

**University of New Mexico – Valencia Campus**  
**Math 100-506: Introduction to Algebra**  
**Fall 2014 Syllabus**

**Instructor:** Emily Miller

**Office:** Cubicles in Academics

**Office Phone:** 505-925-8600

**Time:** Tuesday, Thursday, Friday from 1:30-2:45 pm

**Place:** Tuesday and Thursday in H105 and Friday in SCC200

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**Office Hours:** See Schedule at [www.unm.edu/~efryer](http://www.unm.edu/~efryer)

**ALEKS Course Code:** Q3KNH-V4AUY

**ALEKS Financial Aid Code:** E7863-BA6C9-EE5E1-82F60

**ALEKS Webpage:** [www.aleks.com](http://www.aleks.com)

**ALEKS Technical Support:** <http://support.aleks.com> or (714) 619-7090

**Materials Needed:** You will need an ALEKS access code. These may be purchased at the bookstore or online. You will also need a three-ring binder (at least 2”-3” thick), dividers, a pencil and/or pen, some graph paper (and other paper if you want), note cards (3”x 5” or 4” x 6”), note card holder (a box, a rubber band, etc), and a set of headphones is strongly recommended.

**Math 193: Critical Thinking in Mathematics:** Math 100 and Math 193: Critical Thinking in Mathematics are co-requisites. That means that you must take the two classes together. If you are dropped from one class, you are dropped from the other class. If you have previously passed a Math 193 course, you are highly encouraged to audit the Math 193 course this semester as it will be designed to specifically aid you in passing our Math 100 course.

**Individually-Paced Mathematics:** In a “traditional” mathematics class the instructor decides what topics are covered and how much time is spent on each topic in class. The assignments are the same for everyone and everyone is expected to learn the topics covered in the same time frame. If students know a topic, they have to sit through the coverage and do all of the practice anyway. If students struggle with a topic it is up to them to get help outside of the classroom if the class coverage is not enough.

In an individually-paced class you will be using a computer program to determine what topics you know and what topics you need to work on. This gives you an individualized learning plan. The computer program will also give you cumulative review exercises to make sure you remember what you have learned. If you don’t remember, you will go back and review. If there are topics from a previous class that you don’t remember, you will go back and work on them as well. If you finish all of the topics for the class you are in, you can go ahead and work on (and possibly finish) the next class. In a nut shell, you have a completely individualized math class that is focused on what you need to learn.

This type of class does bring its own challenges. You need to have the motivation to do the work. Without hard deadlines for specific assignments, this can be a challenge for some students. You are never expected to teach yourself math topics, but because you are working at your own pace, this

means that you will need to ask for help. If you are uncomfortable asking for help, this can also be a challenge. You will have an instructor and a tutor in class for two days, as well as a third day in a computer lab with a tutor, individual tutoring sessions, instructor office hours, group tutoring and studying, an online tutor, and online resources. You should never be at a loss for help, but you will usually have to ask for it. Also, being in your own study plan can make it difficult to keep the goals of the semester in sight. In the end, you need to know the material that will be covered on the final. There will be review assignments and test anxiety quizzes throughout the semester that are designed to help you keep this in mind.

Remember: This is your math class. You are here to learn what *you* need to learn to be able to move on to the next math class and be successful in it. You will not be given assignments that are not imperative for completing this goal. You should ask for help whenever you feel like you need it. Help will often be given even when you feel like you don't need.

**Major Learning Objectives (These are the things that will be on the final):**

- Demonstrate an understanding of and correctly use the order of operations.
- Demonstrate an understanding of the concept of a variable.
- Add, subtract, multiply, and divide positive and negative numbers including fractions and decimals
- Solve linear equations in one variable
- Solve word problems that can be solved with only one variable
  - Compute perimeter, area, and volume of geometric figures.
  - Solve basic percent problems.
  - Convert basic units of measure.
  - Use ratios and proportions to solve problems.
- Graph  $y = mx + b$  and  $Ax + By = C$
- Understand and use the slope formula
- Manipulate exponents using the Product Rule, Power Rule, Power of a Product Rule, Quotient Rule and Zero Exponent
- Complete simple operations in Scientific Notation
- Add, subtract, multiply and divide polynomials
- Factor the greatest common factor
- Factor by grouping
- Factor  $ax^2 + bx + c$  where  $a = 1$  or  $a = \text{GCF}$

**Grading Policy:**

RA+	98% - and above
RA	93% - 98%
RA-	90% - 93%
RB+	88% - 90%
RB	83% - 88%
RB-	80% - 83%
RCR Credit	72% - 80%
RNC No Credit	Less than 72%

Topics Per Week Forms	18%
Objective Scores	12%
Test Anxiety Quizzes	10%
Other Activities/Assignments	10%
ALEKS Time (8 hours per week)	10%
Review Assignments/Activities	10%
Final Exam	30%

- *In order to take the final, you must complete your pie by December 5<sup>th</sup>, 2014 at 11:59 pm.*
- *You must receive at least a 70% on the final exam to pass the course.*
- *No assignments other than the final will be accepted after December 4<sup>th</sup>, 2014 at 5:45 pm for any reason.*

**Topics per Week Forms:** Each week you need to fill out a Topics per Week Form for the previous week (so, the week 3 form will be filled out and is due week 4). The purpose of filling out this form is for you to have a good idea of where you are and whether you are on track to finish on time. Weeks run from Monday to Sunday and a list of weeks with dates can be found in the course outline posted on our class's webpage. The directions for filling out the form can be found on our class webpage and students should feel free to ask for help in class. The number of objectives that should be completed each week, as well as an ideal schedule for completing objectives, can be found in our course outline.

**Objective Scores:** The passing score for each objective completed by the student will be factored into your grade. Remember that only passing grades will be factored into your grade. Any score that is not passing will not be factored in.

**Review and Test Anxiety Activities:** In both Math 100 and CTM 193, reviewing for the final and dealing with test anxiety are two main goals. Unfortunately, not all students will be at the same place at any one time. This makes review of any kind difficult. So, we will have activities that address both review and test anxiety. These activities will be based solely on participation, not on correctness. Students will receive a score based on how many questions they try, not how many they get correct. Students should use these assignments as a gauge for progress as well as an opportunity to try out test taking strategies. Review and test anxiety assignments will focus only on the objectives covered on the final and not any pre-requisite material, so they are a good place to see how much of the final material you know.

**ALEKS Time:** Each week you need to put in at least 8 hours of ALEKS time to finish the course on time. This is the 4 hours we have in class and 4 hours of homework. Some students will need more time than this to complete the course material and any extra time will count as extra credit in this score category. As soon as a student has finished their pie, they will no longer be required to put in hours.

**Homework:** In a "traditional" math class everyone has the same assignment and it can take some students half an hour and other students several or many hours to complete. Since this is an individually-paced class, it doesn't make sense for every student to have the same homework. Instead, each student is expected to work in ALEKS 4 hours per week outside of class. This is less than the amount of time the average student spends in a traditional math class on homework.

**QuickTables Access:** All students receive access to QuickTables in addition to ALEKS. QuickTables is an arithmetic review program that is set-up in a game-like fashion. Students will be given credit for hours spent in QuickTables for their ALEKS time grade.

**Other Activities/Assignments:** These will include, but are not limited to:

- The Scavenger Hunt
- Note Card and Notebook Checks
- One-on-one progress meetings to be held during class.

**Attendance Policy:** It is a well studied fact that the more absences a student has, the less likely they are to be successful in Math. The following attendance policy is designed to take into account the unique circumstances of every student while setting a standard that will give every student the most chances to be successful. When in doubt, talk to Emily. She can't help you if she doesn't know about the problem.

There are different types of absences that are worth different "absence points." If you are just plain absent, it is 1 point. If you are late to class (arrive after class starts) or leave early (leave class without finishing all of the in-class work/assignments) you have 0.2 points. If you make up an absence, either before or after your absence, you will get 0.2 points.

Attendance will be taken in all three meetings of the class. Even though Emily will not be in the lab during the Friday meeting, it is still a mandatory class meeting. If you need to make up one of these meetings you will need to get permission from the tutor running the session you wish to attend and fill out the Objectives per Week form found on our class's webpage.

The goal of this is to have the smallest number of absence points (like absence golf). If you are a student taking the class for a grade and:

- You get 1.5 points in the first two weeks of class you may be dropped.
- You get above 5.5 points any time during the semester, you may be dropped.
- You are absent three classes in a row without contacting Emily, you may be dropped.
- Any student with 3 absence points and a grade below 72% in the course may be required to create a success contract with Emily or be dropped.

There will be no exceptions to this policy unless the student has an individual success contract in place.

**Special Requirements for the First Two Weeks of Class:** Along with the requirement that a student may not have 1.5 absence points or more during the first two weeks of class, students must also complete the Scavenger Hunt. If this assignment is not completed (and the student has not contacted Emily *prior* to the due date to make alternate arrangements) the student will be dropped regardless of attendance.

**Lab Sessions:** The lab portion of class on Friday is MANDATORY. It is part of your four credit hours of class and counts toward your overall class attendance. There will also be assignments in lab that count toward your grade.

**Math Dollars:** Math dollars are the way we will handle extra credit in this class. Each math dollar is worth one extra credit point and may be used towards any grade category other than the final

exam. Most assignments may only be turned in late with math dollars. Most assignments may be turned in late for five math dollars each.

*Earning Math Dollars:* Math dollars are earned by doing extra credit assignments and in other classroom situations. Math dollars are also earned by going to tutoring and filling out the proof of tutoring sheet found on our webpage. Group studies may also earn math dollars. There will also be many activities in CTM 193 that can earn math dollars. Students will be alerted to other opportunities not listed here. Math dollars may be cashed in at any time before the end of the semester by coming to see Emily *in her office*. Math dollars are fully transferable. Emily does not keep a record of how many Math dollars you have until you turn them in. Math dollars **MUST** be turned in by the student **IN** office hours or an appointment. They will not be accepted after May 8<sup>th</sup>, 2014 at 5:45pm.

**Taking the final early:** You may take the final early if you wish. To be eligible to do this you need to do the following:

1. Finish their ALEKs pie.
2. Have all make-up work, late-work, etc done and turned in before taking the final.
3. Be passing the class (if not, come see me for a plan to make this happen).
4. Take mock finals under testing conditions and pass two of them with an 80% or better. The mock finals may be taken during some class periods (check with me), or in office hours as long as I know beforehand, or in the testing center by appointment with them.

Students who take the final early may then register for Math 101 if there is enough time left in the semester. For more information, talk to Emily.

**Expectations:** Students are expected to conduct themselves in a professional and collegial manner. Students should act like adults and treat everyone else in the class room with respect. Having cell phones going off in class is not respectful of anyone, therefore they are not permitted during class unless they are on SILENT (not vibrate) and they are only used outside the classroom. Students are adults and are welcome to leave class at any time if there is a need (bathroom, drink of water, emergency, take a break, send a text, make a call, etc). When appropriate, music may be played in the classroom while students are working. Students are welcome to listen to their own music with headphones while working. Student conversation is highly encouraged in class so long as it doesn't overly disturb the other students in class.

**Disability Statement:** 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 accommodations are provided in a timely manner.

**UNM's Policy on Dishonesty in Academic Matters:** 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, including dismissal, against any student who is found responsible for academic dishonesty. Any student who has been 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 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; and misrepresenting academic or professional qualifications within or outside the University.

See Also: <http://pathfinder.unm.edu/policies.htm#academicdishonesty>  
<http://www.unm.edu/~unmreg/Catalogs/2009-10Catalog.pdf> pages 44 and 52

**Student Support:** The Valencia Campus Library provides a quiet atmosphere for study and is an excellent resource for supplementary materials. The Learning Center, the Highway to Success, and the STEM Center offer tutorial and individualized instruction at no cost to the student.