



DE LA SALLE UNIVERSITY
College of Science
 Department of Mathematics



COMALGE – *College Algebra for Business and Economics Students*

Prerequisite:

Prerequisite to: BUSANA1

Instructor: _____

Contact details: _____

Consultation Hours: _____

Class Schedule and Room: _____

Course Description

This is a 3-unit course on College Algebra, specifically designed for Business & Economics students to provide them with a solid and working knowledge of pre-Calculus Algebra. The course tackles the real number of system, polynomials, algebraic fractions and radicals, functions and relations, systems of equations and their respective applications to business and economic situations.

Learning Outcomes

On completion of this course, the student is expected to present the following learning outcomes in line with the Expected Lasallian Graduate Attributes (ELGA)

ELGA	Learning Outcome
Critical and Creative Thinker	At the end of the course, the students shBT/o 0 1 4591T:
Effective Communicator	
Lifelong Learner	
Service-Driven Citizen	

Grading System

	FOR EXEMPTED STUDENTS (w/out Final Exam)	FOR STUDENTS with FINAL EXAM		Scale:	
		<i>with no missed quizzes</i>	<i>with one missed quiz</i>		
Average of quizzes	95%	65%	55%	95-100%	4.0
Seatwork, Homework, Board Work, Learning Output	5%	5%	5%	89-94%	3.5
Final exam	-	30 %	40%	83-88%	3.0
				78-82%	2.5
				72-77%	2.0
				66-71%	1.5
				60-65%	1.0
				<60%	0.0

Learning Plan

Learning Outcome	TOPICS	WEEK NO.	Learning Activities
At the end of the course, the students should be able to understand and explain the basic concepts of algebra.	Review Topics in Algebra 1.1 The Set of Real Numbers 1.2 Integer Exponents 1.3 Polynomials: Operations and Special Products 1.4 Factoring Polynomials 1.5 Rational Expressions: Fractions and Operations 1.6 Rational Exponents and Radicals 1.7 Properties and Operations on Radicals 1.8 The Set of Complex Numbers	Week 1 – 2 Week 3 - 5	Seatwork Board work Lecture and Discussion Practice Exercises
	Linear and Quadratic Equations 2.1 Equations 2.1.1 Linear Equations 2.1.2 Involving Rational Expressions 2.1.3 Literal Equations 2.2 Applications of Linear Equation 2.2.1 Number Relation 2.2.2 Investment/Finance 2.3 Quadratic Equations in One Variable and Applications 2.4 Other Equations in One Variable	Week 6 - 9	Seatwork Board work Lecture and Discussion Practice Exercises
	Systems of Equations and Matrices 3.1 Systems of Linear Equations in Two Variables 3.2 Systems of Linear Equations in Three Variables 3.3 Properties and Operations on Matrices 3.4 Determinants and Cramer's Rule 3.5 Solutions of Linear Systems by Matrix Inverses 3.6 Solutions to Linear Systems by Gaussian Elimination and Gauss-Jordan Reduction	Week 10 – 12	Seatwork Board work Lecture and Discussion Practice Exercises

Linear Inequalities

- 4.1 Linear Inequality in One Variable
- 4.2 Linear Inequality in Two Variables
- 4.3 Systems of Linear Inequalities in 2 Variables

Week 13

Seatwork
Board work
Lecture and
Discussion