February 29th, 5:00pm-7:00pm	
March 4	Rational Functions Graphing Rational Functions	5.6 5.6
March 11	Spring Break	
March 18	Graphing Rational Functions Compositions	5.6 3.4
March 25	Inverses Exponential Functions	3.7 6.1/6.2
April 1	Logarithms Properties of Logarithms	6.3/6.4 6.5
April 8	Properties of Logarithms Logarithmic and Exponential Equations	6.5 6.6
April 15	Exponential Growth Models (financial) Exponential Growth and Decay Models (other)	6.7 6.7
April 22	Systems of Linear Equations Review	7.1
April 29	Review Final Exam Thursday, May 2nd, 5:00pm-7:00pm	