POINT LOMA NAZARENE UNIVERSITY MATHEMATICS 099 ELEMENTARY ALGEBRA

TERM: FALL 2013 INSTR.: Coach BLAMEY EMAIL: TOMBLAMEY@POINTLOMA.EDU

CLASS HOURS:
OFFICE HOURS:
TEXTBOOK:
CALCULATORS:

T/Th 1:30-2:45PM (RLC 106) T 4:15PM (RLC 108) or by Apt. Prealgebra, by Martin-Gay 6th Ed. (Prior edition is ok). None allowed (Especially <u>NO</u> phones).

<u>COURSE DISCRIPTION AND LEARNING OUTCOMES</u>: This course constitutes an introduction to algebra designed to meet the requirements for graduation and to prepare you for other classes for which this class is a prerequisite. We will study the real number system, solutions of linear and quadratic equations, polynomials, factoring, graphing, inequalities, and radicals.

Mathematics is learned primarily by doing mathematics- not simply listening to it; that is, the effective learning of mathematics is an active process, involving participation. Thus, the course aims to maximize student involvement, hence student achievement. Individual concepts in mathematics are learned (mastered as opposed to memorize) by thinking and working through numerous examples and exercises which involve theses concepts; by this process mathematical concepts become familiar and less abstract. The course pedagogy will be based on a "Team Based Learning" and "Flip Class" structure.

Course Objectives:

- 1. Student will analyze the number line, learn the basic properties of integers, and apply the four basic operations to positive and negative numbers, and zero.
- 2. Student will calculate absolute value as part of their number line experience.
- 3. Student will evaluate simple algebraic expressions including the use of order of operations.
- 4. Student will solve first degree linear equations.
- 5. Student will demonstrate their mathematical problem solving skills and strategy by performing the indicated calculations and comparing these with the estimate, making changes if necessary.
- 6. Student will identify, describe, and simplify ratios and rates.
- 7. Student will set-up a proportion to solve application problems.
- 8. Student will perform computation problems using fractions (both common and decimal) employing the four basic operations.
- 9. Student will plot ordered pairs on the rectangular coordinate system, and graph simple linear equations in two variables.
- 10. Student will identify the geometric formula needed to compute the perimeter, circumference, area, and volume for geometric figures.
- 11. Student will perform conversions within the English system of measurement, and conversions within the metric system.
- 12. Student will evaluate expressions that contain exponents.
- 13. Student will simplify algebraic expressions that contain integer exponents using the laws of exponents.
- 14. Student will perform operations (add, subtract, multiply) on polynomials.
- 15. Student will convert between standard form of a number and scientific notation.

Student Learning Outcomes:

Upon successful completion of Math 99, the student should be able to:

- 1) Evaluate and perform order of operations on arithmetic and algebraic expressions that include signed numbers, fractions, mixed numbers, or decimals without a calculator.
- 2) Convert between percents, decimals and fractions, and solve percentage problems using proportions and/or percent equation without a calculator.
- 3) Solve geometric problems involving angles, perimeter, circumference, area and volume without a calculator.
- 4) Solve linear equations that contain integers, fractions or decimals, and solve application problems by first identifying the unknown, setting-up the equation, solving the equation, and then checking the solution all without a calculator.
- 5) Apply exponent rules to simplify exponential expressions and evaluate and perform algebraic operations on polynomials without a calculator.

<u>GRADES</u>: 1,000 Point Total.

А	92.5% or Above	A-	90% to 92.4%
В	82.5% to 87.4%	B-	80% to 82.4%
С	72.5% to 77.4%	C-	70% to 72.4%
D	62.5% to 67.4%	D-	60% to 62.4%
200 of your gra	ade.		
250 of your gra	ade.		
50 of your grad	le.		
250 of your gra	ade.		
250 of your gra	ade.		
Up to 3% of to	tal grade via board work	participatio	on.
	A B C D 200 of your gra 250 of your gra 50 of your gra 250 of your gra	A 92.5% or Above B 82.5% to 87.4% C 72.5% to 77.4% D 62.5% to 67.4% 200 of your grade. 250 of your grade. 50 of your grade. 250 of your grade. 250 of your grade. 250 of your grade. Up to 3% of total grade via board work	$ \begin{array}{ccccccc} A & 92.5\% \text{ or Above} & A-\\ B & 82.5\% \text{ to } 87.4\% & B-\\ C & 72.5\% \text{ to } 77.4\% & C-\\ D & 62.5\% \text{ to } 67.4\% & D-\\ \hline \end{tabular} 250 \text{ of your grade.} \\ \hline \end{tabular} 50 \text{ of your grade.} \\ \hline \end{tabular} 50 \text{ of your grade.} \\ \hline \end{tabular} 250 \text{ of your grade.} \\ \hline \end{tabular} \\ \hline \end{tabular} 50 \text{ of your grade.} \\ \hline \end{tabular} \\ \hline \end{tabular} Up \text{ to } 3\% \text{ of total grade via board work participation} \\ \hline \end{tabular} $

Academic Accommodations:

While all students are expected to meet the minimum academic standards for completion of this course as established by the instructor, students with disabilities may require academic accommodations. At Point Loma Nazarene University, students requesting academic accommodations must file documentation with the Disability Resource Center (DRC), located in the Bond Academic Center. Once the student files documentation, the Disability Resource Center will contact the student's instructors and provide written recommendations for reasonable and appropriate accommodations to meet the individual needs of the student. This policy assists the University in its commitment to full compliance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities (ADA) Act of 1990, and ADA Amendments Act of 2008, all of which prohibit discrimination against students with disabilities and guarantees all qualified students equal access to and benefits of PLNU programs and activities.

Students with learning disabilities who may need accommodations should discuss options with the instructor during the first two weeks of class.

General Advice: The key to success in this class is to attend lectures regularly and do your homework. You learn mathematics by doing it yourself. You should expect to spend approximately two hours outside of class for every one hour in class working on homework and going over concepts. When doing homework, please note it is normal to not be able to do every problem correct on the first attempt. Do not be discouraged, instead seek help.

Sources of Help:

1. Me. If you have questions, ask me.

2. FREE TUTORING- Math Learning Center, RS-230 or Bond Academic Center.

3. Other classmates. Form study groups! Work together!

<u>ATTENDANCE</u>: After you miss the equivalent of 4 class periods, you will be warned of impending deenrollment. If you miss the equivalent of 7 class periods, you will be de-enrolled.

INSTRUCTOR ABSENCES: If no substitute appears within 20 minutes of starting time, students may sign an attendance sheet and leave (the last student to sign the attendance sheet will bring it to the next class).

Fall Semester 2013 - Coach Blamey Mathematics 099

Tentative Schedule

Week Beginning	<u>Monday</u>	Tuesday	Wednesday	<u>Thursday</u>	<u>Friday</u>
				Intro	
September 2, 2013	Holiday	No Tuesday Class		Ch. 1	
Sontombor 0, 2012		Ch 1		Cha	
September 9, 2013				Chz	
September 16, 2013		Ch2		Ch3	
September 23, 2013		Ch3		Ch4	
September 30, 2013		Ch4		Ch4	
Octobor 7, 2012		Ch5		Ch5	
		0110		0110	
October 14, 2013		Midterm Review		Midterm	
October 21, 2013		Ch6		Ch6	Fall Break
October 28, 2013		Ch7	Midterm Grade Posted	Ch7	Drop Deadline
,					
No		Decident I		Decident II	
November 4, 2013				Project II	
November 11, 2013		Ch8		Ch8	
November 18, 2013		Ch9		Ch9	
November 25, 2013		Ch9	Thanksgiving Recess	Thanksgiving Recess	Thanksgiving Recess
,					
December 0, 0040		Ch10		Ch10	
December 2, 2013		Citto		CITIO	
December 9, 2013		Final Review		Final Review	
		Final Exam			
December 16, 2013		1:30 to3:30pm			