

Math 121, College Algebra **Section 503**
Fall 2018 **CRN 57166**

Instructor: Elaine Clark **Office:** Arts & Sciences Bldg. Room 142C, Valencia Campus
Phone: 925-8618 (my office), 925-8600 (Academic office)
email: ewclark@unm.edu or send a message in Learn.

OFFICE HOURS:

I will be on campus most days (Monday through Thursday) from 10:00 AM to 3:45 PM but will hold schedule office hours as indicated below:

- In my office, Tuesday and Thursday 1:30 to 4:15 PM
 - Math Center: Monday and Wednesday 11:00 AM to 12:00 noon
- Other hours by appointment.

Response time: I will respond to emails when I am on campus for sure (see above). I will also read emails at least once a day on Fridays and Sundays unless I am out of town. If you call my office and I am not there, leave a voice mail or you may call the Academics Office to leave a message (see phone numbers above).

Be sure to check my weekly schedule posted in Learn to make sure I have not needed to change availability. Occasionally I may have an unexpected or impromptu meeting come up that takes me away from the office. It is a good idea to let me know you are coming so I don't run off.

Course Prerequisites

In order for you to enroll in this course you will need to meet one of the following criteria:

- ACT score greater or equal to 22
- SAT score greater or equal to 510
- Grade of C or better in MATH 120
- Appropriate score on AccuPlacer

Check with your advisor to determine if you meet one of these requirements.

Course Overview

College Algebra prepares you for, and is one of the prerequisites for Math 150 (Pre-Calculus), Math 123 (Trigonometry), and Math 180 (Elements of Calculus I). It is also a graduation requirement for many majors at UNM. It is the study of equations, functions and graphs, especially those involving linear, quadratic, exponential, and logarithmic functions. You will also receive an introduction to polynomial and rational functions and their graphs. And you will be asked to handle various types of applications of these functions.

This course emphasizes algebraic problem solving skills, so be ready to work those algebra muscles! If it has been a while since you have done any algebra, plan on spending time “catching up” during the first few weeks of the semester.

Student Learning Outcomes

A list of the Course Goals and Student Learning Outcomes as posted on the main campus website for this course are listed at the end of this syllabus and on your schedule. You should skim through these to know what to expect from this course.

Text and Tools - Required

The text for this course is **College Algebra, Tenth Edition, by Sullivan**. The bookstore should have hard copies of the book with MML access codes, or just the access codes available. Or you may purchase the access code when you register in MML for our course. If you want a hard copy of the book, rather than just reading the etext, be sure you buy one with a valid MML access code.

1. You will need a 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.
2. You will need a Student Access Code which can be purchased from the Valencia campus Bookstore or online (credit card required) when you register for the course at <http://pearsonmylabandmastering.com/>.
3. You will need to register for our course in MyMathLab. Go to <http://mymathlab.com/> or <http://pearsonmylabandmastering.com/> and follow the steps to register. Our course ID is:

COURSE ID: clark59345

Once you register, run the Installation Wizard to make sure you have all the appropriate software installed on your computer.

4. You will need access to Blackboard Learn. This is the primary program we will use for communication in the class. You will use your UNM NetID to log into Learn. You may access it directly via <http://learn.unm.edu>
5. You will need to use a *scientific* calculator for this course. You need not own a *graphing* calculator, any assignments that require the graphing of functions you can also do using free software on the internet.
6. You will also need administrative rights to download free software or plug-ins or add-ons on the computer you plan to use for this course. If you do not own a computer, and you are in the face-to-face course, be sure you schedule time to spend in the computer labs on campus to make sure all of the programs will work properly.

Other software requirements:

- Those needed to properly run MyMathLab. This includes the latest Javascripts and QuickTime player (both free downloads). Be sure to run the Installation Wizard in MML the first time you login to our course.
- **Adobe Reader** (a free download), preferably version 11.0 or better.
- To run MyMathLab I have had good luck with Google Chrome, but Mozilla Firefox and Safari also work. I am not sure how well these programs will work on Linux computers, so if you have a Linux operating system we will need to talk.
- To run Blackboard Learn and all of the programs embedded in it, you may have better luck with Mozilla Firefox.

You will need high-speed internet and the ability to upload free software to access the online materials. All the programs we use should be fully compatible with mobile devices – phones, tablets, laptops, etc.

Time for This Course: Plan right now 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 it is not likely you will pass if you don't.

Course Grade

Your Course Grade will be determined in the following way:

- Average on Homework Assignments 20%
- Average Participation Points 10%
- Average on Unit Quizzes in MML 20%
- Average on Projects 10%
- Midterm Exam 10%
- Departmental Final 30%

You must score at least a 70% on the final exam *and* have at least a 70% course average to earn a passing grade in the course.

Depending on the grading option you have chosen, your final course letter grade will be determined as follows:

Letter Grade	Final Exam score AND Course Average
A+	70% or better AND 98% or better
A	70% or better AND 92% up to but not including 98%
A-	70% or better AND More than 89% but less than 92%
B+	70% or better AND 88% to 89%
B	70% or better AND 82% up to not including 88%
B-	70% or better AND More than 79% but less than 82%
C+	70% or better AND 78% to 79%
C	70% or better AND More than 69% but less than 78%
CR	70% or better AND More than 69%
D+	Less than 70% AND More than 69%
D	Any AND More than 60% but less than 69%
D-	Any AND 50% up to 60%
F	Any AND Less than 50%
NC	Any AND Less than or equal 69%

To calculate your grade at any point in the semester you can perform the following calculations:

Before Midterm Exam

$$\frac{(\text{HW Ave} * 0.20) + (\text{Part. Ave} * 0.10) + (\text{Quiz Ave} * 0.20) + (\text{Project Ave.} * 0.10)}{0.60}$$

Before Final Exam

$$\frac{(\text{HW Ave} * 0.20) + (\text{Part. Ave} * 0.10) + (\text{Quiz Ave} * 0.20) + (\text{Proj Ave.} * 0.10) + (\text{Mid} * 0.10)}{0.70}$$

Check Learn regularly for postings of assignment due dates and updated averages for each category.

W grade: If you withdraw from the course after the “census date” (after 5:00 PM on September 7) you will be assigned the W grade. If you drop before 5:00 PM on September 7, the course will not show up on your transcript and you will be eligible for a 100% refund. I can drop you upon specific request any time before grades open at the end of the semester.

Reasons I will drop you from the course:

- Any student who misses the first two class days of the semester will be dropped.
- Any student who misses more than three class days during the first three weeks may be dropped.
- Any student who is not registered in MyMathLab (MML) and completing work in there by the end of the first week of class, August 24 will be dropped. You can have access to our course in MML for 14 days before you have to pay.
- If you specifically request me to drop you from the course.

Do not count on me to drop you, however. If you plan to not complete the course, be sure to process a drop yourself.

Homework: The material in the book is divided into Units. Each unit corresponds to what I plan to cover in one week of class. There are Homework assignments posted in MML to complete after each class meeting. This means you will have homework assignments in MML due generally on Wednesdays by 11:59 PM and on Mondays by 11:59 PM. You will need to score at least an 80% on these assignments for the unit quizzes to open. Each Homework assignment is worth 10 points each. Your grade is your score in MML times 10.

You are automatically allowed to work past deadline on Homework assignments, you won't need to ask for extensions, **but** do not get behind.

Please use the Ask My Instructor button if you need help!

Participation: Participation includes

- Attendance. Show up to class!
- Activity. We will be doing short group activities from time to time during class meeting times.
- Questions. Bring your 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.”

You need to work on this course throughout the week. Be sure to plan around 9 to 12 hours per week outside of class as well!

You will receive **10 Participation** for every class day you are present, In-Class Activities are worth **10 Participation Points**.

Absences: I do not require you to give me any sort of documentation for up to three (3) absences, they will be automatically excused. Be sure to ask about any in-class activity we did on the day(s) you missed, those points are *not* excused. Once you have used up your three absences, you cannot have any more absences excused.

Unit quizzes: For each Unit there is a Quiz you are to complete in MML. These quizzes are generally due on Tuesdays by 11:59 PM. You will need to score 80% on the homework in MML before each quiz will open. You are allowed 3 attempts on each quizzes. I consider mastery a score of at least 75 to 80%. You should strive to achieve this score. If not, study the material again and retake the quiz. Each **unit quiz is worth a maximum of 10 quiz/test points**.

The quiz deadlines are fixed. If you find yourself falling behind, *you can ask for up to three extensions on quizzes*. Try not to do this very often because another unit will begin and you will have work to do in that unit as well.

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 unit quizzes to see if you can receive some points back. If you want to email me any work or explanation of why you missed a question, this can result in more partial credit.

DO NOT consider any of the grades posted in MyMathLab as representing your actual grade. Starting about the fourth week of the semester I will post and update your grades regularly in Blackboard Learn.

Projects: You will be assigned two or three projects to complete during the semester, each worth 100 points. These projects may be completed in groups, if you have permission from me ahead of time. *If you do not ask for permission to complete the project in a group, and I receive papers from two or more people that are nearly identical, all the parties involved may receive a 0 for the project*

Midterm and Final Exams: The midterm exam will cover material from the first six units and will be on Tuesday, October 9, right before Fall break. The final is a cumulative, departmental final and is scheduled for Tuesday, December 11. The midterm counts 10% of your course grade and the final counts 30% of your course grade. Also, you must score at least a 70% on the final exam to pass the course.

All written assignments –unit activities, projects, exams – will be graded within a couple of days of when I receive them, definitely within a week of receipt.

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

- **Ask My Instructor:** Do not be afraid to click on the Ask My Instructor button in MyMathLab. This button is available in the computational assignments and in the quizzes.
- **Office Hours:** I have office hours Tuesday through Thursday in various places. 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. However, for your Guided Notes and other work meant to be done individually are too much alike, all parties involved will lose points. ***For example, if I receive Guided Note submissions from two or more people that are identical, all students involved will receive a zero for that assignment.***
- **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.
- **Online Resources:** In Blackboard Learn I will post various resources for you. These will include a link to Kahn Academy, a folder with SmartPen recordings that I have created, recordings of the face-to-face class, and, possibly, a folder with mini-lectures recorded using MediaSite. Be sure to check out these resources and open the sample recording to make sure they work properly.

Other Important Information:

Equal Access: If you have a documented disability, please provide me with a copy of your letter from Equal Access Services as soon as possible to ensure that your accommodations are provided in a timely manner. It is up to you to obtain documentation of a disability. If you are a Valencia campus student, contact Equal Access Services at Valencia Campus, Jeanne Lujan at (505)925-8910 and <http://www.unm.edu/~vcadvise/equalaccess.htm> . If you are a main campus student you can receive documentation from the main campus Equal Access office <http://www.unm.edu/~vcadvise/equalaccessfaq's.htm> . I will not guarantee accommodation without the appropriate documentation.

Plagiarism and Not Doing Your Own Work:

It's a bad idea to plagiarize or to have other people do your work for you. UNM has specific policies concerning academic dishonesty: <https://policy.unm.edu/regents-policies/section-4/4-8.html> There are various tools now developed to help determine if the person enrolled in an online course is actually the person completing the work. I may be implementing some of these tools as the semester progresses, especially if there is an obvious need to do so.

Don't Cheat! Cheating, in my opinion, is any behavior that short circuits *your* learning. This can range from mindlessly mimicking the worked out examples in the MML computational assignments, to simply copying someone else's solution, to paying someone to complete the course for you. I won't always be able to detect when you have cheated, at least not at the time you cheat, but the chances of you passing the midterm and final exams goes down considerably the more you cheat. Save yourself some time and money and put in the effort now to learn the material for the course.

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 Student Learning Outcomes (These are what I refer to as the Course Goals)

By the end of the course, students will be able to

A. Understand the concept of a function

1. Apply the definition of a function
2. Identify domain and range. Interpret in context when appropriate.
3. Use function notation to evaluate functions.

B. Build New Functions from Existing Functions

1. Use graphing transformations
2. Use function arithmetic
3. Find inverse functions

C. Build and Analyze Graphs

1. Understand the relationship between a function's equation, table and graph.
2. Identify or sketch the following key features of a graph:
 - intercepts;
 - intervals where the function is increasing, decreasing, positive, or negative;
 - relative maximums and minimums;
 - symmetries;
 - slope;
 - vertex;
 - end behavior.
3. Create graphs using key features.
4. Write the equation of a function or circle given its graph based on the key features shown. (reverse of above outcome)
5. Interpret key features of functions in context.

D. Apply Algebraic Techniques

1. Evaluate numeric expressions in exact form and find decimal approximations for irrational numbers.
2. Solve equations and inequalities
3. Simplify algebraic expressions to analyze functions and graphs.

Preliminary Schedule (subject to change as needed)

Week	Date	Day	Assignments Due	Topics in class	Sections
1	8/21	Tues.	Ch. R test in MML	Introduction, Review	R.1, R.2, R.4 R.5, R.7
	8/22	Wed.			
	8/23	Thurs.			
2	8/27	Mon.	Ch. R test in MML second try	Solving Linear Eqs.,	1.1, 1.5
	8/28	Tues.	Uni 1 Part A HW in MML	Solving Linear Eqs.,	
	8/29	Wed.		Applications of Linear	
	8/30	Thurs.		Eqs., Solving Ineqs.	1.5, 1.7
August 31 by 5:00 PM - Last day to add online					
Labor Day Holiday, Monday, September 3					
3	9/3	Mon.	Unit 1 Part B HW in MML	Graphs of Lines, Properties of Linear Functions, Systems of Linear Equations	2.3, 4.1
	9/4	Tues.	Unit 1 Quiz in MML		
	9/5	Wed.	Unit 2 Part A HW in MML		8.1
	9/6	Thurs.			
Sept. 9 - Last day to drop w/out grade, add w/ form				Functions	Project 1
4	9/10	Mon.	Unit 2 Part B HW in MML	Solving Quadratic Eqs., Radical Expressions and Eqs., Distance Formula, Pythagorean Theorem	R.8, 1.2, 1.4
	9/11	Tues.	Unit 2 Quiz in MML		
	9/12	Wed.	Unit 3 Part A HW in MML		R.3, 2.1
	9/13	Thurs.			
5	9/17	Mon.	Unit 3 Part B HW in MML	Properties of Graphs, Functions, Graphs of Functions	2.2, 3.1
	9/18	Tues.	Unit 3 Quiz in MML		
	9/19	Wed.	Unit 4 Part A HW in MML		3.2
	9/20	Thurs.			
6	9/24	Mon.	Unit 4 Part B HW in MML	Ops. on Functions, Properties of Functions, PW defined Functions, Ave. Rate of Change	3.1, 3.3
	9/25	Tues.	Unit 4 Quiz in MML		
	9/26	Wed.	Unit 5 Part A HW in MML		3.3, 3.4
	9/27	Thurs.			
7	10/1	Mon.	Unit 5 Part B HW in MML	Transformations of Functions	3.5
	10/2	Tues.	Unit 5 Quiz		
	10/3	Wed.	Unit 6 HW in MML		
	10/4	Thurs.	Review for Midterm Exam		
8	10/8	Mon.	Unit 6 Quiz in MML		
	10/9	Tues.	Midterm Exam		
Fall Break, Thursday and Friday, October 11 & 12					
9	10/16	Tues.	Unit 7 Part A HW in MML	Domains, Comp. of	6.1
	10/17	Wed.		Functions, One-to-One	go over midterm
	10/18	Thurs.		Functions, Inverses	6.2
10	10/22	Mon.	Unit 7 Part B HW in MML	Exponential Functions, Logarithmic Functions, Properties of Logs	6.3, 6.4
	10/23	Tues.	Unit 7 Quiz in MML		
	10/24	Wed.	Unit 8 Part A HW in MML		6.4, 6.5
	10/25	Thurs.			

Week	Date	Day	Assignments Due	Topics in class	Sections
------	------	-----	-----------------	-----------------	----------

Preliminary Schedule (subject to change as needed)

11	10/29	Mon.	Unit 8 Part B HW in MML	Solving Equations, Applications with Exponentials and Logs	6.6, 6.7 Project 2 6.7, 6.8
	10/30	Tues.	Unit 8 Quiz in MML		
	10/31	Wed.	Unit 9 Part A HW in MML		
	11/1	Thurs.			
12	11/5	Mon.	Unit 9 Part B HW in MML	Circles, Applications of Quadratics, Completing the Square	2.4 4.3
	11/6	Tues.	Unit 9 Quiz in MML		
	11/7	Wed.	Unit 10 Part A HW in MML		
	11/8	Thurs.			
November 9 Last day to drop without Dean's permission					
13	11/12	Mon.	Unit 10 Part B HW in MML	Rational Expressions and Equations, Divide Polynomials, Rat'l. Functions	R.4, R.7 5.2
	11/13	Tues.	Unit 10 Quiz		
	11/14	Wed.	Unit 11 Part A HW in MML		
	11/15	Thurs.			
14	11/19	Mon.	Unit 11 Part B HW in MML	Wrap up Unit 11	
	11/20	Tues.	Unit 11 Quiz in MML		
Thanksgiving Break, Thursday through Sunday, November 22 -25					
15	11/26	Tues.		Polynomial Functions	5.1
	11/27	Wed.	Unit 12 HW in MML		
	11/28	Thurs.	Unit 12 Quiz in MML		
16	12/4	Tues.	Review for Final Exam		
	12/6	Thurs.			
December 7 Last day to drop with Dean's permission and form					
	12/11	Tues.	Final Exam		