

MATH 121 College Algebra Sect. 504 - Online

Instructor: Dr. Jinxia Xie

Email: jxie@unm.edu or send a message in Learn. I will check email Monday mornings through Thursday afternoons and usually on Sunday afternoons unless I am out of town or it is a university holiday. Expect a response within 24 hours to email messages sent Sunday afternoon through Thursday. If you send me a message on Friday or Saturday, expect a message no later than the following Monday.

Online Office Hour: Thursday 3:00 pm to 4:30 pm

For online office hours, we can use Skype for business. As a student, you have free access to Skype for business. You just have to download the application by going to Lobomail.unm.edu and following the links. We can use the chat feature, the video conference feature, and we can also talk on the phone. Other hours by appointment.

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
- Compass Algebra score greater than 54
- College Algebra placement score greater than 33

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 MyMathLab (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 text, be sure you buy one with a valid MML access code or you can buy one used, but be aware *you will need access to MyMathLab*.

1. You will need reliable access to a computer or tablet, and Internet. Though assignments should be accessible on a mobile device, I recommend using a computer (laptop or desktop).

2. 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. Otherwise, you can create an account when you register in MyMathLab for our class.
3. 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 <https://www.pearsonmylabandmastering.com/northamerica/mymathlab/>.
4. You will need to register for our course in MyMathLab. Go to <http://mymathlab.com/> or <https://www.pearsonmylabandmastering.com/northamerica/mymathlab/> and follow the steps to register. **Our course ID is: smith85385**
Once you register, run the Browser Check to make sure you have all the appropriate software installed on your computer.
5. You will need access to Blackboard UNM Learn. This is the primary program we will use for communication in the class. You will use your UNM NetID to log into UNM Learn. You may access it directly via <http://learn.unm.edu>.
6. 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.
7. 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, 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 Adobe Flash Player and Adobe Reader. Be sure to run the Browser Check the first time you enter our course in MML.
- 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.

You will need reliable access to a computer, 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. This time cannot all be lumped on the weekend or in one day; you will need to spread out the time you allot to this course. 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 by a weighted average of scores in the following categories:

- | | |
|----------------------------------------------------------|----------------|
| • 11 Guided notes with lowest score dropped | 10 points each |
| • 11 Computational Assignments with lowest score dropped | 10 points each |
| • Participation points | 100 points |
| • 11 Quizzes with lowest score dropped | 20 points each |
| • Five Projects | 20 points each |
| • Midterm Exam | 100 points |
| • Final | 300 points |
| • Total | 1000 points |

You must score at least a 70% (210/300) on the final exam and score a total of at least 700 points to pass the class.

Your letter grade will be based on the following chart. I do not give a score of C- since that is not considered passing.

Letter Grade	Final Exam score AND Course Average
A+	960-1000
A	920-959
A-	890-919
B+	860-889
B	820-859
B-	800-819
C+	780-799
C	750-779
D	700-749
F	0-699

To calculator your current grade at any time, add up the total points received and divide by the total points possible *so far*. To get the point total for a quiz or computational assignment, divide the percent score by 10. For example, if you score a 74%, you receive 7.4 points for that assignment.

Note: Your grade can change drastically after the final because it is worth more than the other assignments.

Check Learn regularly for postings of assignment due dates. Also, to ensure that you are completing *all* assignments for the class, the computational assignments will be password protected, and quizzes will not open until you score at least a 60% on the computational assignment. Be sure you are following the required assignments in each unit so you can find the password to enter to complete your computational assignments. After the first project I will post and update your grades regularly in Blackboard Learn.

W grade: If you withdraw from the course after the “census date” you will be assigned the W grade. I reserve the right to drop you if you have not logged in and completed the orientation module and course agreement by the third day of classes. If you drop before 5:00 PM New Mexico time on the census date, the course will not show up on your transcript and you will be eligible for a 100% refund. I can also drop you upon specific request any time before grades open at the end of the semester.

Reasons I will drop you from the course:

- Student who does not log into Learn and complete orientation and course agreement during the first three days of class.
- Student who has not begun working in MML by Friday, August 31. 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.

If you do not log into Learn and complete the orientation and course agreement by the third day of classes, or within three days of registering late for this course, you will be dropped.

Homework: Your homework will come in two parts with a total of 200 points possible:

- **Guided Notes** (11 of these worth 10 points each and the lowest score dropped; total 100 points), and
- **Computational Assignments** (11 of these worth 10 points each and the lowest score dropped; total 100 points).

Guided Notes (each worth 10 Homework Points) – These questions come from the sections of the book you are supposed to read *before* completing the Computational Assignments. These assignments will be posted in Learn in the appropriate folder for each unit. **Do not skip these assignments.** Embedded in the notes will be a statement giving you the password to open the corresponding Computational Assignment. Do not share this password with anyone.

Print out the Guided Notes for the unit that are posted in Learn. I have given them to you in PDF format to actually make it more difficult for you to complete these electronically. It is difficult to type in the proper mathematical notation (unless you know how to use a math editor) and almost impossible to sketch graphs. Much quicker to do these “by hand.” Once you have the questions in front of you, you need to go to that section of your book.

- On the homepage in MML you will see a button in the left toolbar that says eText or HTML ebook. Click on this button. If you selected to view the eText, this is where you may encounter a problem if you do not have the correct add-ons or apps installed. If you are using a screen reader, you should open the HTML ebook instead.
- Check which section the Guided Notes questions are about, and then select the folder for the correct chapter.
- Next to the chapter name you will see an arrow or a plus sign. Click on that. This will open a drop-down menu listing each of the sections in the chapter. Select the correct section.

Once you have completed these do the following.

1. Scan them into a single document. Use a mobile app such as “tiny scanner” if you don’t have access to a scanner.
2. Submit them for a grade on Blackboard Learn.

Your grade on the guided notes is based on percent complete. I grade on completion and work shown. If you answered all of the questions and showed your work for the computational problems, you will receive 10 out of 10 points. If you left questions blank, then you will receive points based on the percent completed. I do look at select questions in the notes to determine if you understand the process. I do not grade on accuracy on all answers but will email you if you do not show understanding on the select ones I do review fully. Also, if you do not understand a problem in the guided notes, feel free to write in there that you did not understand. I will get back with you and you can resubmit to earn the points back.

Computational Assignments (each worth 10 Homework Points) – These questions are posted in MML. Here are instructions for accessing these assignments.

1. On the tool bar in MML (left side of window on home page), click on Assignments.
2. In the window that opens, at the top you will see buttons labeled “All Assignments,” “All Chapters,” and “Show All.” Likely when you first go in all assignments will show in the list below.
3. In the assignments list, the columns show the due date, name of the assignment, time limit (I don’t put any on these), number of attempts (you will have 3 attempts on quizzes), and Gradebook score.
4. Click on the assignment you want to complete. If the hyperlink is no longer active this means you are attempting to access it after deadline.

You are automatically allowed to work past deadline on Computational Assignments, you won’t need to ask for extensions, **but** do not get behind. **The quiz for that unit will not open until you have scored at least a 60% on the Computational Assignment.**

Unit quizzes: I have divided the material in the book into 11 units. These divisions include usually two or three sections of the text but may include material from only one section or as many as five. After you

complete the homework for the unit (both the guided notes and the computational assignment) then take the quiz on that material. You are allowed 3 attempts on these 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. The quiz *will not open for you until you have scored at least a 60% on the Computational Assignment*. Each **unit quiz completed is worth a maximum of 20 quiz/test points**. There will be 11 scores in this category, each worth 20 points. I will not count the Chapter R test score toward the final grade and I will drop the lowest quiz score, so there is a total of 200 points possible.

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. Use the gradebook in MML only to review your work and see what you missed so you can correct it.

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

Participation: Participation is required for this course. In the folder for each unit in Learn you will find a list of ways you can earn Participation Points (PP). Below is a partial list of what you can do to earn these points.

- Watch the video I provided in our class to show you information about how to navigate our class specifically. Also, fill out the course agreement, sign it and date, and then send it to me (**required**; worth 10 PP). *You will be dropped from the course if you do not submit the course agreement.*
- Complete Participation Activity for the unit (if there is one) posted in Learn (**required**; points vary, usually 10 PP each).
- Ask me questions! You will receive 1 participation point for each Ask My Instructor question you email me. Also, any other questions you email me or message me about can earn participation points. These are **optional**.
- Document tutoring you have received (email me to find out how to document tutoring). **Optional**; 5 PP for each hour documented.
- Attend review sessions or office hours either in person or online. **Optional**; Up to 5 points for attending office hours or attending review sessions.

There will Participation Activities you will need to complete, Completing these is a good way to earn participation points.

Projects: You will be assigned five projects to complete during the semester, **each worth 20 points**. *These projects will emphasize concepts that the book does not cover well and are a required part of the learning objectives, so they are required! Don't ignore them.*

Participation Activities and Projects are graded based on correct answers and correct methods of solution.

Midterm and Final Exams: The midterm exam and the departmental final exam must be taken in person. If you are an online student and cannot come to Valencia Campus to take these exams, you will need to make arrangements to have the exam proctored. Talk to me as soon as possible about how to find a proctor. The midterm will be worth 100 points and counts 10% of your course grade and the final will be 300 points and counts 30% of your course grade. Also, you must score at least a 70% on the final exam to receive a passing grade for this course.

Working Ahead and Late Assignments: It is conceivable that you may be able to work ahead on your assignments. If I find you jumping around too much or not taking the time to complete the Guided Notes, unit activities, or projects before attempting the work in MML, I will change how these are assigned to make you slow down and learn the material rather than just try to “bash tests” to get through.

If, on the other hand, you find yourself falling behind, contact me as soon as possible. I will allow you to complete some assignments later than the posted deadline, but not if you haven't contacted me and made arrangements. See extension policy below.

Extensions on Assignments: If events in your life or trouble with technology require you to miss a deadline for a unit quiz I will grant up to four extensions on quizzes; *this means four quizzes, not four requests*. You will already be able to work past deadline on the Computational Assignments, so you need not request an extension for these. Guided Notes are not considered late as long as I receive them about the time the quiz for that unit is due. Projects and Participation Activities associated with a unit must be completed in the time window during which the unit is open in Learn. There are posted due dates for these assignments, which you should meet. If you turn them in early, that is excellent! However, they are designed to go with the unit in which they are posted so don't get ahead of the other assignments. If you turn in a project or activity later than the posted due date, I reserve the right to dock your score at least 10%.

All written assignments – guided notes, 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 online office hours Monday through Thursday in various time slots. Feel free to 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 Learning Center has free tutoring and open labs. Call 505-925-8907 for more information. There is also tutoring available in the STEM Center. Call 505-925-8515 for more information. CAPS on main campus also provides tutoring for which I can get documentation.
- **Other Tutoring:** If you do not live in the Albuquerque or Valencia County area you should explore other options for tutoring. If you want to earn participation points for tutoring, however, you will need to document this. There are generic online tutoring sites available on the Internet but be aware that you often get what you pay for. In other words, if it is free, it may not be that great and you will not be able to document tutoring received. Also, if you have a friend or relative help you, this may be great but there will not be an easy way to document the tutoring for participation points.
- **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 other professors have created and, possibly, a folder with mini-lectures recorded using MediaSite or some other software. Be sure to check out these resources and open the sample recording to make sure they work properly.
- **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: <http://valencia.unm.edu/students/student-services.html>.

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://valencia.unm.edu/students/advisement-and-counseling/equal-access-services.html>. If you are a main campus student you can receive documentation from the main campus Accessibility Resource Center <http://as2.unm.edu/>. I will not guarantee accommodation without the appropriate documentation.

Netiquette and Behavior Expectations: One of the overriding principles in online conversations is to “craft your responses effectively.” It is sometimes difficult to remember that there are real people reading posted messages. This is especially true of online communication where others do not have the opportunity to see body language or hear tone of voice; therefore, they have a greater possibility of misunderstanding what is meant.

Please, follow these guidelines in all of your online responses and discussion postings.

- Honor everyone’s right to an opinion.
- Respect the right of each person to disagree with others.
- Respond honestly but thoughtfully and respectfully; use language which others will not consider foul or abusive. You may also use emoticons to convey a lighter tone.
- Respect your own privacy and the privacy of others by not revealing information which you deem private and which you feel might embarrass you or others
- Be prepared to clarify statements which might be misunderstood or misinterpreted by others.

A Special Note about Anger

- Do not send messages that you have written when you are angry, even anonymous ones. In the online world, angry messages are known as “flaming” and are considered bad behavior. Venting and flaming are two different things. It is possible to vent without sounding angry. Stick to the facts of what is causing you frustration.
- Do not send messages that are written all in upper case; this is the visual equivalent of SHOUTING. It is considered aggressive and is considered bad behavior. If you ever feel like shouting a message, take a deep breath and wait until you have calmed down before responding. Then, respond in a calm and factual manner.

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>.

Calculating Your Grade

Homework: There are 11 units, each with a guided notes assignment worth 10 points and a computational assignment worth 10 points. Your grade on the computational assignments will be posted in the gradebook in MML as a percent. Move the decimal to the left one place to get your points out of 10 possible. There will also be a few extra credit assignments along the way to help boost your scores. By the end of the semester the total possible points is 100 on assignments in this category. To find your current score, just add up the total number of points up to the current unit.

Participation Points: There are various activities, discussion postings, and other assignments posted in Learn worth various point values. To find your current participation points score just add up the participation points you have accumulated so far.

Quizzes: Again, there are 11 units in this class, each with a quiz worth 20 points. I may also provide some extra credit assignments that will give points in this category. By the end of the semester the total possible points for test/quiz assignments is 200. Again, in the gradebook in MML your score is recorded as a percent. You want to move the decimal point one unit left and then multiply by two to get your points out of 20 possible. For example, a 75% gives you 15 quiz points. Add up the total quiz points up to the current unit.

Projects: I am giving five projects each worth 20 points for a total of 100 points.

Midterm Exam: There will be a midterm exam in this class worth 100 points that counts for 10% of your course grade.

Final Exam: The final exam will be worth 300 points. To earn a passing grade in the class, you must score at least 210 points (70%) or better on the final exam.

To get your current *average*, add up all the points above and divide by the all the points currently possible. Note that this will be an incomplete picture of your final grade, and it may change significantly after the final exam.

Student Learning Outcomes

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.