Math 1215X/Y: Intermediate Algebra A, B

Spring 2022

Andy Taylor
Email: ataylor19@unm.edu

Instructor-Led Help Sessions via Zoom:
Monday/Wednesday, 12-2:30pm, or by appointment

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

CONTENTS

Course Description 2
Student Learning Outcomes/Course Objectives 2
Prerequisites and Co-requisites 4
Technical Skills 4
Technical Requirements 4
Computer 4
Web Conferencing 5
Technical Support 5
Textbook and Supplemental Materials 5
Required Textbooks/Ebook: 5
"Developmental Mathematics," 2nd edition, by Sullivan, Struve, Mazzarella. 5
Required: Appropriate MyMathLab (MML) access code (do not purchase a generic code; in this case, the code is book specific). You may purchase the 18-week access code for a lower price, but you *cannot* upgrade to the lifetime code once you purchase the restricted one. 5
Recommended and Optional: 5
Specific Course Requirements 5
Coursework and Participation 6
Instructor Response Time 6
Procedures for Completing Coursework 6
Late/Missing Work: 6
Expectations for Participation 6
Netiquette 6
Notes to Students about participation in a course using UNM Learn: 7
Tracking Course Activity 7
Submitting Assignments 8
Grading Procedures 8
UNM Policies 8
Equal Opportunity and Non-Discrimination 8

Copyright Issues....9
Accessibility and Accommodations....9
Accessibility Statements....9
Academic Integrity....9
Drop Policy:....9
UNM Resources....10
FOR MILITARY-CONNECTED STUDENTS....10
Semester Deadlines....10
Course Schedule....11

COURSE DESCRIPTION

Math 1215 X

Sect.	CRN	Class Time	Days	Location	MML Course Code
504	51128	12:00-12:50pm	T/TR	VAAS 133	taylor00296

This 1-credit-hour course includes the first third of an Intermediate Algebra course, including problems in ratio and proportion, unit conversions, solving linear equations and problems modeled by these, finding equations for lines and graphing them, working with formulas, and scientific notation.

Student Learning Outcomes/Course Objectives

In this course, we will explore linear functions, linear inequalities, polynomials, and factoring.

Upon successful completion of the Math 1215X 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.
B. Convert between equivalent forms of algebraic expressions.
   1. Rewrite line equations in different forms (slope-intercept, point-slope, standard)
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.
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.
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 them.
   2. Set up a linear proportion from an application problem and solve it.
   3. Analyze solutions to application problems and give them contextual meaning.
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.

Math 1215 Y

Sect.	CRN	Class Time	Days	Location	MML Course Code
504	51191	12:00-12:50pm	T/TR	VAAS 133	taylor00296

This 1-credit-hour course includes the second third of an Intermediate Algebra course, including solving systems of linear equations, exponent rules, factoring polynomials, operations on polynomials, and solving and graphing quadratics. This class will run during the second half of the semester for those that successfully complete Math 1215X.

Student Learning Outcome/Course Objective

This course will explore systems of linear equations, polynomials and factoring, and linear functions.

Upon successful completion of the Math 1215Y 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.
B. Convert between equivalent forms of algebraic expressions.
   1. Simplify expressions using properties of exponents.
   2. Add, subtract, and multiply polynomials.
   3. Factor some types of polynomials.
C. Solve single-variable equations of the types listed above.
   1. Solve quadratic equations using factoring, quadratic formula, and the square root method.
D. Interpret and communicate algebraic solutions, graphically, and numerically.
   1. Determine when linear equations represent parallel and perpendicular lines.
   2. 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 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)
   2. Determine a system of linear equations from an application problem and solve it if possible.
   3. Analyze solutions to application problems and give them contextual meaning.
F. Apply appropriate problem-solving methods from among algebraic, graphical, and numerical.
   1. Solve systems of two linear equations graphically and algebraically.
   2. Apply solution methods learned to application problems.

Completing Math 1215X and 1215Y meets the prerequisites for Math 1110 and Math 1350. Completing all three (Math 1215X, 1215Y, and 1215Z) meets the requirements for Math 1220 and some science classes. Completing all three, Math 1215X, 1215Y, and 1215Z, meets the same learning objectives as Math 1215.

Prerequisites and Co-requisites

Math 1215 X

Appropriate placement score or a grade of C or better in Math 100 or Math 022 or ACT Math =>18 or SAT Math Section =>490 or ACCUPLACER Next-Generation Advanced Algebra and Functions =228-238, QRAS=253-300, Arithmetic=276-300 or B+ in Alg II or B- or B in Statistics or CRM or C or lower in Pre-calculus, Trigonometry, Calculus. Check with your adviser to make sure you meet the requirements.

- While MATH 1215X provides credit toward establishing a full-time load for financial aid purposes, this course does NOT satisfy UNM general education core course requirements.

Math 1215 Y

Prerequisite/Placement**:** A grade of C or better in Math 1215X.

- While MATH 1215Y provides credit toward establishing a full-time load for financial aid purposes, this course does NOT satisfy UNM general education core course requirements.

TECHNICAL SKILLS

To participate and succeed in this class, you will need to be able to perform the following essential technical tasks:

- Use UNM Learn (help documentation located in the "How to Use Learn" link on the left course menu and at Online Student Documentation[1]). Also, UNM-Valencia provides a Blackboard Learn Jumpstart self-learning module to give you practice with the most commonly used tools in UNM Learn. Ask your instructor if you do not see the UNM-Valencia Blackboard Learn Jumpstart in your list of UNM Learn classes.
- Use email – including attaching files, opening files, downloading attachments
- Copy and paste within applications including Microsoft Office
- Open a hyperlink (click on a hyperlink to access a website or online resource)
- Use Microsoft Office applications
    - Create, download, update, save and upload MS Word documents
    - Download, annotate, save and upload PDF files
    - Access MS Teams
- Use the in-course web conferencing tool (Collaborate Web Conferencing software in UNM Learn) or use Zoom or another web conferencing tool
- Download and install an application or plugin – required for participating in web conferencing sessions

TECHNICAL REQUIREMENTS

Computer

- A high-speed Internet connection is highly recommended.
- Supported browsers include Chrome, Firefox, or Safari. Preferred operating systems are Windows or Apple.
- Any computer capable of running a recently updated web browser should be sufficient to access your online course. However, bear in mind that processor speed, amount of RAM, and Internet connection speed can *significantly* affect performance. ***Some programs that use mathematics will not work well on mobile devices such as smartphones or tablets.***

[1] http://online.unm.edu/help/learn/students/

- Microsoft Office products are available free for all UNM students (more information on the UNM IT Software Distribution and Downloads page[2])
- Please update your contact information in Loboweb: MyUNM Login[3]. When you log into MyUNM, Enter LoboWeb. Click on the Personal Information link to make sure your contact information is up to date.
- Laptops may be available for checkout for the Fall semester from the UNM-Valencia Library[4]. Contact the librarians for more information.

Web Conferencing
Web conferencing will be used in this course for office hours and scheduled individual meetings For the online sessions, you will need:

- A USB headset with a microphone. Headsets are widely available at stores that sell electronics, at the UNM Bookstore, or online.
- A high-speed internet connection is highly recommended for these sessions. A wireless Internet connection may be used if successfully tested for audio quality before web conferencing.
- You should also dress as you would when attending an in-person meeting, even if you do not turn on your video camera

Technical Support

- For UNM Learn Technical Support: (505) 277-0857 (24/7) or use the "Create a Tech Support Ticket" link in your course.
- For UNM-Valencia IT Support: (505)925-8911
- For UNM Web Conference Technical Help: (505) 277-0857

TEXTBOOK AND SUPPLEMENTAL MATERIALS
Required Textbooks/Ebook:
"Developmental Mathematics," 2nd edition, by Sullivan, Struve, Mazzarella.
NOTE: eText (digital textbook) access will be included when you acquire access to Pearson MyLab Math. You need not have a physical copy of this book unless you would prefer to have one.

Required: Appropriate MyMathLab (MML) access code (do not purchase a generic code; in this case, the code is book specific). You may purchase the 18-week access code for a lower price, but you *cannot* upgrade to the lifetime code once you purchase the restricted one.

Recommended and Optional:
Optional: You may "upgrade" your access by purchasing a hardcopy 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 library (you will not be able to take the book from the library home).

Specific Course Requirements
Pearson account. If you have used any of the Pearson My Lab products before, you can use the same account you created the first time you used it. Otherwise, you can create an account when you register in MyMathLab (MML) for this class. Register by going to mymathlab.com.

[2] http://it.unm.edu/software/index.html
[3] http://my.unm.edu/home
[4] http://valencia.unm.edu/library/index.html

COURSEWORK AND PARTICIPATION

Instructor Response Time

I routinely check emails, Monday (8 am) – Friday (noon), and sometimes on the weekend. You can anticipate a (less than) 24-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.

Procedures for Completing Coursework

Late/Missing Work:

- Please let me know at least 24 hours in advance via UNM email if you anticipate a late submission for a homework assignment or project. Late work may be accepted in the case of an emergency or other extenuating circumstances. If you have a medical excuse for a late submission, please submit a copy of a doctor's note.
- Exams must be completed on time. In the event that you need to take a makeup exam, this must be scheduled ahead of time with the testing center before the class takes the exam.
- All written work needs to be submitted online in the appropriate assignment dropbox. If you have difficulty using a tool to complete work, use the "Create a Tech Support Ticket" link in the Course Menu immediately and notify your instructor as well.

Expectations for Participation

- The time recommended for success in this course is 9-12 hrs per week
- Students are expected to learn how to navigate in Blackboard Learn
- Students are expected to communicate with one another in team projects
- Students are expected to keep abreast of course announcements
- Students are expected to use the Learn course email as opposed to a personal email address
- Students are expected to keep the instructor informed of class-related problems or problems that may prevent the student from full participation
- Students should know that the secret phrase is, "*I can do this."*
- Students are expected to address technical problems immediately
- Students are expected to observe course netiquette at all times

Netiquette

One of the overriding principles in online conversations is to "craft your responses effectively." It is sometimes difficult to remember that real people are reading posted messages. It is especially true of online communication where others do not have the opportunity to see body language or hear the tone of voice; therefore, misunderstandings are more likely.

Please, follow these guidelines in ***all*** of your online responses and discussion postings.

- Honor everyone's right to an opinion.
- Respect the right of each person to disagree with others.
- Respond honestly but thoughtfully and respectfully; use language that others will not consider foul or abusive. You may also use emoticons to convey a lighter tone.
- Respect your privacy and the privacy of others by not revealing information that you deem private and which you feel might embarrass you or others
- Be prepared to clarify statements that might be misunderstood or misinterpreted by others.

A Special Note about Anger

- Do not send messages that you have written when you are angry, even anonymous ones. In the online world, angry messages are known as "flaming" and are considered bad behavior. Venting and flaming are two different things. It is possible to vent without becoming "ugly." Stick to the facts of what is causing you frustration.
- Do not send messages written in the upper case; this is the visual equivalent of SHOUTING. It is considered aggressive and regarded as bad behavior. If you ever feel like shouting a message, take a deep breath, and wait until you have calmed down before responding. Then, respond calmly and factually.

Participation and Progress: Participation includes:

- Attendance. You are expected to show up to class meetings. If for some reason you cannot, let me know ahead of time, if possible. If you show any symptoms resembling a viral illness such as cold/flu/Covid-19, **DO NOT COME TO CLASS.** Just let me know.
- Questions. Please ask questions during class, via email, or during my office hours. My job is to help you learn the material; I cannot do that unless I know where you are misunderstanding, so please don't be afraid to ask questions! I'm happy to help!
- Turn Work in by Due Date.

MyMathLab Homework: Online homework is assigned nearly every week based on the units in the course outline. Complete weekly assignments in MyMathLab no later than the indicated date in MML. Your score on each will be out of **100 points.**

Projects: Projects are required! During the semester, a project will be assigned for each unit, due weekly.

Final Exam: The final is a departmental exam that will test you over all, or nearly all, of the learning objectives for this course. You will be given a formula sheet for the final, and you can use a calculator. You are allowed to take the final ***only once***. The final exam will be 20% of your overall course grade.

NOTES TO STUDENTS ABOUT PARTICIPATION IN A COURSE USING UNM LEARN:
Tracking Course Activity
UNM Learn automatically records all students' activities, including your first and last access to the course, the pages you have accessed, the number of discussion messages you have read and sent, web conferencing, discussion text, and posted discussion topics. This data can be accessed by the instructor to evaluate class participation and to identify students having difficulty

Submitting Assignments
All written work will be submitted as a PDF document in the appropriate dropbox within UNM Learn. ***Please be aware that you must submit work as an attachment. Please check the Submission Preview window and make sure that your file appears there as you'd like to submit it (it is important that you submit as an attachment, not a link, and that your submitted document is viewable within that preview window, otherwise it may not be accepted)***. If you need assistance with this, please let me know and I'd be happy to walk you through it!

GRADING PROCEDURES

- Grades in specific content areas reflect mastery of student learning objectives. Grading of written notes, quizzes, projects, and exams will take into account proper notation, demonstrated knowledge of problem-solving procedures, showing ALL steps/ calculations and legibility.

- My expected response time for grading your written work will generally range from 5 to 7 days. Sometimes it might be shorter than 5 days but generally shouldn't be longer than 7 days. Grades for work completed in MML should be immediately available upon completion of the assignment.

COURSE AVERAGES:

Participation and Progress	10%
Written Homework	20%
MyMathLab Online Homework	20%
Projects	25%
Cumulative Final Exam*	25%
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.**

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	Any AND 69% or less

UNM POLICIES
Equal Opportunity and Non-Discrimination
To meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered "responsible employees" by the Department of Education[5] (see pg. 15). This

[5] https://www2.ed.gov/about/offices/list/ocr/docs/qa-201404-title-ix.pdf

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 of Equal Opportunity[6].
Read more about UNM policy regarding sexual misconduct[7].

Copyright Issues
All materials in this course fall under copyright laws and should not be downloaded, distributed, or used by students for any purpose outside this course.

The UNM Copyright Guide[8] has additional helpful information on this topic.

Accessibility and Accommodations
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides reasonable accommodations for their disabilities. If you have a disability requiring accommodation, please contact:

- UNM-Valencia Student Services[9] if you are a Valencia campus student. The phone number is 505-925-8560
- UNM Accessibility Resource Center[10] in 2021 Mesa Vista Hall if you are a main campus student. The phone number is 505-277-3506.

Information about your disability is confidential, and your instructor cannot refer you for accommodations. Be aware that you will need to provide documentation. If you need assistance in obtaining documentation, the offices above can assist you.

Accessibility Statements
Blackboard's Accessibility statement[11]
Microsoft's Accessibility statement[12]

Academic Integrity
You should be familiar with UNM's Policy on Academic Dishonesty[13] and the Student Code of Conduct[14] , which outlines academic misconduct defined as plagiarism, cheating, fabrication, or facilitating any such act.

Drop Policy:
I reserve the right, but not the obligation, to drop you from the class during the semester. Here are the reasons I ***may*** drop you from the class:

- You are not registered in MML and fail to make progress on the first assignment by the due date.

---

[6] http://oeo.unm.edu/
[7] https://policy.unm.edu/university-policies/2000/2740.html
[8] https://copyright.unm.edu/
[9] http://valencia.unm.edu/students/student-services.html
[10] https://arc.unm.edu/
[11] https://www.blackboard.com/blackboard-accessibility-commitment
[12] https://www.microsoft.com/en-us/accessibility/
[13] https://pathfinder.unm.edu/campus-policies/academic-dishonesty.html
[14] https://pathfinder.unm.edu/code-of-conduct.html

- You fail to show up to class or fail to complete the syllabus quiz and submit to Blackboard Learn by the end of the second week.
- At any point during the semester, you miss multiple (3 or more) consecutive classes without notice, or fail to submit multiple (3 or more) consecutive assignments by their respective due dates.

You will be dropped if you do not complete, sign and turn in the Syllabus Quiz found in the Start Here Module by the due date.

UNM Policies: This course falls under all UNM policies for the last day to drop courses, etc. Please see or the UNM Course Catalog for information on UNM services and policies. Please see the UNM academic calendar for course dates, the last day to drop courses without penalty, and financial disenroll dates.

UNM RESOURCES

- **UNM Valencia Campus Tutoring Services**[15]
- **UNM Main Campus CAPS Tutoring Services**[16]
- **UNM-Valencia Library**[17]
- **UNM Libraries**[18]
- **"Life" Resources available to UNM-Valencia Students**[19]
- **Student Health & Counseling (SHAC) Online Services**[20]

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 or staff can give you, please reach out to the Veterans Resource Center on the 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.

SEMESTER DEADLINES

Spring 2021 – 16-week classes (deadlines will be different for first and second 8-week classes)

- Tuesday, January 18: First day of class, classes available in Blackboard Learn
- Friday, January 28, by 5:00 pm: Last day to add a class or change credit hours or grade mode in LoboWEB.
- Friday, February 4: Last day to drop without "W" grade and with 100% refund on LoboWEB

[15] http://valencia.unm.edu/campus-resources/the-learning-center/learning-center.html
[16] http://caps.unm.edu/services/online-tutoring/olc.php
[17] http://valencia.unm.edu/library/index.html
[18] https://library.unm.edu/
[19] http://valencia.unm.edu/students/student-resources.html
[20] https://shac.unm.edu/

- March 13-20: SPRING BREAK
- Friday, April 15: Last day to drop *without* Dean's permission on LoboWEB. Will receive a "W" grade and will be responsible for tuition for the course.
- Friday, May 6: Last day to drop *with* Dean's permission with form. Will receive a "W" grade and will be responsible for tuition for the course.
- May 9-14: Finals week.

Course Schedule

Math 1215X: Intermediate Algebra Part 1
(*Schedule is subject to change)*

By 5:00pm on the Homework Due Date:

- Your Written Homework is due in Blackboard Learn as a single PDF file in the appropriate drop-box
- You should have completed the Online MML Homework for that Unit

By 5:00pm on the Project Due Date:

- Your project for the given unit should be completed and submitted in Blackboard Learn as a single PDF file in the appropriate drop-box

Assignment Due Dates:

Unit	Homework	Project
1	Monday, 1/31	Friday, 2/4
2	Monday, 2/7	Friday, 2/11
3	Monday, 2/14	Friday, 2/18
4	Monday, 2/21	Friday, 2/25
5	Monday, 2/28	Friday, 3/4

Math 1215X Exam will be given in class on Thursday, March 10, 2022 (70% or higher needed to progress to 1215Y).
You will take this exam in MML, while carefully showing ALL your work on paper; this is what I will use to grade your exam. Work shown must be neat, organized and legible. Complete steps must be shown to receive credit/ partial credit. Work will be submitted to the appropriate dropbox in Blackboard Learn as a single PDF document.

Math 1215Y: Intermediate Algebra Part 2
(*Schedule is subject to change)*

By 5:00pm on the Homework Due Date:

- Your Written Homework is due in Blackboard Learn as a single PDF file in the appropriate drop-box

By 5:00pm on the Project Date:

- Your project for the given unit should be completed and submitted in Blackboard Learn as a single PDF file in the appropriate drop-box

Unit	Homework	Quiz & Project
6	Monday, 4/4	Friday, 4/8
7	Wednesday, 4/13	Friday, 4/15
8	Monday, 4/25	Friday, 4/29
9	Wednesday, 5/4	Friday, 5/6

Math 1215Y Exam will be given in class on Thursday, May 12, 2022 (70% or higher needed to earn credit for course).