MATH 120-503-- Tuesday & Thursday 10:30-11:45 AM in A124

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MyMathLab Course Code: hatch44318

Office Hours: Learning Commons: Mondays 11:30 – 1:30; Tuesdays & Thursdays 8:50 – 10:20

A123 Wednesdays 11:30 - 1:30

or by appointment.

COURSE DESCRIPTION: Math 120 covers linear equations and inequalities, polynomials, factoring, exponents, radicals, fractional expressions and equations, quadratic equations, perimeters, areas of simple geometric shapes, and logarithms. There is an emphasis on problem solving skills. Math 120 is acceptable as credit toward graduation in some programs but not acceptable to satisfy the UNM Core Curriculum or New Mexico Lower-Division General Education Common Core Curriculum requirement in Mathematics. Grade option: A, B, C, CR/NC. Prerequisites/placement: Successful completion of MATH 100 (C or CR) or minimum Pre-Algebra COMPASS score of 57 or Algebra COMPASS score of 34, or math ACT ≥ 19, or math SAT ≥ 450.

COURSE OBJECTIVES: In this course, we will explore linear functions, systems of linear equations, inequalities, polynomials and factoring, rational functions, and radical functions, and we will introduce exponential and logarithmic functions. Often in a mathematics course the emphasis in lecture is on acquisition of skills. In this course we will focus mainly on constructing meaning. What this means in terms of your responsibilities and what will happen during class time is explained below.

COURSE MATERIALS:

- Textbook Hardcopy Optional: <u>Intermediate Algebra</u> by Jay Lehman (I have the 4th Edition.)
- Pearson (MyMathLab) Student Access Code: This code will provide you access to all of the online
 materials for the course that will be required for the course. If you purchased a new book at the bookstore,
 it should have come with a MML kit that includes your access code. If you did not purchase a new book,
 then you can purchase a code directly from the website, www.pearsonmylabandmastering.com. You
 must register for MML by midnight on Tuesday, January 24, 2017 or risk being dropped from the
 course. (See MML registration handout for assistance.)
- **Notebook, pencil, calculator:** Note: A scientific calculator will be desired. Students may use a calculator unless otherwise announced. Graphing calculators and/or phones will not be allowed on quizzes or exams. Students may not share a calculator during exams.

Grading Scale (Note: + and – are also possible.)

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В	80 – 89%	NC	No Credit < 72%
Α	90 – 100%	CR	Credit 72 – 100%

C 70-79% D 60-69% F < 59%

Attendance and Class Participation	10%
Written Homework	10%
MML Homework	5%
Written Quizzes (First quiz on 1/19)	15%
Cumulative Unit Tests	30%
Cumulative Final Exam*	30%

^{*}You must receive at least a 70% on the final and have a 72% overall course average to pass the course. This is not negotiable.

IMPORTANT DATES with respect to this class:

Register for MML by midnight on Tuesday, January 24, 2017
Review Homework Written and in MML due by 7 PM Tuesday, Jan 31, 2017

First Exam: Tuesday, Jan 31, 2017 covering review material. Last date to drop without a grade: Friday, February 3, 2017

Spring Break: March 12 -19, 2017

Final Exam: Tuesday, May 9, 2016 10:30 AM-12:30 PM in A124

THE COURSE: Homework, Quizzes, and Tests: We will cover nearly the entire book. Please note that the book and MML are not perfectly aligned.

- You must register for MML by midnight Tuesday, January 24, 2017 and <u>complete</u> the Written and MML Review assignments by 7 PM on Tuesday, Jan 31, 2017 or risk being dropped.
- Written Homework: Most of the homework will be done with paper and pencil. Written Homework will have a due date. No work = no points. Late written homework scores will be reduced by 25%. Homework may only be submitted in the 8 weeks in which it is assigned.
- MML Homework: Please check there for homework after each class, note the suggested due dates and allow ample time for completion. This class moves quickly. At least one new topic will be covered and a new homework assignment will be applicable to every class. All tools will be available for your use. You may do the problems as many times as you would like without penalty. There is no late penalty on MML Homework.
- Short written quizzes will be given at the beginning of class on most Thursdays and will cover the most recent homework. Quizzes cannot be made up but the 2 lowest scores will be dropped. A 3x5 card with the pertinent information will be required and a calculator will be allowed for the quizzes. No phone calculators will be allowed on the quizzes. If there is no class on a Thursday, there will be no quiz that week.
- Optional (but highly recommended) Practice Tests will appear in Blackboard Learn as exams approach. The actual exams will be written, closed book and have 21 problems worth 5 points each. A 3x5 card with the pertinent information will be required and a calculator will be allowed for the quizzes. No phone calculators will be allowed on the exams.

MATH 106 (Tuesdays 1:30-2:20 PM) is strongly recommended. MATH 106 is a one credit hour class that offers extra help and practice to students taking math 120. Our observation shows that students who register for Math 106 simultaneously with their Math 120 course have a better chance finishing their Intermediate Algebra course successfully.

ATTENDANCE POLICY: The student bears full responsibility for the material and procedural information covered in class. Attendance is part of the grade. If a student misses 3 classes in the first three weeks or 4 consecutive class periods or 6 total, the student may be dropped from the class.

EXPECTATIONS: Students are expected to conduct themselves in a polite, courteous, professional and collegial manner. Cell phones must be set on silent. Please step into the hall if you need to take a call during class. Cell phones must be turned off during exams.

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. The new Learning Commons (925-8907) and STEM Center (925-8515) offer math & science tutoring at no cost to the student. The Writing Center can provide free help with all written assignments. (For Writing Center appointments email gillikin@unm.edu or call 925-8513.) Students who miss tutoring appointments may be denied future appointments.

UNM EMAIL/BLACK BOARD LEARN ACCESS: Beginning Fall 2015 semester, all UNM-Valencia students will need a UNM Net ID which can be created by going to: http://it.unm.edu/accounts/. UNM Net ID will give you access to the computer labs on campus, blackboard learn and UNM Email.

COMPUTER LAB RESPONSIBILITY: Please be advised that use of computer labs on UNM properties is governed by "Policy 2500: Acceptable Computer Use" which can be found at http://policy.unm.edu/university-policies/2000/2500.html. Food and drink are also prohibited in any computer lab on campus. Anyone violating these policies is subject to possible suspension and loss of computer lab privileges.

DISABILITY STATEMENT: Please contact Equal Access Services (925-8510) as soon as possible to ensure that documented disability accommodations can be provided in a timely manner.

TITLE IX: 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

UNM's Policy on Academic Honesty: 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.

Schedule of Topics & Exams (Subject to Change)

Week	Dates	Topics & Exam Dates
1	1/17 & 19	Review
2	1/24 & 26	Review
3	1/31 & 2/2	Exam #1 Tuesday, Jan 31, 2017
4	2/7 & 9	Linear Equations: Writing and Solving Linear Equations & Functions
5	2/14 & 16	Systems of Equations: Solve by Graphing, Substitution and Elimination
6	2/21 & 23	Word Problems
7	2/28 & 3/2	Linear Inequalities; Exam #2 Thursday, March 2, 2017
8	3/7 & 9	Exponents; Friday, March 10, 2017 First 8 weeks HW Final Deadline
9	3/14 & 16	No Class: Spring Break!!
10	3/21 & 23	Inverse Functions and Logarithms
11	3/28 & 30	Discovering Polynomials; Exam #3 Thursday, March 23, 2017
12	4/4 & 6	Factoring Polynomials
13	4/11 & 13	Graphing and Solving Polynomials
14	4/18 & 20	Solving Polynomials; Exam #4 Thursday, April 20, 2017
15	4/25 & 27	Rational Equations
16	5/2 & 5/4	Radical Equations; Friday, May 5, 2017 Second 8 weeks HW Final Deadline
17	5/9	Final Exam: Tuesday, May 9, 2016 10:30 AM-12:30 PM in A124

Student Learning Outcomes in regard to skills acquisition:

Upon successful completion of this course, students will be able to:

- 1. Sketch the graphs of linear, quadratic, and exponential functions.
- 2. Solve systems of two linear equations.
- 3. Solve quadratic equations using factoring, quadratic formula, and the square root method.
- 4. Solve equations containing rational expressions.
- 5. Perform operations on polynomials and factor certain types of polynomials.
- 6. Solve polynomial equations by factoring.
- 7. Correctly use function notation and vocabulary related to functions.
- 8. Find the value of a function for a given domain value.

Student Learning Outcomes in regard to conceptual understanding:

Upon successful completion of this course, students will be able to:

- 1. Interpret slope in relation to variable coefficients and as a rate of change.
- 2. Apply solution methods learned to "real-world" problems.
- 3. Analyze solutions and give them contextual meaning.
- 4. Actively and effectively work in groups to solve problems and increase understanding of concepts, drawing on the skills and knowledge of all group members.