

Chaminade University of Honolulu

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Course: MA 103⁵⁰ COLLEGE ALGEBRA *Cancelled*

Session: Winter Evening Session (January 11 – March 24 1999)

Class Dates/Time: Tuesday and Thursday, 1950 - 2155

Course Description: Algebra knowledge and skills needed for college studies: Sets and real numbers; exponents and polynomials, rational and radical expressions, equations and inequalities with applications, including equations containing rational and radical expressions, systems of equations, beginning analytic geometry and functions, exponential and logarithmic functions, and as time allows, the Sigma notation, the Binomial theorem and progressions.

Instructor/Phone: Ivan Ormsbee, tele# 668-8993, e-mail address *ink_pen@aloha.net*

Prerequisites: According to the result of placement examination which is equivalent to the contents of high school Algebra 1 or MA 102 with a grade C or better. Not open to students having credits in MA 110, 210, or higher numbered math course.

Required text: Algebra for College Student (4th edition)
by R. David Gustafson and Peter D. Frisk
ISBN 0-534-25188-9

Homework: There will be homework assigned on the material covered during each session due the following session.

LATE HOMEWORK WILL BE NOT BE ACCEPTED (Unless you have a documented medical or job-related absence. In this situation all work is due on day returning to class. Student is responsible to get and complete assignment/s missed due to absence prior to his/her return to class.)

Exams: Exams are closed book.

Grading	Attendance	40 pts.	Grade 450 - 500	A
	Homework	60 pts.	400 - 449	B
	Exam I	100 pts.	350 - 399	C
	Exam II	100 pts.	300 - 349	D
	<u>Final Exam</u>	<u>200 pts.</u>	0 - 299	F
	TOTAL POINTS	500 pts		

Course Outline:

The schedule may be adjusted by the instructor, as deemed appropriate in the best interests of the class.

If Chapters 1 through 4 are unfamiliar to you, you should be in Math 102 instead of in Math 103

There will be a BRIEF REVIEW of the topics covered in Math 102, and some of those topics will be presented again in more depth. New topics will be covered thoroughly.

1. Real Number System (Chapter 1)
Review on your own with emphasis on sets (1.1), Intervals and absolute values (1.3), Distributive property and order of operations.
2. Exponents and Polynomials (Chapter 2)
Review: Rules of exponents (2.1); Arithmetic of polynomials (2.3 - 2.5) with emphasis on division algorithm (2.5)
3. Equations and Inequalities (Chapter 3)
Review 3.1, 3.5, 3.6
4. Factoring (Chapter 4)
Review all sections with emphasis on factoring by grouping (4.2) and more complex factoring techniques (4.3); (4.4), equations (4.5)
5. Rational Expressions (Chapter 5)
(5.1 - 5.3) Basically review with emphasis on LCD
(5.5) NEW & Review: Equations containing rational expressions
6. Rational Exponents (Chapter 7)
(7.1) NEW: Rational exponents (7.2 - 7.4) NEW/Review: Radical expressions
(7.5) Radical equations (7.6) Applications
7. Exponential and Logarithmic Functions (Chapter 12)
(12.1 - 12.5) NEW
8. Quadratic Equations and other nonlinear Inequalities (chapter 8)
(8.1) Completing the square and quadratic formula.
(8.3) Discriminant
9. Graphs, Equations of Lines, and Functions (Chapter 6) Review as time allows.
(6.2 - 6.3) NEW/Review: Slopes and equations of lines, graphing lines etc. with emphasis on "slope-intercept" form.
(6.6) Functions
10. Systems of Equations and Inequalities (Chapter 10)
(10.1 - 10.3) Review
(10.4) NEW: 2 BY 2 CASE AND Cramer's Rule Optional, if time allows.
11. Chapter 14 Pascal's Triangle, Sigma Notation

Course Objectives:

1. To give the student a firm foundation in the fundamentals of Algebra
2. To prepare the student for entry into MA110 Precalculus
3. Emphases are: Skills in manipulating algebraic expressions (polynomials, rational expressions, radical expressions), in solving equations and inequalities, understanding basic concepts of functions, including exponential and logarithmic functions.

Important Dates

Session 01	12 JAN	
Session 02	14 JAN	
Session 03	19 JAN	
Session 04	21 JAN	
Session 05	26 JAN	
Session 06	28 JAN	
Session 07	02 FEB	Exam I
Session 08	04 FEB	
Session 09	09 FEB	
Session 10	11 FEB	
Session 11	16 FEB	
Session 12	18 FEB	
Session 13	23 FEB	Exam II
Session 14	25 FEB	
Session 15	02 MAR	
Session 16	04 MAR	
Session 17	09 MAR	
Session 18	11 MAR	
Session 19	16 MAR	
Session 20	18 MAR	FINAL EXAM