# MATH 1215Z-506: Intermediate Algebra Part III Spring 2022 (Mastery Class)

Instructor: Nancy Engler email: englern@unm.edu

Office: AA 134

**Office Hours**: AA134 Available M/W 9:00 am-12.00 noon or by appointment Or online via Zoom link: <a href="https://unm.zoom.us/my/profengler">https://unm.zoom.us/my/profengler</a> by appointment

Division Chair: Ariel Ramirez, aramirez8@unm.edu

#### **MATH 1215Z**

Sect. CRN MML Course Code

506 70512 Engler35700

MATH 1215Z COURSE DESCRIPTION: This 1-credit-hour course includes the final third of an intermediate algebra course including simplifying radical expressions including the use of rational exponents, solving radical equations, simplifying rational expressions, operations on rational expressions, solving rational equations, development of the concept of functions, solving absolute value equations and inequalities, and an introduction to exponential and logarithmic functions.

- Prerequisite/Placement: A grade of C or better in Math 1215Y.
- While MATH 1215Z provides credit toward establishing a full-time load for financial aid purposes, this course does NOT satisfy UNM general education core course requirements.

#### MATH 1215Z 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. Simplify rational expressions.
  - 3. Simplify radical expressions.
  - 4. Rewrite exponential functions in logarithmic form and vice versa.
- C. Solve single-variable equations of the types listed above.
  - 1. Solve equations containing rational expressions.
  - 2. Solve equations containing radical expressions.
  - 3. Solve absolute value equations in one variable.
  - 4. Solve exponential and logarithmic equations using equating bases.
- D. Interpret and communicate algebraic solutions graphically and numerically.

- E. Demonstrate contextual problem-solving skills that include setting up and solving problems and interpreting solutions in context.
  - 1. Analyze solutions to application problems and give them contextual meaning.
- F. Apply appropriate problem-solving methods from among algebraic, graphical, and numerical.
  - 1. Perform operations with radical expressions.
  - 2. Perform operations with rational expressions.
  - 3. Solve absolute value inequalities in one variable.
  - 4. 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 prerequisites for Math 1220 and some science classes. Completing all three, Math 1215X, 1215Y, and 1215Z, meets the same learning objectives as Math 1215.

**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 =>16 or SAT Math Section =>440 or ACCUPLACER Next-Generation Advanced Algebra and Functions =>220, or QRAS=>237, or Arithmetic=>265.. Check with your adviser to make sure you meet the requirements.

**COURSE OBJECTIVES:** 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.

#### **COURSE MATERIALS:**

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

Required: Appropriate MyMathLab (MML) access code (do not purchase a generic code, 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.

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 library (you will not be able to take the book from the library 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.
- 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 requires use your UNM NetID to log into UNM Learn. You may access it directly via <a href="learn.unm.edu">learn.unm.edu</a>
- 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:

- You are expected to UNMLearn and MyMathlab (MML) each week and progress toward
  the completion of the class. You will have written homework assignments in addition to
  the Pearson MyMathLab assignments. Although the class is wholly online, it is not selfpaced. There are deadlines and due dates for all assignments in class.
  - Absences: This course does not have assigned meeting times. But, you are required to check in with me weekly! This will count as attendance. You may check in with me during my posted office hours/tutoring hours either in person or by Zoom. If you can not make these times, contact me and we will schedule a brief meeting at another time Monday-Friday. If you are unable to Zoom, a descriptive email may be substituted, as long as you update me as to your progress and any difficulties/questions you may have.
    - Here are the reasons I may drop you from the class:
    - If you miss the first week of the semester—fail to log in to Learn and Pearson accounts and begin the class within the first 7 days of the course.
    - If you have not logged in to Learn or Pearson for 14 days during the course and have not responded to my emails. The course is only 8 weeks long. Pearson software tracks your interactions and notifies me if you have not been working.
    - If you are not registered in MML and completing assignments by the end of the first week you are in the class.
- EXPECTATIONS: Students are expected to conduct themselves in a polite, courteous, professional and collegial manner. Cell phones must be set on silent and be out of sight during class. No food or drink is allowed in the computer labs.
- **Time for This Course:** Plan to spend a *minimum* of 9 to 12 hours per week for this class. There is no guarantee you will pass if you dedicate this amount of time, you still need to learn the material and use your time wisely, but those who pass generally are the ones who spend the time needed to do the work to learn the material.

#### **HOMEWORK:**

- Online homework is assigned nearly every week based on the 5 units in the course outline. Assignments in MML must be completed not later than the posted due date for full credit. **Each homework assignment is worth 20 points**. A 10% penalty may be incurred if your homework is late. You will not be able to go back to improve your grade after the due date. The online homework is worth 15% of your overall course grade.
  - Each unit will have a separate written homework due when the online homework is due. These written assignments must be completed not later than the posted due date for full credit. Each homework assignment is worth 20 points. The written homework is worth 20% of your overall course grade.

**PROJECTS:** During the semester, projects will be assigned in each unit. If you are working on this project in groups, you must demonstrate that you contributed to the group answer. I also require *individual* submissions of the project, not one group paper. The projects are worth 20% of your overall course grade.

#### FINAL EXAM:

• 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, and you can use a calculator. You can NOT use your phone for a calculator. You are allowed to take the final only once. There is a final exam at the end of each individual course: 1215X, 1215Y and 1215Z.

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. The final exam will be 20% of your overall course grade.

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

**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 office 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.
- Free Tutoring: The Math Center at Valencia campus has free tutoring and open labs. Call 505-925-8907 for more information. CAPS on main campus also provides tutoring for which I can get documentation.
- 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>

#### 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 <u>Valencia Student Services</u>. 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.

**Collegial Behavior:** Since I assume you are all adults, I will expect respectful adult behavior. Engaging in disruptive or unruly behavior could result in your being asked to leave, at which time you will be counted absent, and a referral will be sent to the Associate Dean of Student Services. Continuing to behave in this way could result in your being dropped from the course. Disruptive or unruly behavior includes but is not limited to:

- texting or talking on your cell phone at any time during class,
- continually talking with your neighbor when we are not working on a group activity,
- working on homework from another class,
- reading material or watching media on a mobile device not related to this course or at a time that is inappropriate,
- refusing to participate in the class activities.

#### **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

**COVID-19 Statement:** UNM Administrative Mandate on Required Vaccinations UNM requires COVID-19 vaccination and a booster for all students, faculty, and staff, or an approved exemption (see: UNM Administrative Mandate on Required Vaccinations). Proof of vaccination and booster, or a medical, religious, or online remote exemption, must be uploaded to the UNM vaccination verification site. Failure to provide this proof may result in a registration hold and/or disenrollment for students and disciplinary action for UNM employees. Booster Requirement: Individuals who received their second dose of a Pfizer or Moderna vaccine on or before June 15, 2021, or their single dose of a Johnson & Johnson vaccine on or before October 15, 2021, must provide documentation of receipt of a booster dose no later than January 17, 2022. Individuals who received their second dose of a Pfizer or Moderna vaccine after June 15, 2021 or who received their single dose of Johnson & Johnson after November 15, 2021 must provide documentation of receipt of a booster within four weeks of eligibility, according to the criteria provided by the FDA (6 months after completing an initial two-dose Moderna vaccine, 5 months after completing the Pfizer sequence, and 2 months after receiving a one-dose Johnson and Johnson vaccine). International students: Consult with the Global Education Office.

**Exemptions:** Individuals who cannot yet obtain a booster due to illness should request a medical, religious, or online remote exemption (which may have an end date) and upload this to the vaccination verification site. Medical and religious exemptions validated in Fall 2021 (see your email confirmation) are also valid for Spring 2022 unless an end date was specified in the granting of a limited medical exemption. Students must apply for a remote online exemption every semester.

#### **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 the masking requirement. 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. Students and employees who do not wear a mask in classrooms and other indoor public spaces on UNM campuses are subject to disciplinary actions. **Medical/health grade masks** 

are the best protection against the omicron variant and these masks should be used, rather than cloth.

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 <a href="https://bringbackthepack.unm.edu">https://bringbackthepack.unm.edu</a> regularly for general UNM updates about COVID-19 and the health of our community.

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.

COVID-19 Symptoms and Positive Test Results: Please do not come to a UNM campus if you are experiencing symptoms of illness or have received a positive COVID-19 test (even if you have no symptoms). Contact your instructors and let them know that you should not come to class due to symptoms or diagnosis. Students who need support addressing a health or personal event or crisis can find it at the Lobo Respect Advocacy Center. The instructor will try to have a few disposable masks available in the classroom on a first-come, first-served basis.

#### 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 <a href="mailto:vrc@unm.edu">vrc@unm.edu</a>. The Veterans Coordinator at UNM-Valencia is in the Student Services Office, at 505-925-8560.

## **Grading Policy: COURSE AVERAGES:**

Attendance/Class Participation	10%	
MyMathLab Homework	15%	
Written Homework	20%	
Projects (5 in X, 4 in Y, 4 in Z)	20%	
Cumulative Final Exam*	35%	

Total 100%

<sup>\*</sup>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	
$\mathbf{A}$	70% or better <b>AND</b> 90% or better	
В	70% or better <b>AND</b> 80% to 89%	
C	70% or better <b>AND</b> 70% to 79%	
CR	70% or better <b>AND</b> 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**

Last day to ADD sections and CHANGE credit hours on LoboWEB.	21-Jan
Last day to CHANGE grade mode on LoboWEB.	21-Jan
Last day to DROP without "W" grade and receive a 100% tuition refund on LoboWeb.	28-Jan
Last day to ADD sections and/or CHANGE credit hours with form, \$10 per transaction. After this	28-Jan
date \$75.	<u>Form</u>
Last day to DROP without Dean's Permission on LoboWEB.	25-Feb
Last Day for CHANGE grade mode with form.	11-Mar
	<u>Form</u>
Last Day to ADD sections and/or CHANGE credit hours with forms \$75 per transaction.	11-Mar
	<u>Form</u>
Last day to DROP with Dean's Permission with form.	11-Mar
	<u>Form</u>

Math 1215: Intermediate Algebra (Fall 2021) (Course outline is subject to change)

Math 1215: Intermediate Algebra (Fall 2021) (Course outline is subject to change)  1st 8 WEEKS MATH 1215Z Schedule				
Week	Dates	Sections / Topics	Assignments Due	
1	01/17 - 01/22	Read Unit 10: Sect. 13.1, 13.2, 13.3	Begin work on assignments due 01/30 shown below	
2	01/23 - 01/30	Unit 10: Sect. 13.1, 13.2, 13.3 (Continued)	MML Unit 10 homework due 01/30 Written Unit 10 homework due 01/30 Project 10 due 01/30	
3	01/31 - 02/06	Read Unit 11: 13.5, 13.7	Begin work on assignments due 02/13 shown below	
4	02/07 - 02/13	Read Unit 11: Section 14.7	MML Unit 11homework due 02/13 Written Unit 11 homework due 02/13 Project 11 due 02/13	
5	02/14 - 02/20	Read Unit 12: Sec 15.2, 15.3	Begin work on assignments due 02/27 shown below	
6	02/21 - 02/27	Read Unit 12: Sects. 15.4, 15.8	MML Unit 12 homework due 02/27 Written Unit 12 homework due 02/27 Project 12 due 02/27	
7	02/28 - 03/06	Read Unit 13: Section 17.2	Begin work on assignments due 03/11 shown below	
8	03/07 - 03/11	Read Unit 13: Section 17.3  Review and Final Exam	MML Unit 13 homework due 03/11 Written Unit 13 homework due 03/11 Project 13 due 03/11 Final Exam Due 03/11	
	03/11	LAST DAY OF CLASS - THE FINAL EXAM MUST BE COMPLETED BY MIDNIGHT		