

Chaminade University



MATH 103
College Algebra
Spring 1998
MWF 9:00-9:50
H118

INSTRUCTOR: Dennis Kunimura, MS
Office: Math Lab, H8
Office Hours: W 10-12:30 or by appointment
PHONE: 625-3509 (Voice/Fax)
E-Mail: kunimura@compuserve.com

Course Description: Operations with algebraic expressions, exponents, radicals, linear and quadratic equations and inequalities, equations involving radicals or rational expressions and exponential and logarithmic functions.

Prerequisites: By placement test or passing MATH 102; or consent of instructor

Textbook: Algebra for College Students (4th edition). By R David Gustafson & Peter D Frisk.
Brooks/cole Publishing Company

Topics to be Covered:

Chapter 1: The Real Number System

Sect 1.1: Sets and the real number system

Sect 1.3: Inequalities and graphs of sets of real numbers

Chapter 2: Exponents and Polynomials

Sect 2.1: Exponents

Sect 2.3: Adding and subtracting polynomials

Sect 2.4: Multiplying polynomials

Sect 2.5: Dividing polynomials

Sect 2.6: Synthetic division

Chapter 4: Factoring Polynomials

All Sections

Chapter 3: Equations & Inequalities

Sect 3.1: Linear equations and their solutions

Sect 3.4: Formulas & literal equations

Sect 3.5: Absolute value equations

Sect 3.6: Linear equations

Sect 3.7: Inequalities with absolute values

Chapter 5: Rational Expressions

Sect 5.1: Simplifying rational expressions

Sect 5.2: Multiplying and dividing rational expressions

Sect 5.3: Adding and subtracting rational expressions

Sect 5.5: Equations containing rational expressions

Chapter 7: Rational Exponents and Radicals

- Sect 7.1: Rational exponents
- Sect 7.2: Radical expressions
- Sect 7.3: Adding and subtracting radical expressions
- Sect 7.4: Multiplying and dividing radical expressions
- Sect 7.5: Radical equations

Chapter 6: Graphs, Equations of Lines and Variation

- Sect 6.1: The rectangular coordinate system
- Sect 6.2: Slope of a nonvertical line
- Sect 6.3: Equations of lines
- Sect 6.6: Introduction to functions

Chapter 13: Conic Sections and Quadratic Systems

- Sect 13.1: The circle

Chapter 8: Quadratic Equations

All sections

Chapter 10: Systems of Equations and Inequalities

- Sect 10.1: Solution by graphing
- Sect 10.2: Solution by substitution and addition
- Sect 10.3: Solution of three equations in three variables

Chapter 12: Exponential and Logarithmic Functions

- Sect 12.1: Exponential functions
- Sect 12.2: Logarithmic functions
- Sect 12.3: Properties of logarithms
- Sect 12.4: Applications of logarithms
- Sect 12.5: Exponential and logarithmic equations

Chapter 14: Natural Number Functions and Probability

- Sect 14.1: The binomial theorem
- Sect 14.2: Sequences, series and summation notation
- Sect 14.3: Arithmetic and geometric sequences

Attendance/Participation: Attendance will be recorded. Points will be awarded based upon the percentage of classes attended as well as participation during these classes.

Homework/Quizzes: Quizzes will be administered over the course of the semester. These quizzes will be representative problems chosen from the homework. Furthermore, the instructor may require selected problems from the assigned homework to be turned in for grading. The student will be given advance notice of both quizzes and homework.

Midterm: A midterm exam will be administered and will be worth 100 points.

Final Exam: A final exam will be administered as dictated by Chaminade University Schedule of Classes. It will be a comprehensive exam and will be worth 150 points.

GRADING:

	POINTS
Homework/Quizzes	150
Attendance	50
Midterm	100
Final Exam	150
Total:	450

Grade	Percentage	Points
A	90-100%	405-450
B	80-89%	360-404
C	70-79%	315-359
D	50-69%	225-314
F	Below 50%	224 or less

Chapter 7: Rational Exponents and Radicals

- Sect 7.1: Rational exponents
- Sect 7.2: Radical expressions
- Sect 7.3: Adding and subtracting radical expressions
- Sect 7.4: Multiplying and dividing radical expressions
- Sect 7.5: Radical equations

Chapter 6: Graphs, Equations of Lines and Variation

- Sect 6.1: The rectangular coordinate system
- Sect 6.2: Slope of a nonvertical line
- Sect 6.3: Equations of lines
- Sect 6.6: Introduction to functions

Chapter 13: Conic Sections and Quadratic Systems

- Sect 13.1: The circle

Chapter 8: Quadratic Equations

All sections

Chapter 10: Systems of Equations and Inequalities

- Sect 10.1: Solution by graphing
- Sect 10.2: Solution by substitution and addition
- Sect 10.3: Solution of three equations in three variables

Chapter 12: Exponential and Logarithmic Functions

- Sect 12.1: Exponential functions
- Sect 12.2: Logarithmic functions
- Sect 12.3: Properties of logarithms
- Sect 12.4: Applications of logarithms
- Sect 12.5: Exponential and logarithmic equations

Chapter 14: Natural Number Functions and Probability

- Sect 14.1: The binomial theorem
- Sect 14.2: Sequences, series and summation notation
- Sect 14.3: Arithmetic and geometric sequences

Attendance/Participation: Attendance will be recorded. Points will be awarded based upon the percentage of classes attended as well as participation during these classes.

Homework/Quizzes: Quizzes will be administered over the course of the semester. These quizzes will be representative problems chosen from the homework. Furthermore, the instructor may require selected problems from the assigned homework to be turned in for grading. The student will be given advance notice of both quizzes and homework.

Midterm: A midterm exam will be administered and will be worth 100 points.

Final Exam: A final exam will be administered as dictated by Chaminade University Schedule of Classes. It will be a comprehensive exam and will be worth 150 points.

GRADING:

	POINTS
Homework/Quizzes	150
Attendance	50
Midterm	100
Final Exam	150
Total:	450

Grade	Percentage	Points
A	90-100%	405-450
B	80-89%	360-404
C	70-79%	315-359
D	50-69%	225-314
F	Below 50%	224 or less