# MATH 120-503 Tuesday & Thursday 9:00 - 10:30 AM in A125

Instructor: Annette Hatch Email: <a href="mailto:ahatch2@unm.edu">ahatch2@unm.edu</a>Office: A123MyMathLab Course Code: hatch72954Phone: 925-8642Office Hours:Learning Commons: Thursday 10:30-12Phone: 925-8642A123: Monday & Wednesday 11:20-12 & 1:00-1:30, Tuesday 10:15-1:30OR 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 Optional: Intermediate Algebra 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. You can purchase a code from the bookstore or directly from the website, www.pearsonmylabandmastering.com. You must register for MML by midnight Monday, January 22, 2017 or risk being dropped from the course. (See MML registration handout for assistance.)
- Notebook, pencil, and calculator: Note: A scientific calculator will be desired. Students may use a calculator unless otherwise announced. Phone calculators will not be allowed on quizzes or exams. Students may not share a calculator during exams.

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

| CR Credit 72 – 100% |
|---------------------|
| NC No Credit < 72%  |
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Attendance and Class Participation 10% Written Homework 10% MML Homework 10% Written Quizzes 10% 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 Monday, January 22, 2018 Review Homework in MML due by midnight Monday, January 29, 2018 Written Review Homework due in class Tuesday, January 30, 2018 First Exam: Tuesday, Jan 30, 2018 covering review material. Last date to drop without a grade: Friday, February 2, 2018 Spring Break: March 10-18, 2018 Final Exam: 9:00-11:00 AM Thursday, May 10, 2018 in A125

THE COURSE: You must register for MML by on Monday, January 22, 2017 and complete the Written and MML Review assignments as noted or risk being dropped.

- Written Homework: An extensive Written Review Homework is due in class Tuesday, Jan 30, 2018. 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:** A 4-part MyMathLab Review will be due at **midnight Monday, January 29, 2018**. Subsequent assignments will be smaller, have helpful links, and will allow students additional problem practice by selecting "Similar Exercise". All remaining MyMathLab homework after the review assignments will be <u>due at the time of the final</u>.
- Quizzes: 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 calculator will be allowed and a 3x5 card with the pertinent information will be required for assistance during the quizzes. No phone calculators will be allowed on the quizzes or the final. If there is no class on a Thursday, there will be no quiz that week.

**Practice Tests:** Optional (but highly recommended) Practice Tests will appear in Blackboard Learn as exams approach. **Exams:** Exams will be written, closed book and have 21 problems worth 5 points each. A calculator will be allowed and a

**3x5 card with the pertinent information will be required for assistance during the exam**\*\*. No phone calculators will be allowed on the exams. \*\*Final Exam assistance is not as in depth as for quizzes or regular exams.

**MATH 106** 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 2 classes in the first two 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 Learning Commons and STEM Center 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**: 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:** If you have a documented disability, the Equal Access Services office will provide me with a letter outlining your accommodations. I will then discuss the available accommodations with you to determine the best learning environment. If you feel that you need accommodations, but have not documented your disability, please contact Jeanne Lujan, the coordinator for Equal Access Services at 925-8910 or <u>jmlujan@unm.edu</u>.

**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.

| Week      |   |
|-----------|---|
| Beginning | Topics (Subject to change)  |
| 1/16      | Review  |
| 1/22      | Review  |
| 1/29      | Lines; Exam #1 Tuesday, January 30  |
| 2/5       | Linear Inequalities & Absolute Values   |
| 2/12      | Systems of Equations: Solve by Graphing, Substitution and Elimination             |
| 2/19      | Word Problems   |
| 2/26      | Word Problems; Exam #2 Thursday, March 1  |
| 3/5       | Exponents   |
| 3/12      | No Class - Spring Break   |
| 3/19      | Inverse Functions & Logarithms; First 8 weeks HW Final Deadline Tuesday, March 20 |
| 3/26      | Discovering Polynomials; Exam #3 Thursday, March 29                               |
| 4/2       | Factoring Polynomials   |
| 4/9       | Graphing & Solving Polynomials  |
| 4/16      | Rational Equations  |
| 4/23      | Radical Equations; Exam #4 Thursday, April 26                                     |
| 4/30      | Review; Second 8 weeks HW Final Deadline Thursday, May 3                          |
| 5/7       | Final Exam: 9:00-11:00 AM Thursday May 10, 2018 in A125                           |

### 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