UNM Valencia
MATH 1215-554, Intermediate Algebra
Fall 2023

Instructor: Michael Gonzales
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Office Location: Tome Campus LRC 107
Tutoring Hours: Tuesdays: 1225-1325, Wednesdays: 1345-1445 (Workforce Training Center), Thursdays: 1245-1315, 1500-1530, Fridays: 1330-1630 on Zoom (Office Hour Link)
MECS Division Chair: Ariel Ramirez (aramirez8@unm.edu)

Textbook: *Developmental Mathematics*, 2nd edition, by Sullivan, Struve, Mazzarella.

Course description: This course is a study of linear and quadratics functions, an introduction to polynomial, absolute value, rational, radical, exponential, and logarithmic functions. Development of strategies for solving single variable equations and contextual problems. (3 Credit Hours).

Prerequisites: Appropriate placement score or a grade of C or better in Math 100 or Math 022 or FYEX 1010 or ISM 100 or ACT Math $\geq$ 18 or SAT Math Section $\geq$ 490 or ACCUPLACER Next-Generation Advanced Algebra and Functions $\geq$ 228, or QRAS $\geq$ 248, or Arithmetic $\geq$ 285. Check with your adviser to make sure you meet the requirements.

Course Outcomes: In this course, we will explore linear functions, systems of linear equations, linear inequalities, polynomials and factoring, rational functions, and radical functions, and we will introduce exponential and logarithmic functions. A complete list of the Student Learning Objectives for this course is given at the end of this syllabus.

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 Learn requires use your UNM NetID to log into UNM Learn. You may access it directly via `https://canvas.unm.edu/`
- Standard or Scientific calculator. It cannot be an app on your cell phone.
- Adobe Reader (a free download), preferably version 11.0 or better.

Attendance/Participation (5%): You are expected to be on time for each class, stay the entire class, have the necessary course materials on hand, and participate in the lecture or group activities to receive full credit for attendance each day. Points will be deducted for unexcused absences and unexcused tardiness.

- **Absences:** If you know ahead of time you will miss class, send me an email with the date of the absence to receive and excused absence. Arrange before the next class to get notes from a classmate. The student is responsible for the material and information covered in class.

High School Assignments Homework (15%): Homework and assignments from high school will be contributing to this portion of the grade for the class.

Written Homework(20%): Problems assigned can be found in the Modules section of our Canvas page. These written assignments must be completed and turned in by the due date listed on the

schedule for full credit. Each written homework assignment is worth 10 points. A 20% penalty will be incurred if your homework is more than one day late. To submit an assignment more than a day late, please contact me so I can open the assignment for you in Canvas. No assignment will be accepted more than one week after the due date.

Projects (20%): During the semester, projects will be assigned in each unit. You are encouraged to work with classmates on the project assignments. If working with a group, I require individual submissions of the project, not one group paper. The point value for each project is provided with the assignment. These project assignments must be completed and turned in by the due date listed on the schedule for full credit. A 20% penalty will be incurred if your homework is more than one day late. To submit an assignment more than a day late, please contact me so I can open the assignment for you in Canvas. No assignment will be accepted more than one week after the due date.

Exams (20%): There will be two written exams during the semester. These will correspond to the final exams for Math 1215X and Math 1215Y, respectively. Each exam is work 100 points. If you are ill or an unexpected event happens preventing you from taking the exam, you have one week to make it up.

Final Exam (20%): The final is a departmental exam that will test all, or nearly all, of the learning objectives for this course. The final exam must be taken during the week scheduled. You are allowed to take the final only once.

Grading: Course Averages: Attendance/Participation 5%, High School Assignments Homework 15%, Written Homework 20%, Projects (13) 20%, Term Exam (2) 20%, Cumulative Final Exam* 20%. Total: 100%

Grading Scale:

Letter Grade	Final Exam Score AND Course Weighted Average
A	70% or better **AND** 90% or better
B	70% or better **AND** 80% to 89%
C	70% or better **AND** 70% to 79%
CR	70% or better **AND** 70% or better
NC	Less than 70% **AND** any course grade

In the case where a student is unsuccessful in the course, if a grade is required for financial aid, please inform the professor.

Expectations:

- Students are expected to conduct themselves in a polite, courteous, professional, and collegial manner. When participating in discussions or interacting with me or other students be respectful at all times.

Support:

- Tutoring Hours: See my tutoring hours listed at the beginning of this syllabus. Feel free to come by or log in for online office hours or make an appointment to get help.
- Form study groups: You may work together with other members of our class.
- Resources to support study skill and time management are available through UNM-Valencia Learning Commons (Tutoring). Tutoring is available to you in math, science, writing, and other subjects through the Learning Commons: Learning and STEM Centers and Writing Center. In person tutoring is in these centers in the LRC (the building that also has the library). Tutoring in Zoom and, for writing, through email, is also available.

Making use of tutoring is a fantastic way to use your resources and set yourself up to learn deeply and well in your courses. To schedule an appointment, please go to: Learning Commons Bookings

If you are making an email appointment with the Writing Center, email your draft to tutor@unm.edu after you fill out the form above.

If you have difficulty with the scheduling link above, would like an appointment in a subject not listed at that link, or have a question, email tutor@unm.edu. You'll get answers during business hours Monday through Friday. The webpage, with more details about available hours, is here: Learning Commons: Tutoring Services webpage. Center for Academic Program Support (CAPS). Many students have found that time management workshops can help them meet their goals (consult (CAPS) website under "services").

- 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
- Many students have found that time management workshops or work with peer tutors can help them meet their goals. These and are other resources are available through PASOS (Pathways to Articulation and Sustainable Opportunities for Students), TRIO Student Support Services, and Student Learning Support at the Center for Teaching and Learning.

Instructor Response Time: I routinely check the course for postings or emails, Monday (9 am) – Friday (5 pm), and sometimes on the weekend. You can anticipate a 24 to 48-hour response from me, Monday – Thursday. I will try and respond to all weekend (Friday afternoon to Sunday) emails and postings by noon on Monday or earlier. I prefer all communication through email or Canvas Learn.

Other Important Information:

Equal Access: In accordance with University Policy 2310 and the Americans with Disabilities Act (ADA), academic accommodations may be made for any student who notifies the instructor of the need for an accommodation. It is imperative that you take the initiative to bring such needs to the instructor's attention, as I am not legally permitted to inquire. Students who may require assistance in emergency evacuations should contact the instructor as to the most appropriate procedures to follow. Contact Accessibility Resource Center at 277-3506 for additional information.

If you need an accommodation based on how course requirement interacts with the impact of a disability, you should contact me to arrange an appointment as soon as possible. At the appointment, we can discuss the course format and requirements, anticipate the need for adjustments and explore potential accommodations. I rely on the Disability Services Office for assistance in developing strategies and verifying accommodation needs. If you have not previously contacted them, I encourage you to do so.

If you are a Valencia campus student, contact Equal Access Services at Valencia Campus, Cheryl Dilger at (505) 925-8910 or Valencia Student Services. If you are a main campus student, you can receive documentation from the main campus Accessibility Resource Center. I will not guarantee accommodation without the appropriate documentation.

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 Statement: To meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered "responsible employees." This designation requires that any report of gender discrimination, which includes sexual harassment, sexual misconduct and sexual violence, made to a faculty member, TA, or GA must be reported to the Title IX Coordinator at the Office Compliance, Ethics and Equal Opportunity (ceeo.unm.edu). For more information on the campus policy regarding sexual misconduct and reporting, see: https://policy.unm.edu/university-policies/2000/2740.html.

- Support: LoboRESPECT Advocacy Center, the Women's Resource Center, and the LGBTQ Resource Center all offer confidential services.

Respectful and Responsible Learning: We all have shared responsibility for ensuring that learning occurs safely, honestly, and equitably. Submitting material as your own work that has been generated on a website, in a publication, by an artificial intelligence algorithm, by another person, or by breaking the rules of an assignment constitutes academic dishonesty. It is a student code of conduct violation that can lead to a disciplinary procedure. Please ask me for help in finding the resources you need to be successful in this course. I can help you use study resources responsibly and effectively. Off-campus paper writing services, problem-checkers and services, websites, and AIs can be incorrect or misleading. Learning the course material depends on completing and submitting your own work. UNM preserves and protects the integrity of the academic community through multiple policies including policies on student grievances (Faculty Handbook D175 and D176), academic dishonesty (FH D100), and respectful campus (FH CO9). These are in the Student Pathfinder (https://pathfinder.unm.edu) and the Faculty Handbook (https://handbook.unm.edu).

- Support: Many students have found that time management workshops or work with peer tutors can help them meet their goals. These and are other resources are available through PASOS (Pathways to Articulation and Sustainable Opportunities for Students), TRIO Student Support Services, and Student Learning Support at the Center for Teaching and Learning.

COVID-19 Health and Awareness: COVID-19 Health and Awareness. UNM is a mask friendly, but not a mask required, community. If you are experiencing COVID-19 symptoms, please do not come to class. If you do need to stay home, please communicate with me; I can work with you to provide alternatives for course participation and completion. 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
Support:

- PASOS Resource Center (505) 925-8546, pasps@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

Accomodations: 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 Accessibility Resource Center at arcsrvs@unm.edu or by phone at 505-277-3506. The UNM-Valencia Equal Access Services (Sarah Clawson, Coordinator), at (505) 925-8840 or by email at sjclawson@unm.edu.

- Support: Contact me at my email or in office/check-in hours. The UNM-Valencia Equal Access Services (Sarah Clawson, Coordinator), at (505) 925-8840 or by email at sjclawson@unm.edu., Or Accessibility Resource Center (https://arc.unm.edu) at arcsrvs@unm.edu or (505) 277-3506.

Citizenship and/or Immigration Status: All students are welcome in this class regardless of citizenship, residency, or immigration status. Your professor will respect your privacy if you choose to disclose your status. As for all students in the class, family emergency-related absences are normally excused with reasonable notice to the professor, as noted in the attendance guidelines above. UNM as an institution has made a core commitment to the success of all our students, including members of our undocumented community. The Administration's welcome is found on our website: https://undocumented.unm.edu.

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 https://vrc@unm.edu. The Veterans Coordinator at UNM-Valencia is in the Student Services Office, at 505-925-8560.

Land Acknowledgement: Founded in 1889, the University of New Mexico sits on the traditional homelands of the Pueblo of Sandia. The original peoples of New Mexico Pueblo, Navajo, and Apache since time immemorial, have deep connections to the land and have made significant contributions to the broader community statewide. We honor the land itself and those who remain stewards of this land throughout the generations and also acknowledge our committed relationship to Indigenous peoples. We gratefully recognize our history.

Semester Dates and Deadlines:

- Spring 2023– 16-week classes (deadlines will be different for first and second 8-week classes)
- Tuesday, January 17: First day of class, classes available in Canvas
- Monday, January 16: Martin Luther King Day, no class
- Friday, January 27, by 5:00 pm: Last day to add a class or to change credit hours or grade mode in LoboWEB.
- Friday, February 3: Last day to drop without "W" grade and with 100% refund on LoboWEB
- Friday, April 14 : Last day to drop without Student Services' permission on LoboWEB. Will receive "W" grade and will be responsible for tuition for the course.
- Friday, May 5: Last day to drop with the permission form.
- Finals Week: Monday, May 8 – Saturday, May 13

MATH 1215 Course Student Learning Outcomes: Upon successful completion of the course, students will be able to:

1. Demonstrate appropriate use of basic function language and notation.
    a. Communicate or present mathematical concepts using correct mathematical notation and terminology

   b. Correctly use function notation and vocabulary related to functions.
   c. Determine function values for given domain values and determine domain values for given function values.
   d. Determine domains for specific functions.
2. Convert between equivalent forms of algebraic expressions.
   a. Simplify expressions using properties of exponents.
   b. Add, subtract, and multiply polynomials.
   c. Rewrite line equations in different forms (slope-intercept, point-slope, standard)
   d. Factor some types of polynomials.
   e. Simplify radical expressions
   f. Simplify rational expressions.
   g. Rewrite exponential functions in logarithmic form and vice versa.
3. Solve single-variable equations of the types listed above.
   a. Solve for a single variable in a proportion.
   b. Solve for a single variable in a linear equation.
   c. Solve for a specified variable in a formula.
   d. Solve quadratic equations using factoring, quadratic formula, and the square root method.
   e. Solve equations containing rational expressions.
   f. Solve equations containing radical expressions.
   g. Solve absolute value equations in one variable.
   h. Solve exponential and logarithmic equations using equating bases.
4. Interpret and communicate algebraic solutions graphically and numerically.
   a. Determine equations for lines in the three forms – slope-intercept and point-slope.
   b. Sketch the graphs of linear functions.
   c. Interpret slope in relation to variable coefficients and as a rate of change.
   d. Graph linear inequalities in one variable on a number line and write corresponding interval notation.
   e. Determine when linear equations represent parallel and perpendicular lines.
   f. Sketch graphs of quadratic functions.
5. Demonstrate contextual problem-solving skills that include setting up and solving problems and interpreting solutions in context.
   a. Determine linear equations from application problems and solve.
   b. Set up a linear proportion from an application problem and solve.
   c. Analyze solutions to application problems and give them contextual meaning.
   d. Determine the three types of outcomes from a system of linear equations in the context of what the graphs look like (terminology about consistent/inconsistent or dependent/independent not emphasized).
   e. 5. Determine a system of linear equations from an application problem and solve if possible.
6. Apply appropriate problem-solving methods from among algebraic, graphical, and numerical.
   a. Perform unit conversions.
   b. Solve linear inequalities in one variable.
   c. Simplify expressions written in scientific notation.
   d. Simplify multiplication and division problems using scientific notation.
   e. Apply solution methods learned to application problems.
   g. Solve systems of two linear equations graphically and algebraically.
   h. Solve problems including percent.
   i. Perform operations with radical expressions.
   j. Perform operations with rational expressions.
   k. Solve absolute value inequalities in one variable.

Tentative Schedule

Week	Dates	Sections/Topics
1	08/21-08/27	Unit 1: 8.3 and 8.4
2	08/28-09/03	Unit 2: Sects. 8.8 and 8.6
3	09/04-09/10	Unit 3: Sects. 9.1, 9.2, 9.3,9.4,9.5
4	09/11-09/17	Unit 4: Sects. 9.6, 10.1
5	09/18-09/24	Unit 5: Sects. 10.2, 10.3,
6	09/25-10/01	**Midterm 1**
7	10/02-10/08	Unit 6: Sects. 11.1, 11.2, 11.3,11.4,11.6
8	10/09-10/17	Unit 7: Sects. 12.1, 12.2, 12.3
9	10/16-10/22	Unit 8: Sects. 14.1, 14.2, 14.3,14.4
10	10/23-10/29	Unit 9: Sects. 15.1, 12.6 16.2, 16.5
11	10/30-11/05	**Midterm 2**
12	11/06-11/12	Unit 10: Sects. 13.1, 13.2, 13.3
13	11/13-11/19	Unit 11: Sects. 13.5,13.7,14.7
14	11/20-11/26	Unit 12: Sects. 15.2, 15.3, 15.4, 15.8
15	11/27-12/03	Unit 13: Sects. 17.2, 17.3
16	12/04-12/10	Final Review
	12/11-12/17	Final Exams Week