Math 121, College Algebra Section 505 Fall 2017 CRN 38016

Instructor: Mychael Smith Office: Arts & Sciences Bldg. Room 111, Valencia Campus

Office Hours:

STEM: M 10-11; LRC: 10-11; Online: TR 11-12:45; In office: MW 10-11:45 and TR 11-12:45 and by appointment.

Phone: 925-8644 (my office), 925-8600 (Academic office)

email: <u>mysmith@unm.edu</u> or send a message in Learn. I will check email Monday through Thursday afternoon unless I am out of town. Expect a response within 24 hours to email messages sent Sunday afternoon through Thursday. If you send me a message on Friday or Saturday I may not see it until Sunday or Monday.

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 placement score

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/.
- You will need to register for our course in MyMathLab. Go to <u>http://mymathlab.com/</u> or <u>http://pearsonmylabandmastering.com/</u> and follow the steps to register. Our course ID is: COURSE ID: smith22535

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 working from the computers on campus, 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. Also, MyMathLab is supposed to be fully compatible with tablets and mobile devices.
- To run Blackboard Learn and all of the programs embedded in it, you will likely have the best luck using Google Chrome, Mozilla Firefox, or Safari. Learn is also supposed to be fully compatible with tablets and mobile devices.

You will need high-speed internet and the ability to upload free software to access the online materials.

<u>Time for This Course:</u> Plan right now to spend a minimum of *6 to 8 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 (see preliminary schedule). 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:

٠	Average on Homework Assignments (computational and guided notes)	20%
•	Average Participation Points (see below)	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 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
А	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%
В	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%
С	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**

(HW Ave * 0.20) + (Part. Ave * 0.10) + (Quiz Ave * 0.20) + (Project Ave. * 0.10) 0.60

<u>Before Final Exam</u> (HW Ave * 0.20) + (Part. Ave * 0.10) + (Quiz Ave * 0.20) + (Proj Ave. * 0.10) + (Mid * 0.10) 0.70

Check Learn regularly for postings of assignment due dates. Be sure you are completing all of the required assignments in each unit, not just the assignments posted in MyMathLab.

<u>I grade</u>: There are sometimes circumstances that will allow me to assign the I or Incomplete grade. In order to receive the I grade you need to be passing the class at three-fourths of the way into the summer session (on November 1) and have had a major circumstance occur that does not allow you to complete the work for the class. You may need to provide documentation. If you receive the I grade, you will also need to meet with me to determine how you will complete the course work to have the I grade removed. It is best if you make a plan to complete the work as soon as possible. You should not re-enroll for the course in order to have the I grade removed.

<u>W grade</u>: Also, if you withdraw from the course after the "census date" (after 5:00 PM MDT on September 9) you will be assigned the W grade. If the course is full, with a waiting list, I reserve the right to drop you if you have not logged in by the third day of classes (August 23). If you drop before 5:00 PM MDT on September 9, 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. Once the registrar opens Banner for entering final grades, I will no longer be able to drop you from the course.

Reasons I will drop you from the course:

- Student who does not log into Learn during the first three days of class
- Student who does not complete the course agreement and send it to me by August 22 or within two days of registering.
- Student who has not begun working in MML by the end of the first week of class. You can have access to our course in MML for 14 days before you have to pay.

If you do not log into Learn to find out what you need to do for the course by the third day of classes – August 23 – you will be dropped from the course.

Homework: Your homework will come in two parts:

- Guided Notes, and
- Computational Assignments.

<u>Guided Notes (each worth 10 Homework Points)</u> – These questions come from the sections of the book you are supposed to read and the Media Assignments given in MyMathLab for each unit that you should complete *before* completing the Computational Assignments. These

assignments will be posted in Learn in the appropriate folder for each unit. *Do not skip these* assignments.

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. Click on this button. Select view eText. This is where you may encounter a problem if you do not have the correct add-ons or apps installed. Check which section the Guided Notes are about, and then select the folder for the correct chapter. In the window that opens there will be a list of the sections for that chapter. Click on the correct section and it will take you to the eText.

Some of the questions in the Guided Notes are linked to recordings given in the Media Assignment for that unit. The etext should have opened in a new tab or a new window, so you can return to the original tab or window in your web browser to go back to the homepage for our course in MyMathLab. Select the Assignments link and you will see the Unit * Media Assignment. Open this assignment so that you can watch the recordings indicated in the Guided Notes and complete those questions.

You will need to complete the Guided Notes "by hand." Also, embedded in the Guided Notes for each unit will be the password you will need to open the Computational Assignment. Once you have completed these notes you may either

- Drop them off for Mychael Smith at the Academic Office at Valencia Campus,
- Scan them as PDF documents and then upload in MML or email. *I would prefer if you send me one document per set of guided notes rather than a document for each page*. If you want to send them in Learn be aware that you can only attach one document in a message in Learn. If you do not own a scanner, there are free apps you can load on your smartphone that will allow you to create a readable PDF document. Ask me about this.

Some people like to keep their Guided Notes to refer to while completing the other assignments for the unit. That is fine, but be sure to submit your Guided Notes by the Quiz deadline date.

<u>Computational Assignments (each worth 10 Homework Points)</u> – 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. You will see a list of the Media Assignments, Computational Assignments and Quizzes with their due dates. Notice that the due dates for all Computational Assignments are August 20, 2017. This is not a mistake. If you have the password you should have found while completing the Guided Notes, you will be able to open the Computational Assignment for the unit. Click on the assignment you want to complete.

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*.

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

<u>Participation</u>: 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).

Here is a general list of what you can do to earn these points. You need not complete *all* of these, but you need to complete enough of the required ones to have a good average score by the end of the class:

- 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 the other orientation assignments from the orientation module in Learn. This includes your introduction in Learn Discussion forums (see posted points for each assignment).
- Complete tech survey in SurveyMonkey (worth 10 PP) https://www.surveymonkey.com/r/J8ZNQKB
- Complete Participation Activity for the unit (if there is one) posted in learn (points vary, usually 10 PP each).
- Post to other discussions in Blackboard Learn (usually 5 PP each).
- Find and answer syllabus questions or riddles in whole-class emails sent in Learn. (worth 3 PP each).
- Ask me questions! You will receive ¼ of a 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.
- Document tutoring you have received (email me to find out how to document tutoring). 3 to 5 PP for each hour documented.
- Attend office hours either in person or online. 5 PP for each visit.
- Others as I am able to create them.

<u>Unit quizzes:</u> 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 four. 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, but do not expect to do well on the quiz if you stop at 60% on your computational assignment*. Each unit quiz completed is worth a maximum of 10 quiz/test points.

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. After the first project I will post and update your grades regularly in Blackboard Learn.

<u>Projects</u>: You will be assigned between two to four projects to complete during the semester, each worth 100 points. For these projects you may work with a partner or in a group of no more than four people. If I receive identical project submissions but no documentation that you

worked together in a group (this does not mean one person does all the work and another one copies, you have to *work together*), you will not receive points for the project. *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.*

<u>Midterm and Final Exams</u>: The midterm exam and the departmental final exam must be taken in person. If you 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 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.

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 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. Late assignments may be docked at least 10% of the grade.

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!

- <u>Ask My Instructor</u>: 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.
- <u>Office Hours</u>: Please come to my office hours either online or in person. If you can't make it, make an appointment with me.
- <u>Form study groups</u>: 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.

- <u>Free Tutoring</u>: 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.
- <u>Other Tutoring</u>: 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.
- <u>Online Resources</u>: In Blackboard Learn I will post SmartPen recordings that I have created to answer questions.

Plagiarism and Not Doing Your Own Work

It's a bad idea to plagiarize or to have other people do your work for you. Refer to the UNM-Valencia Catalog for the campus policy on "Dishonesty in Academic Matters." If I receive assignments from two or more people that are supposed to be done individually (for example, the guided notes), and that are basically identical, you will *all* receive a zero for that assignment.

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.

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.

In the discussion threads in Blackboard Learn I will provide a thread for venting. These postings will be anonymous and will allow you to vent any frustration you are feeling about MML, the course, and math in general. Sometimes I may answer these posts if there is an issue that needs addressing.

ADA and Students with Disabilities

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. The person to call for evaluation and documentation is Jeanne Lujan at (505)925-8910. Also, here is their web site so you can check out accommodations and support that is available to you: <u>http://www.unm.edu/~vcadvise/equalaccess.htm</u>.

<u>Title IX Statement:</u> 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 page 15 - <u>http://www2.ed.gov/about/offices/list/ocr/docs/qa-201404-title-ix.pdf</u>). 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: <u>https://policy.unm.edu/university-policies/2000/2740.html</u>.

Student Learning Outcomes

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

- A. <u>Understand the concept of a function</u>
 - 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.