

University of New Mexico- Valencia Campus
Department of Science & Mathematics
Math 150- Sec. 501- CRN# 22953)
Pre-Calculus
Fall 2015

Instructor: Khaled Kassem (Mr. K) **Phone Number:** 505-925-8609
Email: Use the message tool within UNM LEARN, or khaled@unm.edu
Website: <http://www.unm.edu/~khaled> (currently under modification)
Class Schedule: Tuesday & Thursdays 03:00-04:15PM @ A-129.
Office Room: A-142E.
Office Hours: Monday & Wednesday: 04:15 -05:30 PM, Tuesday & Thursday: 04:15-06:30 PM
Text: *Pre-calculus, A Right Triangles Approach, 5th Edition, Bittinger, et al*, packaged with *My Lab & Mastering*.
Calculator: TI 83 Plus recommended, but not required and not allowed on exams.
MY LAB COURSE ID #: **kassem88723** Material is located at www.coursecompass.com.
UNM LEARN course URL: <https://learn.unm.edu>. Check this location frequently for messages and announcements. Also, find the syllabus of the course there and print a hard copy for yourself.

Please note the following guidelines for the course:

-Prerequisite: Grade of C (not C-) or better in Math 121

- Grades: Your grade will be based on your performance on the following assignments and exams. Your instructor may also give short in-class quizzes and special homework assignments that will contribute to your grade. To receive a C grade, or better, for this course you must have at least a 70% grade on the final exam **and** a 72% overall average.

In-class Quizzes	100 points (6 short quizzes with 20 points each, lowest will be dropped)
My Lab Homework	100 points
3 in-class tests	300 points (<i>100 points/test</i>).
Final Exam	200 points
Total	700 points

Your overall average will be found by dividing your total points by 7 and applying the following measure:

A	90% -100%
B	80% - 89%
C	72% - 79%
D	60%- 70%
F	Below 60%

- Calculator policy: Graphing calculators are **NOT ALLOWED** on any tests, including the Final Exam. A scientific calculator may be necessary on all tests, including the Final Exam. Homework and non-graded work may be done with the help of a graphing calculator. A graphing calculator may be used by the instructor during class as a teaching aid.

- **Homework:** Your homework is your most important effort in this class; homework is how you actually learn the material that will be on the quizzes and exams. Expect to do 2-3 hours of homework for every hour of class meeting time (on average 6-9 hours per week). Keep all of your homework together in a folder so that if you are having trouble in the course, you can bring it with you when you go to see your instructor or get tutoring. Homework can be computer based or book based or both.

- **Attendance** is mandatory, and if you have *five or more unexcused absences*, you may be dropped from the course (we WILL enforce this policy). However, it is **YOUR** responsibility to drop the course if you decide to stop attending classes. If you don't, you may receive an F.

- **Missed Exams:** If you miss an exam, contact your instructor immediately and provide a note (hardcopy or email) explaining your reason. Provide enough detail so that the instructor can check your excuse. Make-up test will only be given if your excuse is valid and will be more difficult than the timed tests. "I wasn't ready for it" is not a valid excuse. Be aware that make-up exams are more difficult than the original exam. **No exam scores will be dropped.**

- **Student Behavior:** According with the Code of Conduct as stated in the Policies and Regulations for UNM, student activities that interfere with the rights of others to pursue their education or to conduct their University duties and responsibilities will lead to disciplinary action. This includes any activities that are disruptive to the class and any acts of academic dishonesty. Students are expected to behave in a courteous and respectful manner towards the instructor and their fellow students.

Academic Dishonesty: Academic dishonesty is defined in the 2014-2016 UNM-Valencia catalog, and includes but not limited to copying work from other students. Any student found doing this is subject to disciplinary action, ranging from a reduced or failing grade for the work in question and/or the course, to dismissal from the University.

- **Disability Statement:** We will accommodate students with documented disabilities. During the first two weeks of the semester, those students should inform the instructor of their particular needs and they should also contact **Equal Access Services** at 925-8560.

- **Support Services:** The Valencia Campus Library provides a quiet atmosphere for study and is an excellent resource for supplementary materials. Audiotapes and videotapes are available for student use through the library. It will also have a link to all your course syllabi.

The Open Computer Lab (V123) provide free access to word processors, email, Internet access and other software that students may find useful in the course of their studies.

The Learning Center (TLC) can be reached at 925-8907. It provides tutoring at no charge for all UNM-Valencia Campus students. If you feel you need a tutor, you may set up a regular time for tutoring, make occasional appointments for tutoring, or ask to see a tutor on a walk-in basis without an appointment. Tutoring also can be provided through The STEM Center (925-8515). In addition, the online tutor, Ryan Baltunis, can be reached at 925-8553 or found in LRC 118. Also, for those who drive from Albuquerque, you can get tutoring for this class at UNM- Main Campus at the CAPS- Center for Academic Program Support; 3rd floor of Zimmerman Library (277-7208).

Math 150 Tentative Course Schedule- Spring 2015

Week **Topic** **Homework** (only odd problems, unless otherwise stated.
(This suggested homework is only optional, since you will be doing homework on My Lab.)

1 (08/18)	Entrance Exam	Handout- Review from previous Algebra courses
	1.1	1-93
	1.2	1-81
2 (08/25)	1.3	1-75

1.4	1-63
1.5	1-89
1.6	1-39

Last day to add courses or change grading options: Friday, August. 28.

3 (09/01)	2.1	1-61
	2.2	1-67
	2.3	1-51
	2.4	1+-47

Last day to drop without a grade, Last day for a refund: Friday, September. 04th.

4 (09/08)	2.5	1-47
	2.6	1-39
	Review for Test 1	

5 (09/15) **Test 1 Over Entrance Exam Handout, Chapter 1, and Chapter 2**

3.1	1-87
3.2	1-107

6 (09/22)	3.3	1-55
	3.4	3-87 (Multiples of 3)
	3.5	1-61

7 (09/29)	4.1	1-49
	4.2	1-45

8 (10/06)	4.3	1-59
	4.4	1, 2, 3-99 (Multiples of 3)
	<i>October 08th & 09th - Fall Break. (No Classes)</i>	

9 (10/13)	4.5	3-93 (Multiples of 3)
	5.1	1-89
	5.2	1-49, 53, 63, 65, 73.

10 (10/20) Review for Test 2
Test 2 Over chapters 3 and 4

11 (10/27)	5.3	1-93, 97
	5.4	1-75
	5.5	1-61

12 (11/03)	5.6	1-21
	9.1	1-73

Last day to withdraw without the Dean's approval: Friday, November. 06th.

13 (11/10)	9.2	1-35
------------	-----	------

	10.1	1-33
	10.2	1-43
14 (11/17)	10.3	1-27
	10.4.	1-31
	The “Limits” handout	
15 (11/24)	Completing The “Limits” handout	
	Nov 26 & 27 Thanksgiving Holiday (No Classes)	
16 (12/01)	<u>Test 3 over chapters 5, 9, 10 and the “Limits” handout.</u>	
	Final Exam Review	
	(An additional Final Exam Review session ``will be given out of class)	
	<u>Last day to withdraw with the Dean's approval: Friday, December 04th.</u>	

17 (12/08) [In-Class Final Exam on Tuesday, Dec.08th, 03:00-05:00PM] A 3" by 5" notecard for formulas, and a scientific calculator will be allowed.

My Lab Grading Rubric: Each computational assignment is worth 10 Homework points.

If you score:	You will receive:
85% or better	10/10
80 to 85%	9/10
75 to 80%	8/10
65 to 75%	7/10
55 to 65%	6/10
45 to 55%	5/10
35 to 45%	4/10
25 to 35%	3/10
Attempts homework but scores less than 25%	2/10

List of Student Learning Outcomes (SLO) for Math 150

Course Goal #1: Communication

Addresses UNM Core Area 2/HED Area II: Mathematics (Algebra Competencies)

SLO 1: Students will be able to use correct mathematical notation and terminology.

SLO 2: Students will be able to read and interpret graphs.

Course Goal #2: Functions

Addresses UNM Core Area 2/HED Area II: Mathematics (Algebra Competencies)

SLO 1: Students will be able to evaluate functions and difference quotients for a variety of functions.

SLO 2: Students will be able to graph some basic functions; this includes power, root, reciprocal, and piecewise defined functions.

SLO 3: Students will be able to calculate an average rate of change of a function and to interpret its meaning.

SLO 4: Students will be able to shift, and reflect graphs, and to compress and stretch graphs horizontally and vertically.

SLO 5: Students will be able to set up models using functions in word problems.

SLO 6: Students will be able to find extreme values of quadratic functions.

SLO 7: Students will be able to compose functions and to express a given functions as a composition of two simpler functions.

SLO 8: Students will be able to identify one-to-one functions and find and graph their inverses.

Course Goal #3: Polynomial and Rational Functions

Addresses UNM Core Area 2/HED Area II: Mathematics (Algebra Competencies)

SLO 1: Students will be able to determine the end behavior and the zeros of polynomial functions. They will be able to use this to graph the function.

SLO 2: Students will be able to divide polynomials and to understand the Division Algorithm.

SLO 3: Students will be able to solve quadratic equations with complex roots.

SLO 4: Students will be able to use the Fundamental Theorem of Algebra and the Complete Factorization Theorem.

SLO 5: Students will be able to find horizontal, vertical, and skew asymptotes of rational functions. They will be able to graph rational functions.

Course goal #4: Exponential and Logarithmic Functions

Addresses UNM Core Area 2/HED Area II: Mathematics (Algebra Competencies)

SLO 1: Students will be able to graph exponential and logarithmic functions.

SLO 2: Students will be able to solve a variety of exponential and logarithmic equations.

SLO 3: Students will be able to set up exponential growth and decay models and to solve the associated word problems.

Course goal #5: Analytic Geometry

Addresses UNM Core Area 2/HED Area II: Mathematics (Algebra Competencies)

SLO 1: Students will be able to identify and graph the conic sections.

SLO 2: Students will be able to graph parametric equations in two dimensions that involve algebraic functions. They will be able to eliminate the parameter.