# MATH 100: Introduction to Algebra - Lecture/MML

Instructor: Sarah Garde Email: sgarde@unm.edu
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Section	Class Time	Meeting Days	Location	MML Course Code
506	9:00 AM – 10:40 AM	Mon/Wed	A-125/L119	Garde03316

OFFICE HOURS: Monday through Thursday 8 - 8:45 AM; Wednesday 10 - 10:45 AM; or by appointment.

**COURSE DESCRIPTION**: Topics include linear equations, polynomials, factoring, formulas, graphing, and application problems and includes a skills laboratory. Prerequisites/placement: Successful completion of Math 099 (RA, RB, RC or RCR), Math011/012, or a minimum pre-algebra COMPASS score of 36, or math ACT score of 16.

#### **COURSE STUDENT LEARNING OUTCOMES:**

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

- 1. Add, subtract, multiply, and divide positive and negative numbers, including integers, fractions, and decimals.
- 2. Use the correct order of operations when simplifying a numerical expression.
- 3. Solve linear equations in one variable.
- 4. Solve word problems involving linear equations in one variable.
- 5. Solve simple linear inequalities.
- 6. Graph simple linear equations.
- 7. Calculate the slope of a line between two points.
- 8. Find the equation of a line from pairs of points or a point and a slope.
- 9. Simplify expressions with integer exponents.
- 10. Use Scientific Notation in elementary arithmetic calculations.
- 11. Add, subtract, multiply, and divide polynomials.
- 12. Factor simple polynomials.

### **COURSE MATERIALS:**

- MyMathLab (MML) Student Access Code: The code is available for purchase in the UNM-VC Bookstore or online at <a href="http://www.mymathlab.com/">http://www.mymathlab.com/</a> You must register for MML by the beginning of the 2<sup>nd</sup> week of classes or risk being dropped from the course.
- Math 100 (Beginning Algebra) Workbook for Lecture Class (First Edition, August 2015). This is available for purchase in the bookstore.
- 3-Ring binder (1-1/2 inch or larger), 10 divider tabs, (Binder will be shared with Math 193.)
- Notebook paper, graph paper
- Pencil, eraser, dry erase marker, 3 X 5 notecards
- Scientific calculator (Calculators on electronic devices are NOT allowed, e.g., phone, IPAD, etc.)

# **IMPORTANT DATES with respect to this class:**

Last date to drop without a grade: Friday, September 4, 2015

Labor Day Holiday: Monday, September 7, 2015 Fall Break: Thursday and Friday, October 8 & 9, 2015

Last date to drop without approval of Director of Student Affairs: Friday, November 6, 2015

Final Exam: Wednesday, December 9 9:00 – 11:00 AM

### **GRADING SCALE:**

While you will receive credit toward establishing a full-time load for financial aid purposes for Math 100, this course is NOT accepted to satisfy UNM core degree requirements. Students in this course will receive the following grades:

RA+	98% and above	P.C.	- 78 – 79%
RA	93 – 97%		
RΛ-	90 – 92%	RC	73 – 77%
	30 32/0	RC-	70 – 72%
KB+	88 – 89%	RCF	R 70 – 100%
RB	83 – 87%		C < 70%
RB-	80 – 82%	KIN	· \ / U/0

#### **GRADE WEIGHTINGS:**

Attendance, Class Participation	25%
Binder	5%
Homework/Labs	20%
Tests	20%
Cumulative Final Exam*	30%

<sup>\*</sup>Students must receive a minimum of 70% on the final exam to pass the course. This is not negotiable.

#### **COURSE COMPONENTS:**

## 1. Attendance/Class Participation (25% of grade)

- You are expected to be <u>on time</u> to each class and stay the <u>entire</u> class, have the necessary course materials on hand, and participate in the lecture and/or group activities to receive full credit for attendance each day.
- If you miss 4 classes you <u>WILL</u> be dropped from the class. You are required to attend class twice a week (Tuesdays and Thursdays).
- The attendance sheet will only be available BEFORE class. Class begins <u>promptly</u> at 9:00. You will be marked absent if: (1) you are absent, (2) you are tardy and/or leave early twice, and/or (3) you are disruptive to the learning environment.
- If absent or tardy, the student must email the instructor. The student bears full responsibility for the material and procedural information covered in class.
- You will be working in the Math 100 Workbook during class and will be graded periodically on that work as part of your Class Participation grade.

# 2. Binder (5% of grade) (Also used in Math 193 – other sections to be specified by Math 193 instructor)

- <u>Section 1: Syllabus/Planning.</u> This will include course syllabus and other materials used for planning/organizing purposes.
- <u>Section 2: Math 100 Notes.</u> This will include Problems of the Day, lecture notes and any supplementary notes given. All pages must be labeled with the date, unit, chapter, topic and lesson. The student must take meaningful notes during the instruction portions of the class. Students without notes will be told to revisit the lesson before assistance will be provided.
- <u>Section 3: Course Work.</u> This will include MML Homework, as well as any labs or other work done during class. Assignments will be labeled with the date, unit, chapter, topic and lesson. Problems must be worked in a neat, orderly manner in the notebook in the appropriate section of the binder.
- <u>Section 4: Tests.</u> This will include both practice and actual tests/quizzes, as well as any corrections done to them. Problems must be worked in a neat, orderly manner on tests and guizzes.
- <u>Section 5: Reference.</u> This includes definitions of terms introduced during lecture or in MML, formulas, summary of key concepts, note cards prepared for tests, progress reports, etc.
- Other Sections (to be specified in Math 193).
- Keep Math 100 Workbook in the back of your binder.

#### 3. Homework/Labs (20% of grade)

- Homework is assigned every week. Weekly assignments in MML must be completed not later than midnight on Sunday of the next week for full credit. A 10% penalty will be incurred if your homework is late. You will be able to go back to improve your grade after the due date. You must earn at least 80% on homework to pass the class.
- Labs not contained in MML will be due no later than the following Monday.

# 4. Tests (20% of grade)

Several tests will be assigned during the term. Students are expected to show their work clearly in the supporting documentation for the tests. The Mid-Term will be a paper/pencil test where students are expected to show all work to get full credit. A 3" X 5" note card (both sides) will be allowed to be used on tests.

You are allowed to make corrections to tests to improve the grade. In order to earn back up to half the points missed, corrections need to be made on a <u>separate</u> sheet of paper. The correction paper is vertically divided in half: The problem must be reworked on the LEFT side of the paper, and the RIGHT side must contain your verbal explanation of what was done incorrectly on the test for that particular problem.

## 5. Final Exam (30% of grade)

- The final exam is a MANDANTORY cumulative written exam taken on Thursday, July 23.
- An instructor pre-approved 3" X 5" note card (both sides) with only formulas will be allowed.
- A scientific calculator, which is NOT a graphing calculator, will be allowed.
- No cell phones or Internet devices will be permitted to be used or out during the exam.
- You MUST PASS this exam with 70% or higher to pass this course.
- Final review and practice problems will be made available before the final exam.

**SUPPORT SERVICES:** Highway to Success tutors are available Monday through Thursday from 8 to 5, and Fridays from 8 to 2. The online tutor, Ryan Baltunis, can be reached at 925-8553 or found in LRC 118. There are also open computer labs on campus for student use. The Valencia Campus Library provides a quiet atmosphere for study and is an excellent resource for supplementary materials.

**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. ABSOLUTELY NO FOOD OR DRINK is allowed in the labs.

**DISABILITY STATEMENT:** If you have a documented disability, please provide me with a copy of your letter from Equal Access Services <u>as soon as possible</u> to ensure that accommodations are provided in a timely manner. The Equal Access Office can be reached at 925-8510.

**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.

# Tentative Schedule - Math 100 - Fall 2015

Course: Math 100 Sec 506 MW 9:00 – 10:40 (CRN: 53645) Semester: Fall 2015

Instructor: S. Garde Format: Lecture/MML

Week Dates	Learning Objective(s)	Blitzer (6 <sup>th</sup> Edition)	Assignments Due Date	Tests/ Final
1 8/17 – 8/23	Add, subtract, multiply, and divide positive and negative numbers, including integers, fractions, and decimals.	L1.1 Intro to Algebra L1.2 Fractions L1.3 The Real Numbers L1.4 Basic Rules of Algebra	MML/WB (8/23)	
2 8/24-8/30	Use the correct order of operations when simplifying a numerical expression.	L1.5 Addition of Real Numbers L1.6 Subtraction of Real Numbers L1.7 Mult & Div of Real Numbers L1.8 Exponents and Order of Operations	MML/WB (8/30)	
3 8/31 – 9/6	3. Solve linear equations in one variable.	L2.1 Add Prop of Equality L2.2 Mult Prop of Equality Practice Test #1	MML/WB (9/6)	
4 9/7 – 9/13		L2.3 Solve Linear Equations L2.4 Formulas and Percents	MML/WB (9/13)	Test #1 On 9/09 (L1.1 – 2.2)
5 9/14 – 9/20	<ul><li>4. Solve word problems involving linear equations in one variable.</li><li>5. Intro to linear inequalities</li></ul>	L2.5 Intro to Problem Solving L2.6 Geometry Problem Solving L2.7 Solving Linear Inequalities	MML/WB (9/20)	
6 9/21 – 9/27	Solve word problems involving linear equations in one variable	L4.4 Mixture/Motion Problems (Modified to one variable) Practice Test #2	Handout (09/28)	
7 9/28 – 10/4	6. Graph simple linear equations.	L3.1 Graphing Linear Equations in Two Variables L3.2 Graphing Linear Equations Using Intercepts	MML/WB (10/04)	Test #2 (Mid-Term) On 9/30 (L2.3 – Mixture/Motion Problems)
8 10/5 – 10/11	7. Calculate the slope of a line between two points.	L3.3 Slope (incl. parallel & perpendicular)	MML/WB (10/11)	
9 10/12 – 10/18	8. Find the equation of a line from pairs of points or a point and a slope.	L3.4 Slope-Intercept L3.5 Point-Slope & Modeling	MML/WB (10/18)	
10 10/19 – 10/25	<ul><li>9. Simplify expressions with integer exponents.</li><li>10. Use Scientific Notation in elementary arithmetic calculations.</li></ul>	L5.7 Negative Exponents and Scientific Notation	MML/WB (10/25)	

Week Dates	Learning Objective(s)	Blitzer (6 <sup>th</sup> Edition)	Assignments Due Date	Tests/ Final
11 10/26 – 11/1	11. Add, subtract, multiply, and divide polynomials.	L5.1 Add/Subtract Polynomials L5.2 Multiply Polynomials L5.3 Special Products	MML/WB (11/01)	Test #3 on 10/28 (L3.1-L3.5, L5.7)
12 11/2 – 11/8		L5.4 Polynomials in Several Variables L5.5 Dividing Polynomials	MML/WB (11/08)	
13 11/9 – 11/15	12. Factor simple polynomials.	L6.1 GCF/Factoring by Grouping L6.2 Factoring Trinomials LC=1 L6.3 Factoring Trinomials LC >1	MML/WB (11/15)	
14 11/16 – 11/22		L6.4 Factoring Special Forms L6.5 General Factoring Strategy	MML/WB (11/22)	Test #4 on 11/18 (Ch 5 & Ch 6)
15 11/23-11/29		Cumulative Review	Mock Final	
16 11/30 – 12/6		Cumulative Review	Mock Final	
17				Final on 12/9 (Cumulative)