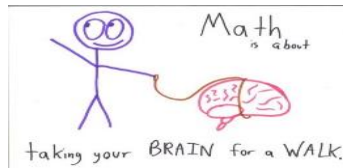




VALENCIA Welcome to MATH 1215X.504: Intermediate Algebra –
Fall 2023 (Lecture Class)



Instructor

Cindi Goodman
cyndia@unm.edu
Office: LRC 109 and Zoom
(scheduled times)

Class Details:

VCTC Room 108
CRN 51128
MML through RedShelf in Canvas

Instructor led study sessions:

Mon/Wed-- in person
9:00-10:00 am
2:00-3:30 pm
Mon--online
2:00-3:30 pm
or by appointment

Zoom link:

<https://unm.zoom.us/j/97116951508>
Password: mathhelp

MECS Division Chair:

Ariel Ramirez
aramirez8@unm.edu

Course Description:

Math 1215 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. This course is part 1 of Math 1215 (1 Credit Hour).

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 =>18 or SAT Math Section =>490 or ACCUPLACER Next-Generation Advanced Algebra and Functions =>228, or QRAS=>248, or Arithmetic=>285, or LCPMAS score 4-5. 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.

Credit-hour Statement:

This is a one credit-hour course delivered in an entirely face-to face modality over the first 8 weeks of the Spring 2024 semester. Please plan for a *minimum* of 9 hours per week to learn course materials and complete assignments.

Course Materials:

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

Required: You will access the E-text and online homework assignments through Redshelf in Canvas.

Optional: You may "upgrade" your access by purchasing a hard copy of the book directly from Pearson for an additional cost (between \$50 and \$60 before tax). There will be copies of the book on reserve for use in the tutoring center (you will not be able to take the book home).

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.
- Administrative rights to download free software or plug-ins or add-ons on the computer you plan to use for this course. The first time you log in to the MyMathLab (MML) homepage, run the Installation Wizard to ensure you have all the appropriate software installed. Also, make sure you are allowing popups.
- Access to UNM Canvas requires you to use your UNM NetID to log into UNM Canvas. You may access it directly via 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.

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.
- Students are expected to complete all online unit assignments by 5:00 pm Tuesday of each week. Problems with the internet, Canvas, or MML are not excuses for turning in late work, as you have an entire week to complete the assignments.
- **Time for This Course:** Plan to spend a *minimum* of 6 to 9 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.

Attendance / Participation (10%)

- You are expected to attend the daily class meetings. You will receive 10 points towards your attendance grade for each day.
- The expectation in this class is that you arrive on time and stay the entire class.
- You are expected to participate each week in learning the material covered.
- Please let me know if you will not be in class and make arrangements with me or a classmate to get the information you miss. That is your responsibility!

Absences: There are no excused absences. You can miss two classes with no penalty, I do not need a reason. Here are the reasons I may drop you from the class:

- If you miss the first week of the semester.
- If you are not registered in MML and completing assignments by the end of the first week you are in the class.

If you added late, your counted absences start the day you registered for the class.

Online MyMathLab Homework (15%)

Homework is assigned every week based on the 5 units in the course outline. Weekly assignments in MML must be completed by 5:00 pm Tuesday of each week for full credit. The online homework cannot be made up! **Each online homework assignment is worth 10 points.**

DO NOT consider any of the grades posted in MyMathLab as representing your actual grade.

Written Homework (20%)

Each unit will have a separate written homework due when the online homework is due. Problems assigned are listed on the schedule at the end of the syllabus and the problems will be found in the e-text in MML. These written assignments must be completed and turned in by the due date on Wednesdays at the beginning of class. **Each written homework assignment is worth 10 points.**

Team Project (20%)

There will be a team project due the last week of class. This project is made up of parts related to each of the units covered in the course. You will have some time in class to work on the project, but you will be expected to work with your team outside of class as well to complete the project. You are expected to contribute and collaborate with your team members on the project so that everyone does an equal amount of work. You will complete a survey at the end of the semester assigning yourself and your team members a grade for collaboration and contribution to the project work. More information will be given when the project is assigned.

Late Policy:

All online work is to be submitted by 5:00 pm Tuesday of the week due. All written homework must be turned in by the beginning of class on the Wednesday of the week they are due. I will accept written work up to one week late, 10% will be deducted for work turned in after the due date. MML online homework will not be accepted late. **No work will be accepted more than a week past the day it is due.**

- You are encouraged to do corrections on written homework to improve your score. You can only do corrections once on an assignment, and only if it was submitted on time. **Corrections must be submitted no more than two weeks past the original due date.**

Final Exam (35%)

The final is a departmental exam that will test all, or nearly all, of the learning objectives for this course. You will be given a formula sheet for the final exam, and you can use a scientific calculator (not a graphing calculator). You can NOT use your phone for a calculator. You **cannot** do corrections on the final exam. You are allowed to take the final only once.

You must score a 70% or better on the Final Exam to earn a passing grade in this class. You must also have a 70% course average to earn a passing grade, but this should not be a problem if you have been completing your work and showing progress.

SUPPORT: If you are struggling in this course, do not be afraid to ask for help!

- Ask My Instructor: Please use the Ask My Instructor button in MyMathLab. This button is available in the computational assignments and the quizzes and sends a message to my email with a link to the question. Do not just send the link; tell me where in the problem you are struggling.
- Office Hours: See my Instructor led study sessions 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.
- Free Tutoring: The Math Center at Valencia campus has free tutoring and open labs. Call 505-925-8907 for more information. The tutoring center is open 8 am – 5 pm Monday through Friday. Late nights until 7 pm on Wednesdays and Thursdays.
- 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](#)
- Work will be graded and returned with feedback within one week of submission. You are encouraged to do corrections and resubmit any written homework or project assignments to improve your grade up to one week after it is returned.

Instructor Response Time

I routinely check the course for postings or emails, Monday (7 am) – Friday (noon), 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 UNM Canvas or UNM email.

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.



Course Averages:

Attendance / Class Participation	10%
MyMathLab online Homework	15%
Written Homework	20%
Project	20%
Cumulative Final Exam*	<u>35%</u>
Total	100%

***You must score at least a 70% on the final exam and have a course average of 70% or better to earn a passing grade in the course.**

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.

Semester Deadlines Spring 2024– first eight-week classes

- Monday, January 15: First day of class, classes available in UNM Canvas
- Monday, January 15: Martin Luther King Jr. Day, NO CLASS
- Friday, January 19, by 5:00 pm: Last day to add a class or to change credit hours or grade mode in LoboWEB.
- Friday, January 26, by 5:00 pm: Last day to drop without "W" grade and with 100% refund on LoboWEB
- Friday, February 23, by 5:00 pm: Last day to drop *without* Dean's permission on LoboWEB. Will receive a "W" grade and will be responsible for tuition for the course.
- Thursday, March 7, by 5:00 pm: Last day to drop with the permission form.
- Final Exam Wednesday, March 6, 10:30-12:30

University Policies

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 the campus. If you do need to stay home, please contact me at cynthia@unm.edu; 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, <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.

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 the 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. UNM is committed to providing courses that are inclusive and accessible for all participants. As your instructor, it is my objective to facilitate an accessible classroom setting, in which students have full access and opportunity. If you are experiencing physical or academic barriers, or concerns related to mental health, physical health and/or COVID-19, please consult with me after class, via email/phone or during office hours. You are also encouraged to contact [Accessibility Resource Center](mailto:arcsrvs@unm.edu) at arcsrvs@unm.edu or by phone 277-3506. If you are a Valencia campus student, contact Equal Access Services at Valencia Campus at (505)925-8560 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.

Any student judged to have engaged in academic dishonesty in course work may receive a reduced or failing grade for the work in question or for the course.

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. You can only learn the course material if you complete and submit 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>).

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, especially the LoboRESPECT Advocacy Center and the support services listed on its website (<http://loborespect.unm.edu/>). 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 at the [Office of Compliance, Ethics, and Equal Opportunity](#). For more information on the campus policy regarding sexual misconduct, please see: <https://policy.unm.edu/university-policies/2000/2740.html>.

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.

Math 1215X: Intermediate Algebra Part 1 (Spring 2024) *Course outline is subject to change*

Week	Dates	Sections / Topics Read the sections before class	Written Homework Assignments and Projects Due
1	1/15-1/17	<i>Introduction</i> <i>Unit 1: Sects: 8.3 & 8.4</i>	All assignments are due at the beginning of class Wednesday of the unit week. Online homework for the unit is due by 5:00 pm Tuesday.
2	1/22-1/24	<i>Unit 2: Sects: 8.6 & 8.8</i>	
3	1/29-1/31	<i>Unit 3: Sects: 9.1, 9.2, 9.3, 9.4, 9.5</i>	Unit 1 written homework – January 31 Sect. 8.3: (pg. 555) #63, 68, 73, 105, 113 Sect. 8.4: (pg. 565) #27, 49, 55, 73, 83
4	2/5-2/7	<i>Unit 3: Sects: 9.1, 9.2, 9.3, 9.4, 9.5 cont.'</i>	Unit 2 written homework – February 7 Sect. 8.6: (pg. 586) #23, 27, 35, 43, 54 Sect. 8.8: (pg. 607) #61, 77, 85, 91, 119
5	2/12-2/14	<i>Unit 4: Sects: 9.6 & 10.1</i>	Unit 3 written homework – February 14 Sect. 9.1: (pg. 630) #65 a-d Sect. 9.2: (pg. 644) #123 Sect. 9.3: (pg. 652) #29, 41, 43 Sect. 9.4: (pg. 663) #95 a and b Sect. 9.5: (pg. 670) #29, 31, 53 Project 3
6	2/19-2/21	<i>Unit 5: Sects: 10.2 & 10.3</i>	Unit 4 written homework – February 21 Sect. 9.6: (pg. 678) #67, 71, 81, 87 Sect. 10.1: (pg. 707) #21, 23, 29, 31, 71, 89
7	2/26-2/28	Project Presentations <i>Final Review Units 1-5</i>	Unit 5 written homework – February 28 Sect. 10.2: (pg. 715) #13, 21, 27, 53, 56 Sect. 10.3: (pg. 724) #17, 19, 27, 69, 71
8	3/4-3/6	<i>Exam review</i> Final Exam Wednesday 10:30-12:30	Projects and Peer evaluations Wednesday, March 6 All corrections and assignments must be submitted no later than March 6 before you take the final exam.

MATH 1215 COURSE STUDENT LEARNING OUTCOMES:

Upon successful completion of the course, students will be able to:

- A. Demonstrate appropriate use of basic function language and notation.
 - 1. Communicate or present mathematical concepts using correct mathematical notation and terminology.
 - 2. Correctly use function notation and vocabulary related to functions.
 - 3. Determine function values for given domain values and determine domain values for given function values.
 - 4. Determine domains for specific functions.
- B. Convert between equivalent forms of algebraic expressions.
 - 1. Simplify expressions using properties of exponents.
 - 2. Add, subtract, and multiply polynomials.
 - 3. Rewrite line equations in different forms (slope-intercept, point-slope, standard)
 - 4. Factor some types of polynomials.
 - 5. Simplify radical expressions.
 - 6. Rewrite exponential functions in logarithmic form and vice versa.
- C. Solve single-variable equations of the types listed above.
 - 1. Solve for a single variable in a proportion.
 - 2. Solve for a single variable in a linear equation.
 - 3. Solve for a specified variable in a formula.
 - 4. Solve quadratic equations using factoring, quadratic formula, and the square root method.
 - 5. Solve equations containing rational expressions.
 - 6. Solve equations containing radical expressions.
 - 7. Solve absolute value equations in one variable.
 - 8. Solve exponential and logarithmic equations using equating bases.
- D. Interpret and communicate algebraic solutions graphically and numerically.
 - 1. Determine equations for lines in the three forms – slope-intercept and point-slope.
 - 2. Sketch the graphs of linear functions.
 - 3. Interpret slope in relation to variable coefficients and as a rate of change.
 - 4. Graph linear inequalities in one variable on a number line and write corresponding interval notation.
 - 5. Determine when linear equations represent parallel and perpendicular lines.
 - 6. Sketch graphs of quadratic functions.
- E. Demonstrate contextual problem-solving skills that include setting up and solving problems and interpreting solutions in context.
 - 1. Determine linear equations from application problems and solve.
 - 2. Set up a linear proportion from an application problem and solve.
 - 3. Analyze solutions to application problems and give them contextual meaning.
 - 4. 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)
 - 5. Determine a system of linear equations from an application problem and solve if possible.
- F. Apply appropriate problem-solving methods from among algebraic, graphical, and numerical.
 - 1. Perform unit conversions.
 - 2. Solve linear inequalities in one variable.
 - 3. Simplify expressions written in scientific notation.
 - 4. Simplify multiplication and division problems using scientific notation.
 - 5. Apply solution methods learned to application problems.
 - 6. Solve systems of two linear equations graphically and algebraically.
 - 7. Solve problems including percent
 - 8. Perform operations with radical expressions.
 - 9. Perform operations with rational expressions.
 - 10. Solve absolute value inequalities in one variable.

Completing Math 1215 meets the prerequisites for Math 1130, Math 1350, Math 1220, and some science classes.

