

## MATH 1215: Intermediate Algebra - Fall 2019 (Online Lecture Class)

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**Office:** Academic Faculty Offices

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**OFFICE HOURS:** Math Center/LRC M/W 1:30 pm-2:30 pm  
Academics Office M/W 9:00 am-10:00 am  
Online hour M 9:00 am-10:00 am or by appt.  
Other Hours by Appt. only

Sect.	CRN	Class Time	Days	Location	MML Course Code
503	64253	Online	Online	Online	goodman11332

**COURSE DESCRIPTION:** This course is a study of linear and quadratic 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  $\Rightarrow$  17 or SAT Math Section  $\Rightarrow$  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:** "Developmental Mathematics," 2nd edition, by Sullivan, Struve, Mazzarella.

**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.

**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).

### 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.
- 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 login to the MyMathLab (MML) homepage run the Installation Wizard to make sure 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](http://mymathlab.com).
- Access to UNM Learn. will use your UNM NetID to log into UNM Learn. You may access it directly via [learn.unm.edu](http://learn.unm.edu)
- Standard or Scientific calculator. This cannot be an app on your cell phone.
- Adobe Reader (a free download), preferably version 11.0 or better.

**Participation and Progress:** Participation includes

- Attendance. Log-in to Blackboard Learn and MyMathLab **at least** once a week!
- Questions. Contact me through the discussion board, Ask my Instructor in MyMathLab, or office hours with questions from the homework. My job is to help you learn the material, I cannot do that unless I know where you are misunderstanding or “not getting it.”
- Show Progress. Turn in Guided Notes done and complete other assignments in a timely manner, ask questions from the Computational Assignments, earn a score of 90% on a Quiz to show you are ready for your next Unit. I will also generate time and progress reports from your work in MML.
- Turn Work in by Due Date. Ten points are available weekly for work turned in on time. 3 points for GN, 3 points for CA, 4 points for Unit Quiz. These points cannot be made up. ***You need to work on this course throughout the week, so you can log your 9 to 12 hours per week.***

**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.

**Absences:** Since this is an online class, logging into Learn and MyMathLab is a requirement to complete your assignments. This is an online class, but that does not mean self-paced. Each Unit, Project, the Guided Notes and the Computational Assignments all have due dates. These can be found on the schedule posted in Learn as well as in MyMathLab and in each Unit Module.

**Netiquette:** This is a guide for how to communicate socially online--proper behavior. Your participation in this course is expected to be academic and constructive. It is important to recognize that each of us may have a different point of view. It is acceptable to debate a topic using facts and citations to support your stance or viewpoint; however, you should conduct your debate in a professional tone.

I've attached the following link for review of UNM's Discussion and Blog Netiquette policy:

<http://online.unm.edu/help/learn/students/pdf/discussion-netiquette.pdf>

There are some discussion board sections available for you to ask math questions, form study groups, or just vent and chat with each other. I will be checking the discussion board at least

once a day to answer questions or help whenever I can. Make sure you use proper Netiquette as described in the policy I have posted a link to.

Here are the reasons I *may* drop you from the class:

- If you are not registered in MML and completing assignments by the end of the first week you are in the class.
- If you miss completing the start here section in Blackboard Learn by the end of the second week.

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

**EXPECTATIONS:** Students are expected to conduct themselves in a polite, courteous, professional and collegial manner. **Follow Netiquette Guidelines** when communicating with me or other class members.

**How to complete your work for this class:**

The course topics are split into 13 units. Below is how you will progress through the material:

**Guided Notes (GN):** Guided notes are required! These are notes you should print and complete using your text. After the first day of class, these notes will be posted in UNM Learn or your instructor may upload them in the Document Sharing folder in MML. Completed notes will be due before you start the Computational Assignment. Embedded in the Guided Notes will be the password to open the corresponding Computational Assignment in MML. Your score on each will be out of **10 points**. Guided Notes are worth 10% of your overall course grade.

**Computational Assignment (CA):** Computational Assignments are required! The Computational Assignments are where you practice the concepts you need to learn. You will complete the Guided Notes and the Computational assignment for each unit before taking the unit quiz. For those you need to complete, linked to many questions are Skill Builder problems. If you are struggling with a particular problem, the program will direct you to simpler problems to practice, helping pinpoint where you are having difficulty. Be sure to work the Skill Builder problems linked to those you struggle with. Your score on each will be out of **10 points**. Computational Assignments are worth 10% of your overall course grade.

You will need to score a 75% or better on the Computational Assignment, before the Unit Quiz will open.

**Unit Quizzes:** Quizzes are required! Each Unit Quiz will be available after earning at least 75% on the Computational Assignment of the corresponding Unit. You will have **only** 2 attempts at each quiz and the last attempt must be taken by 11:59 pm on Sunday of the Unit week. I will give up to 3 (and only 3) time extensions on a quiz for the entire semester. After you use the 3 extensions, **NO MORE** will be available for any reason! Your score on each will be out of **10 points**. Quizzes are worth 20% of your overall course grade.

Sometimes MML will count a problem incorrect because you do not enter the answer in the form the program wants or for some other reason not immediately apparent. I will check your progress approximately every week and will review your quizzes to see if you can receive some points back. If you completed a Quiz and believe your score should be higher tell me and I will look at it sooner rather than later.

**Projects:** Projects are required! During the semester, three projects will be assigned. You can work with each other on these projects, but you must submit **YOUR OWN** work. Your score on each will be out of **10 points**. The projects are worth 10% of your overall course grade.

**Exams:** There will be two exams during the semester that will be written exams given during a one-week period. You will be given a formula sheet for the exam and you can use a calculator. You can **NOT** use your phone for a calculator. Each is worth 10% of the overall course grade. You will have one week to take each exam in person with me, in the testing center, or with an approved proctor. You must make arrangements to take each exam in person during that week.

**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 can **NOT** use your phone for a calculator. You are allowed to take the final **only once**. You will have one week to take the final in person with me, in the testing center, or with an approved proctor. You will be given a schedule of days and times you can choose from to take the final. 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 if you have been completing your work and showing progress, this should not be a problem.

**Late Work Policy:** I will accept Guided Notes, Computational Assignments and Projects up to a week past the due date with no penalty. After that, 10% will be taken off your score. I will accept any late work up until the end of the 14<sup>th</sup> week of classes, Sunday, November 24. **NO** late work will be accepted after that.

If you would like to make quiz corrections, you must have attempted the quiz 2 times. To make corrections, do them on a separate sheet of paper and send them to me with the quiz. You can earn back half of the points missed. This needs to be done within a week of completing the Unit.

**DO NOT** consider any of the grades posted in MyMathLab as representing your actual grade. Your grades will be updated weekly and available in BlackBoard Learn.

**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 in 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: [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 interact 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 from you respectful adult behavior.

### **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](http://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:**

Attendance/Class Participation	10%
Computational Assignments	10%
Quizzes	20%
Projects (3)	10%
Term Exam (2)	20%
Cumulative Final Exam*	30%
<b>Total</b>	<b>100%</b>

**\*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:**

<b>Letter Grade</b>	<b>Final Exam score AND Course Weighted Average</b>
<b>A</b>	70% or better <b>AND</b> 90% or better
<b>B</b>	70% or better <b>AND</b> 80% to 89%
<b>C</b>	70% or better <b>AND</b> 70% to 79%
<b>CR</b>	70% or better <b>AND</b> 70% or better
<b>D</b>	Any <b>AND</b> 60% to 69%
<b>F</b>	Any <b>AND</b> Less than 60%
<b>NC</b>	Any <b>AND</b> 69% or less

## **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. 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.***