

PACIFIC UNION COLLEGE SYLLABUS

MATH 096

INTERMEDIATE ALGEBRA

Winter 2008

COURSE DESCRIPTION: This course fulfills the general education requirement in algebra. It is also for students needing additional experience with algebra before enrolling in MATH 106. Factoring, linear and quadratic equations, linear inequalities, functions, graphs, rational expressions, rational exponents and radicals, equations involving rational and radical expressions, complex numbers, and systems of equations. **Prerequisite:** MATH 019 Introductory Algebra, or satisfactory placement score.

STUDENT LEARNING OUTCOMES: When you are finished with this class, you should be able to (1) routinely solve problems typical of intermediate algebra, (2) solve science and business problems which rely on intermediate algebraic skills, and (3) succeed in other courses, such as MATH 106 College Algebra and MATH 222 Introduction to Statistics, which use the techniques of intermediate algebra.

TEXT: Gustafson and Frisk, *Beginning and Intermediate Algebra*, Thomson Brooks/Cole, 2008 (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. I am happy to meet with you during my office hours and at other times by appointment.

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 may 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. The TLC staff will 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%).

A	A-	B+	B	B-	C+	C	C-	D+	D	D-
92%	88%	84%	80%	75%	70%	65%	60%	57%	53%	50%

D2L: You may check your grade in the on-line D2L gradebook. Answer keys to quizzes and tests will be posted on D2L.

HOMEWORK: Assignments are listed on the schedule. 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.

Date	Homework To Turn In This Day	Class Lecture/Discussion
Jan 7	None	§7.1A: Review of Equations (p434-438)
Jan 8	H7.1A (p444):17-53 odds	§7.1B: Review of Inequalities (p439-443)
Jan 9	H7.1B (p445): 55-79 odds	§7.2: Equations Containing Absolute Values
Jan 11	H7.2 (p452): (11-57 odds), (61-71 odds)	§7.3: Inequalities Containing Absolute Values
Jan 14	H7.3 (p458): 11,15,19,23,....,55	§7.4A: Review of Factoring (p459-462)
Jan 15	H7.4A (p470): 11-57 odds	§7.4B: Review of Factoring, continued (p463-469)
Jan 16	H7.4B (p470): 65,69,73,....,149	§7.6: Synthetic Division
Jan 18	H7.6 (p491): (9-35 odds), (49-53 odds)	§6.1: Simplifying Rational Expressions
Jan 21	<i>Martin Luther King Jr. Day</i>	<i>No classes</i>
Jan 22	H7.T (p498): 1-26,35,36	Test Chapter 7
Jan 23	H6.1 (p368): 17,21,25,....,97	§6.2: Multiplying and Dividing Rational Expressions
Jan 25	H6.2 (p376): 17,21,25,....,113	§6.3: Adding and Subtracting Rational Expressions
Jan 28	H6.3 (p387): 13,17,21,....,97	§6.4: Complex Fractions
Jan 29	H6.4 (p394): 13-63 odds	§6.5 :Solving Eqns That Contain Rational Expressions
Jan 30	H6.5 (p401): 13,17,21,....,73	§6.6 & 6.7: Applications and Ratios
Feb 1	H6.6&7 (p407): 13,15,17,21,27; (p413): 23-49 odds	§6.8: Proportions and Similar Triangles
Feb 4	H6.8 (p423): (19-57 odds), 65,67	§8.1: Rectangular Coordinate System
Feb 5	H6.T (p430): 1-25	Test Chapter 6
Feb 6	H8.1 (p507): (31-53 odds), 61,63,64	§8.2: Slope of a Nonvertical Line
Feb 8	<i>Midquarter Vacation</i>	<i>No classes</i>
Feb 11	H8.2 (p517): (19,23,27,....,35),(39-53odds), 59,61,65	§8.3: Writing Equations of Lines
Feb 12	H8.3 (p530): (17-43 odds), 49,51,59,65	§13.1: Solutions of Two Equations in Two Variables
Feb 13	H13.1 (p859): (9-12),13,15,31,35,37,39,43,47,51,55	§13.2: Solutions of Three Equations in 3 Variables
Feb 15	H13.2 (p870): 11, (15-29 odds)	§8.4: A Review of Functions
Feb 18	H8.4 (p541): 19,23,37,47,51,61,63,65,66,69,77,79	§8.6: Variation
Feb 19	H8.6 (p564): 37,39,41,43,53,55,59,63,65,69,71,72	§9.1: Radical Expressions
Feb 20	H8&13.T (p573): 1-22; (p903): 1-6,21	Test Chapter 8 & 13
Feb 22	H9.1 (p587): (23,27,31,....,83), 103,111,121,122	§9.2: Applications of Radicals
Feb 25	H9.2 (p594): (5-10), (11-23 odds),33,35,37,43	§9.3: Rational Exponents
Feb 26	No Class - Please Attend Napa Meeting!	Napa County Supervisors - Please Attend!
Feb 27	H9.3 (p604): (19,23,27,....,135), 143,145	§9.4: Simplifying and Combining Radical Expressions
Feb 29	H9.4 (p613): (9,13,17,....,77), 87,91,95	§9.5: Multiplying and Dividing Radical Expressions
Mar 3	Begin H9.5 (see below)	§9.6: Radical Equations
Mar 4	H9.5 (p622): (11,15,19,....,87), 95	§9.6: Radical Equations, continued
Mar 5	H9.6 (p631): (6-10), (13,17,21,....,49),65,67,69,74	§9.7: Complex Numbers
Mar 7	H9.7 (p642): 19,23,27,....,107	§10.1 Completing the Square
Mar 10	H9.T (p651):(1-5),(9-20),(17-29 odds),31,32,(35-42)	Test Chapter 9
Mar 11	H10.1 (p663): 9,13,17,....,69	§10.2: Solving Quadratics by the Quadratic Formula
Mar 12	H10.2 (p670): 7,11,15,....,55	§10.3: Discriminant & Equations Quadratic in Form
Mar 14	H10.3 (p680): 9,13,17,....,73	Review
Mar 20	Thursday, 9:45 a.m.	Final Cumulative Test [125 points]