MATH 1215-554: Intermediate Algebra –Fall 2020 (Dual Credit)

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Office: A-134   **Phone:** 925-8611
OFFICE HOURS: Online by email at any time
Zoom link T/W/TH 10:15am-12:15pm https://unm.zoom.us/my/profengler

Sect.	CRN	Class Time
554	68110	Via Valencia HS Instructor as per VHS schedule

COURSE DESCRIPTION: This course is a study of linear and quadratics functions, and an introduction to polynomial, absolute value, rational, radical, exponential, and logarithmic functions. A 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 =>17 or SAT Math Section =>460 or ACCUPLACER Next-Generation Advanced Algebra and Functions =218-238.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: None. Instructional materials provided by Valencia High School instructor
Instructional videos will be posted on UNM Learn website to supplement High School materials.

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. Preferred operating systems are Windows or Apple.
- Access to UNM Learn. will use your UNM NetID to log into UNM Learn. You may access it directly via learn.unm.edu
- Standard or Scientific calculator. This cannot be an app on your cell phone.

ATTENDANCE/PARTICIPATION:

Here are the reasons I may drop you from the class:
- If you do not submit your projects to me by the new due dates as follows:
- Project 1 is due by October 2tnd
- Project 2 is due by October 30th
- Project 3 is due by November 20th
  .

PROJECTS:
During the semester, three projects will be assigned. If available, you may have some class time to begin or work on the project, but it will be designed for you to complete at home. 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 10% of your overall course grade.

EXAMS:
- There will be two exams during the semester. Each is worth 7.5% of the overall grade. The final exam will be worth 20% of your grade.

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

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

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

COURSE AVERAGES:

Course average from VHS Instructor	40%
Projects (3)	10%
Homework(13)	15%
Term Exam (2)	15%
Cumulative Final Exam*	20%

Total100%

I will drop the lowest grade for the homework.
*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.

	12/4/2020	**Last day to drop with Dean's permission/change grade mode with form(5pm)**
16	12/7/2020	**Final Exam Week**

MATH1215 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. 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.

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. Perform operations with radical expressions.
   8. Perform operations with rational expressions.
   9. Solve absolute value inequalities in one variable.

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