

PACIFIC UNION COLLEGE SYLLABUS

MATH 019

INTRODUCTORY ALGEBRA

Autumn 2007

COURSE DESCRIPTION: Basic concepts and techniques of algebra for students without recent experience in algebra. Integers, algebraic expressions, first-degree equations, simple rational expressions and proportions, integer exponents, scientific notation, polynomials and factoring, solving equations by factoring, graphing and systems of linear equations.

OBJECTIVES: You will sharpen your numerical reasoning skills and learn the basic algebraic methods used in a variety of other courses, including MATH 096 Intermediate Algebra and MATH 222 Introduction to Statistics.

TEXT: Gustafson and Frisk, *Beginning and Intermediate Algebra*, Thomson Brooks/Cole, 200 (fifth edition). This textbook contains excellent explanations and examples. Please bring it and a calculator to class.

INSTRUCTOR: Lloyd Best (Lbest@puc.edu). Phone: office/965-6591; home/942-9680. Fax: office/965-7135.

OFFICE: CSH 238G.

OFFICE HOURS: Monday: 9-10, 2-4; Tuesday: 9-10, 11-12, 2-4; Wednesday: 9-10; Thursday: 11-12; Friday: 9-10.

CLASS EXPERIENCES AND ATTENDANCE: Each day you can look forward to interactive presentations of the day's lesson. Occasionally you will be called upon to present some of your own solutions to the previous day's assignment.

Previous students have discovered that missing three or more class presentations makes it very difficult to pass the course. Some explanations presented in class are not in the text. In addition, announcements made during classes have the same force as statements in this syllabus.

STUDYING WITH OTHERS: You are encouraged to study with other classmates. Comparing ideas and solutions helps to clarify understandings. Be sure that your written assignments reflect your own understanding and not just what someone else figured out. You probably don't really "know" it if you can't write it out yourself.

TUTORING HELP: Tutors from the Teaching and Learning Center conduct evening help sessions to answer questions and give suggestions. Hours and locations for these help sessions will be announced in class. I am also happy to help you during my office hours, by appointment, or at other times when I am free.

LEARNING DIFFERENCES: PUC strives to accommodate students with documented learning differences. If you have a learning disability, or think you might have one, please check with Teaching and Learning Center personnel. They can provide a diagnosis and will work with us to accommodate your situation.

GRADING: The final grade will be based on Homework (20%), Quizzes (20%), Tests (60%). You may check your grade in the D2L gradebook.

A	A-	B+	B	B-	C+	C	C-	D+	D	D-
93%	90%	87%	83%	80%	77%	73%	70%	67%	63%	60%

HOMEWORK: Assignments will be announced in class. You are expected to show your work. Before working on the assignment you will need to carefully read the textbook. Pay careful attention to the textbook examples and try working the "Self Check" problems found interspersed with the reading. "Self Check" answers are in the textbook.

Late work is not accepted unless delayed by illness or other emergency. Any late work must be submitted directly to me the day you return to class. Late assignments are not accepted unless due to illness or other emergency.

QUIZZES: You should expect a quiz each class period. Missed quizzes will not be made up, a maximum of three will be averaged in if missed due to illness or other emergency. You must call my office (6591) the same day of your absence to make this arrangement.

TESTS: Tests must be taken at the scheduled time (see schedule). Only tests which are missed due to illness or emergency circumstances may be made up. If you must miss a test, you are required to notify me in advance.

ACADEMIC INTEGRITY: You are encouraged to work with other students on assignments, but your work should reflect your own understanding. All quiz and test work must be completely your own. A student involved in cheating (or assisting another student in cheating) on a quiz or test should expect to be dismissed from the course with a failing grade. See PUC's Code of Academic Integrity (page 213 of the *General Catalog*) for further details.

MATH 019 Introductory Algebra Class Schedule Lloyd Best Autumn 2007

Date	Homework To Turn In This Day	Class Lecture/Discussion
Sep 25	None	§1.1: Real Numbers and their Graphs
Sep 26	H1.1(p11):1-14,(15-25odds),(53-59odds),(81-99odds)	§1.2: Fractions
Sep 28	H1.2(p25):1-28,(33,37,41,...,85),(89-107odds)	§1.3: Exponents and Order of Operations
Oct 1	H1.3(p35):1-4,(25-49odds),(51,55,59,...,103)	§1.4: Adding and Subtracting Real Numbers
Oct 2	H1.4(p45):1-4,(11,15,19,...,79),85,89	§1.5: Multiplying and Dividing Real Numbers
Oct 3	H1.5(p53):1-14,(15,19,23,...,87),95	§1.6: Algebraic Expressions
Oct 5	H1.6(p61): 1-4,(13-29odds),(43,47,...,71),77-80,91,97	§1.7: Properties of Real Numbers
Oct 8	H1.7(p69):5-32,41-61,(69-85odds)	§2.1: Solving Basic Equations
Oct 9	H1Test(p76):1-40	TEST Chapter 1
Oct 10	H2.1(p89):1-8,(21-39odds),(41,45,49,...,117)	§2.2: Solving More Equations
Oct 12	H2.2(p99):(9,13,17,...,45),53,65,69,73,75	§2.3: Simplifying Expressions to Solve Equations
Oct 15	H2.3(p106):1-8,(13,17,21,...,73)	§2.4: Introduction to Problem-Solving
Oct 16	H2.4(p114):3,5,7,8,17,18,19,24,33,37,39,43	§2.5: Motion and Mixture-Problems
Oct 17	H2.5(p123):1-8,13,14,17,18,21,22,35,37	§2.6: Formulas
Oct 19	H2.6(p130):(11,15,19,...,47)	§2.7: Solving Inequalities
Oct 22	H2.7(p138):(11,15,19,...,59),69,73	§3.1: The Rectangular Coordinate System
Oct 23	H2Test(p146):1-32	TEST Chapter 2
Oct 24	H3.1 (p158): (15-29), (35-41 odds)	§3.2: Graphing Linear Equations
Oct 26	H3.2 (p173): (9-16), (17-53 odds)	§3.3: Solving Systems of Equations by Graphing
Oct 29	H3.3 (p185): (5-10), (19,23,27,...,39),49,52,53	§3.4: Solving Systems of Equations by Substitution
Oct 30	H3.4 (p193): (10-12), (13,17,21,...,53), 59	§3.5&6: Solving Systems by Addition; Applications
Oct 31	H3.5&6 (p200): (13,17,21,...,37); (p210): 13,19,23,27	§4.1: Natural-Number Exponents
Nov 2	H3Test (p232): 1-16	TEST Chapter 3
Nov 5	H4.1 (p241): (7-18), (19,23,27,...,115), 123	§4.2: Zero and Negative-Integer Exponents
Nov 6	H4.2 (p246): (7-10), (11,15,19,...,91)	§4.3: Scientific Notation
Nov 7	H4.3 (p253): 7,8, (9-41 odds), 47,51,53	§4.4: Polynomials and Polynomial Functions
Nov 9	H4.4 (p264): (1-20), (27-49 odds), (53,57,61,...,81)	§4.5: Adding and Subtracting Polynomials
Nov 12	H4.5 (p270): (9-23 odds), (27,31,35,...,95),103,104,105	§4.6: Multiplying Polynomials
Nov 13	H4.6 (p280): (7-14), (15,21,27,...,123)	§4.7&8: Dividing Polys by Monomials & Polys
Nov 14	H4.7&8 (p287): (25,33,51,...,73); (p293): 19,29,51,57	Review
Nov 16	H4Test (p299): 1-30	TEST Chapter 4
	<i>Thanksgiving Break</i>	<i>No Classes</i>
Nov 26	Read §5.1	§5.1: Factoring Out the GCD; Factoring by Groups
Nov 27	H5.1 (p309): 25,31,37,...,145	§5.2: Factoring the Difference of Two Squares
Nov 28	H5.2 (p315): 3,7,11,...,63	§5.3: Factoring Trinomials: Lead Coefficients of 1
Nov 30	H5.3 (p324): 11,15,19,...,95	§5.4: Factoring General Trinomials
Dec 3	H5.4 (p332): 7,13,19,...,85	§5.5: Factoring the Sum and Difference of Cubes
Dec 4	H5.5 (p337): 5,9,13,...,53	§5.6: Summary of Factoring Techniques
Dec 5	H5.6 (p341): 9-57 odds	§5.7: Solving Equations by Factoring
Dec 7	H5.7 (p347): 9,13,17,...,85	Review
Dec 12	Wednesday, 9:45 a.m.	Final Cumulative Test [125 points]