

University of New Mexico – Valencia Campus
Math 101/102/103-504: Intermediate Algebra
Fall 2014 Syllabus

Instructor: Emily Miller

Office: Cubicles in Academics

Office Phone: 505-925-8600

Time: 6:00 – 7:15 pm Tuesdays and Thursdays

Place: SCC 200

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Office Hours: See Schedule at www.unm.edu/~efryer

ALEKS Course Code 101: 6Y4CM-QYET9

ALEKS Course Code 102: J9HGQ-A3ED4

ALEKS Course Code 103: HCFEC-AHWQL

ALEKS Financial Aid Code 101: 84E05-A930C-9A228-AAC70

ALEKS Financial Aid Code 102: CAD85-AF029-144B8-FE65F

ALEKS Financial Aid Code 103: CD429-F55A7-82008-7B8D9

ALEKS Webpage: 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 place to keep notes, a place to store other papers, a pencil and/or pen, some graph paper (and other paper if you want). You may also 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.*

COURSE DESCRIPTIONS for Math 101/102/103: The goal is preparation for MATH 121, 129 and STAT 145. Emphasis will be placed on problem solving skills. It is acceptable as credit toward graduation but not acceptable to satisfy UNM core or group requirements. The prerequisite for the courses are completion of Math 100 or test placement.

- **Math 101** includes equations and inequalities, applications and problem solving with linear equations, linear functions and the graph of a line, percent, perimeters, and areas of simple geometric shapes.
- **Math 102** includes quadratic equations, properties of exponents and scientific notation, simplifying polynomial expressions, factoring and introduction to functions. (**Prerequisite for MATH 129 and STAT 145**)
- **Math 103** includes radical expressions and equations, rational expressions and equations, the exponential and logarithm functions. (**Prerequisite for MATH 121**)

COURSE STUDENT LEARNING OUTCOMES: Upon successful completion of the course

- 1. Communication:** Students will use proper mathematical notation and terminology to communicate mathematical phrases.
- 2. Solve various kinds of equations:** Students will solve a variety of equations from systems of two linear equations, to polynomial, rational and quadratic.
- 3. Working with functions:** Students will correctly use function notation and be able to find the value of a function for a given domain.

4. Working with graphs: Students will sketch graphs of linear, quadratic and exponential functions.

5. Modeling and solving real-world problems: Students will use formulas and equations to solve real-world problems.

How the Course Works: This course is system-paced not self-paced. That means that there is a set time by which all of the material for the course must be completed in order to pass. However, how much time each student spends on each topic within that time frame is up to them and their learning needs. Students will be required to make sufficient progress each week or risk being dropped from the course. Please seek help from tutors or instructors as needed.

Grading Policy: for each course. Grades for Math 102 are independent of any Math 101 scores and similarly the grade for Math 103 is independent of any scores from Math 101 or 102.

A+		98% - and above
A		93% - 98%
A-		90% - 93%
B+		88% - 90%
B		83% - 88%
B-		80% - 83%
CR	Credit	72% - 80%
NC	No Credit	Less than 72%

Topics Per Week Forms	15%
Objective Scores	9%
Quizzes	8%
Other Activities/Assignments	8%
ALEKS Time (5 hours per week)	10%
Cumulative Final Exams	50%

- *No assignments other than the final will be accepted after December 4th, 2014 at 7:45 pm for any reason.*
- *Students must receive at least a 90% on the Math 101 final to pass Math 101 and proceed to Math 102.*
- *Students must receive at least an 80% on the Math 102 final to pass Math 102 and proceed to Math 103, Math 129 or Stat 145.*
- *Students must receive at least a 70% on the Math 103 final to pass Math 103 and proceed to Math 121.*

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 and in ALEKS under Resources. 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.

ALEKS Time: Each week you need to put in at least 5 hours of ALEKS time to finish the course on time. This is the 2.5 hours we have in class and 2.5 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 all of the course material, they will no longer be required to put in ALEKS 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 *at least* 2.5 hours per week outside of class. This is much less than the amount of time the average student spends in a traditional math class on homework.

Quizzes: There will be two types of quizzes given in class. The first type of quiz will be Test Anxiety Quizzes. They will be given on Tuesdays in the first 15 minutes of class. They will be timed. Each problem will be worth two points, one for trying the problem and showing your work, and one for getting the correct answer. There will be an additional five points for using whatever test taking strategy we are practicing that week. Topics for the quizzes and the test taking strategy for the week will be posted on the course outline. The Thursday after the quiz we will spend 10 to 15 minutes at the beginning of class going over these quizzes.

The second type of quiz is a review quiz that each student will take after they complete major benchmarks in each course. In Math 101 a Pie Slice Quiz will be given after completing the Arithmetic Readiness slice of the pie, the Real Numbers and Linear Equations slice of the pie, the Graphs and Linear Functions slice of the pie, and after the rest of the pie is completed. In Math 102 a quiz will be given after the Systems of Linear Equations slice of the pie, after the Exponents and Polynomial Expressions slice of the pie, after the rest of the pie is completed. In Math 103 a quiz will be given after completing the Exponents and Polynomial Expressions slice of the pie, after the Radicals and Rational Exponents slice of the pie, and after completing the rest of the pie. These quizzes will be fairly short. They will be designed to help the student review the most crucial parts of the topics they have just completed learning and to help the student prepare for the types of problems they will see on the finals. Students may choose to postpone the Pie Slice Quizzes until they have finished the course so that they can review for the final. All of the Pie Slice Quizzes need to be taken before the final for 101, 102, or 103.

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

- The Scavenger Hunt
- Review Assignments

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.

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.

Attendance will be taken in all meetings of the class. 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 it occurs, you will get 0.2 points and it will be "forgiven."

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 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.

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 exams. 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, going to tutoring (either in STEM, the Learning Center, or with Emily) and in other classroom situations. Group studies may also 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 December 4th, 2014.

Completing the Courses: The course outline (found on our class's webpage and in ALEKs under Resources) gives all of the dates and benchmarks that need to be met in order to complete all three courses on time. The student should be aware that Math 103 is the hardest of the three and should move through Math 101 and Math 102 as quickly as possible in order to allow maximum time to do Math 103.

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.