Math 1215 Intermediate Algebra Fall 2021 (Online Lecture Class)

Instructor: Precious Andrew email: pandrew@unm.edu

Office: Online via Zoom or email

Office Hours/Study Sessions: Most Mondays and Wednesdays 1:20-2:50, most Tuesdays and Thursdays 1:00-2:30 or by appointment

MECS Division Chair: Elaine W. Clark ewclark@unm.edu

Sect. CRN Meeting Times MML Course Code
501 64251 Online via Zoom Mondays and Wednesdays 10:30-11:45am andrew50591

Course Description/Objectives

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). 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.

Textbook: Ebook in MyMathLab - Developmental Mathematics, 2nd Edition, Sullivan, Struve, Mazzarella.

MyMathLab (MML) access code required. The code is book specific. It's suggested you buy a code with at least 24 months access since you'll most likely be using MML in Math 1215Y/1220 also.

Calculator: You may use a 4-function basic calculator (not a scientific or graphing calculator) for assignments and exams.

Pre/Corequisites: 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. Check with your adviser to make sure you meet the requirements.

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

Lecture Notes/Attendance (Camera On) 10%
Written Assignments (Homework/Projects) 40%
MyMathLab Online Homework 15%
Two Exams 15%
Final Exam 20%
Total 100%

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% NC: Any score on the final and less than 70% course weighted average

OR less than 70% on the final exam and any course average

(If you choose CR/NC mode at the start of the semester,

CR: 70% or better on final and 70% or better course weighted average

NC: Any score on the final and less than 70% course weighted average OR less than 70% on the final exam and any course average)

Course Format:

- 1 You will be attending class during the scheduled meeting time. These meetings must be attended in their entirety just as if you were in a classroom lecture. You must take careful notes on each and every example from each lecture. You will write down every example and all steps I show to reach a solution. These notes should be labeled clearly, organized, and neat and clear. I will be grading the lecture notes for both completeness and neatness. You will submit these lecture notes for a grade. You'll be submitting these via UNM Learn. They must be submitted as one readable pdf file.
- 2 You will submit written homework projects about 1-2 times per week see due dates in Learn. You need to print out the homework packets, fill them in, then create a pdf file of your work to upload. These problems 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. You'll be submitting via UNM Learn. Homework must be submitted as one readable pdf file.
- 3 You will submit online homework through MyMathLab. The due dates are listed in the program and you are responsible for keeping up with these.
- 4. You will submit two tests and a cumulative final exam. You must take these at the scheduled times. These will be submitted via MyMathLab with your supporting work submitted via UNM Learn in pdf format. See the schedule for the projected exam dates. 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.



^{*}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.

Late work is not accepted. Instead, to account for absence, technology issues, etc. With this in mind, I will not be extending deadlines, re-grading online homework, or considering excuses regarding technology issues, etc. You should submit assignments early and contact me with any issues. That way we can resolve the problem before the item is due.

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.
 - Simplify radical expressions.
 - 6. Simplify rational expressions.
 - 7. 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.
- 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.

Other Requirements:

- Reliable access to a computer or tablet, printer, Zoom, and Internet. A computer (laptop or desktop) is recommended. Preferred
 browsers are Chrome, Firefox, or Safari. Preferred operating systems are Windows or Apple. Some applications in MyMathLab work best
 while using Google Chrome, but make sure your Chrome browser is up to date.
- Adobe Reader and Adobe Flash Player. These two programs are needed to have full access to resources provided in MyMathLab. Also, make sure you are allowing popups.
- 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.
- Access to UNM Learn. You will use your UNM NetID to log into UNM Learn. You may access it directly via learn.unm.edu
- Basic 4 function calculator. This cannot be an app on your cell phone or mobile device.

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

- If you miss the first week of the semester never log into UNM Learn or communicate with the instructor.
- If you show minimal progress during the first three weeks of the semester. Minimal progress can be defined as
 - Not having purchased access to the MML portion of the class and 14 day trial has expired.
 - Not watching instructional videos.
 - Not submitting lecture notes or written homework.
 - If you are not registered in MML and completing assignments by the end of the first week.
- If you don't submit 3 or more assignments (homework, lecture notes, projects, etc.)

If you added late, documentation of absences starts the day you registered for the class.

Expectations: Students are expected to conduct themselves in a polite, courteous, professional, and collegial manner in any online communications with the instructor or other students. Students are expected to do their own work on the assignments and tests. Students are expected to set aside dedicated time each week to work on their assignments. Students are expected to stay up with posted deadlines for this course.

Time for This Course: Plan to spend a *minimum* of 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. **Make a schedule now** and dedicate specific times during the week for this class. Do not lump this time all on the weekend, you need to give your mind time to absorb the new material, so space the time you dedicate to this class over three or five days per week. Your instructor may ask for you to submit a calendar showing how you plan to schedule time for this class.

Online Homework in Mymathlab and Written Homework:

- Online homework is assigned in MML with due dates based on the schedule. You will need to complete the assignments in MML by the
 deadlines listed in the program.
- Written homework/project packets can be found in Learn with their respective due dates.

Do not consider any of the grades posted in MyMathLab as representing your actual grade. Because there are written assignments you will be submitting in Learn that are not part of the MML gradebook, those grades can be misleading. Use the gradebook in MML only to check your online homework and review what you missed.

Final Exam:

Your final exam will occur at the end of the course. Your final exam will be cumulative (include topics from the entire course. The exam is taken in MyMathLab but you must submit your written (pencil-paper) work for all exam questions as a PDF file in Learn. You can use a basic 4-function calculator on the exam. 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 full credit for that question.

Because this class is fully online, this exam will be administered in the following way:

- The exams will appear in MyMathLab at the designated times.
- You will complete the exam and submit your answers in MyMathLab, but you must write down every question and all of your work to reach your answer on your own paper. Be sure to number the problems clearly and indicate which work goes with which problem. All work needs to be shown and to be neat, clear, and in order or you will not receive credit. You will be submitting the exam in two places then the answers alone in MyMathLab, your work as a pdf file in Learn.
- Be sure to time yourself. You will need to complete the exam in MyMathLab and also upload your pdf with supporting work in Learn in the allotted time.
- Sign the honor statement that came with your exam. If a signed honor statement is not returned with the exam, your exam will not be graded.
- As soon as you are finished with the exam in MyMathLab in the allotted time, create an electronic copy of the pages on which you completed
 your work and your signed honor statement and submit these as a pdf file in Learn (just as you have been sending your lecture notes and
 written homework).
- If you have Internet issues, trouble downloading or printing the test, trouble scanning and sending back your completed exam, etc., you must contact me immediately!

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

- Ask My Instructor: Please use the Ask My Instructor button in MyMathLab. This button is available in the MML homework 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 your instructor's office hours listed at the beginning of this syllabus. Feel free to log in for online 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. 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: <u>Valencia Student Services</u>

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 cdilger@unm.edu 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: In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered "responsible employees" by the Department of Education (see pg. 15 - http://www2.ed.gov/about/offices/list/ocr/docs/qa-201404-title-ix.pdf). 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 of Equal Opportunity (oeo.unm.edu). For more information on the campus policy regarding sexual misconduct, see: https://policy.unm.edu/university-policies/2000/2740.html

UNM Administrative Mandate on Required Vaccinations: All students, staff, and instructors are required by UNM Administrative Mandate on Required Vaccinations to be fully vaccinated for COVID-19 as soon as possible, but no later than September 30, 2021, and must provide proof of vaccination or of a UNM validated limited exemption or exemption no later than September 30, 2021 to the UNM vaccination verification site. Students seeking medical exemption from the vaccination policy must submit a request to the UNM verification site for review by the UNM Accessibility Resource Center. Students seeking religious exemption from the vaccination policy must submit a request for reasonable accommodation to the UNM verification site for review by the Compliance, Ethics, and Equal Opportunity Office. For further information on the requirement and on limited exemptions and exemptions, see the UNM Administrative Mandate on Required Vaccinations.

UNM Requirement on Masking in Indoor Spaces: All students, staff, and instructors are required to wear face masks in indoor classes, labs, studios and meetings on UNM campuses, see masking requirement. Vaccinated and unvaccinated instructors teaching in classrooms must wear a mask when entering and leaving the classroom and when moving around the room. When vaccinated instructors are able to maintain at least six feet of distance, they may choose to remove their mask for the purpose of increased communication during instruction. Instructors who are not vaccinated (because of an approved medical or religious exemption), or who are not vaccinated yet, must wear their masks at all times. Students who do not wear a mask indoors on UNM campuses can expect to be asked to leave the classroom and to be dropped from a class if failure to wear a mask occurs more than once in that class. With the exception of the limited cases described above, students and employees who do not wear a mask in classrooms and other indoor public spaces on UNM campuses are subject to disciplinary actions.

Communication on change in modality: The university may direct that classes move to remote delivery at any time to preserve the health and safety of the students, instructor and community. Please check your email and your UNM Learn site regularly for updates about our class, and please check https://bringbackthepack.unm.edu regularly for general UNM updates about COVID-19 and the health of our community.

Acceptable masks and mask wearing in class: A two-layer mask that covers the nose and mouth and that is cleaned regularly is acceptable, as are disposable medical masks, KN95, KF94, FFP1 and FFP2 masks. A face shield is not sufficient protection. It is vital that you wear your mask correctly, covering your nose and mouth. Removing your mask for an extended period to eat or drink in class violates the university mask requirement and endangers others

Consequences of not wearing a mask properly: If you don't wear a mask, or if you do not wear a mask properly by covering your nose and mouth, you will be asked to leave class. If you fail to wear a mask properly on more than one occasion, you can expect to be dropped from the class. If you insist on remaining in the classroom while not wearing a mask, class will be dismissed for the day to protect others and you will be dropped from the class immediately.

Note: The instructor for this class reserves the right to change the syllabus at any point during the semester. Week of Sections Covered Aug 23 8.3 8.4 8.6 8.8 Aug 30 9.1 9.2 Monday - Labor Day Holiday - NO CLASS Sep 6 9.4 Sep 13 9.5 9.6 10.1 Sep 20 10.2 10.3 Test 1 Monday, September 27th 10:30am-11:45am Sep 27 11.1 11.2 11.3 11.4 11.6 Oct 4 12.1 12.2 Oct 11 12.3 14.1 14.2 Oct 18 14.3 14.4 15.1 Oct 25 12.6 16.2 16.5 Nov 1 16.5 (finish) Test 2 Wednesday, November 3rd 10:30-11:45am Nov 8 13.1 13.2 13.3 Nov 15 13.5 13.7 Nov 22 14.7 15.2

15.3

15.4

15.8 17.2

17.3

Review

FINAL Monday, December 13th 10:30am-12:30pm

Nov 29

Dec 6

Dec 13