

District Syllabus MAC1105 College Algebra

Credit Hours:	3
Contact Hours:	3
Laboratory Fee:	None.
Prerequisites:	MAT1033 Intermediate Algebra with a grade of "C" or better or MAT1033C Intermediate Algebra with a grade of "C" or better
Co-requisites:	There are no co-requisites for this course.
Catalog Description:	Covers the following topics: functions and functional notation; domains and ranges of functions; graphs of functions and relations; operations on functions; inverse functions; linear, quadratic, and rational functions; absolute value and radical functions; exponential and logarithmic properties, functions, and equations; systems of equations and inequalities, applications (such as curve fitting, modeling, optimization, exponential and logarithmic growth and decay.) Meets A.A. general education Category III.
Required Materials:	 Books: Marvin L. Bittinger, Judith A. Beecher, David J. Ellenbogen, and Judith A. Penna. <u>College Algebra: Graphs and Models with Graphing</u> <u>Calculator</u>, 5th ed., Pearson, 2011. ISBN: 0321824210
Supplemental Materials:	Supplies:
	• TI-84 Graphing Calculator Additional materials may be assigned by the instructor to supplement the required materials>
Special Requirements:	There is a \$24.99 Lab Fee for Distance Learning courses and NO Lab Fee for Hybrid courses. Distance Learning and Hybrid Sections require a MyMathLab access code. Use of MyMathLab in face-to-face sections is at the discretion of the instructor. Contact your instructor to determine if MyMathLab is required. For sections NOT requiring MyMathLab the textbook listed is required.
Program	MATHEMATICS COURSE Global Learning Outcomes and Objectives:

Learning Outcomes:

Performance Indicator:

The student applies an understanding of natural, mathematical and behavioral scientific principles and methods to solve abstract and relevant problems, using appropriate technology with inclusion of necessary scientific and mathematical language.

Student's Level of Achievement Based upon Student's Performance:

MASTERY:

The student uses relevant techniques, demonstrates excellent observations skills for trends and patterns, collects reliable data, reaches valid conclusions from it, performs accurate computations, uses results to predict outcomes of similar phenomena.

COMPETENT:

The student uses some relevant techniques, demonstrates good observation skills, collects appropriate volume of data, reaches acceptable conclusions with a few exceptions, performs computations with good accuracy.

DEVELOPING:

The student uses questionable techniques, demonstrates fair observation skills, collects insufficient data, reaches marginal or invalid conclusion, performs some inaccurate computations.

BEGINNING:

The student uses faulty techniques, demonstrates poor observation skills, exhibits unreliable data collection skills, reaches inappropriate conclusions, and performs inaccurate and improper computations.

Course Learning At the end of the course the student will be able to: **Outcomes:**

- 1. Solve linear, quadratic, rational, absolute value, and radical
- 2. equations and inequalities, algebraically and graphically.
- 3. Use exponential and logarithmic properties to analyze functions and solve equations.
- 4. Analyze relations and functions.
- 5. Sketch and interpret graphs of linear, quadratic, rational, absolute value, radical, exponential and logarithmic functions.
- 6. Solve systems of equations and inequalities.
- 7. Set up and solve application problems related to the above
- 8. concepts.

Methods ofEvaluation of student progress towards achieving the stated learning
outcomes and performance objectives is the responsibility of the instructor,
within the policies of the college and the department. Detailed explanation is
included in the expanded syllabus developed by the instructor for each
section being taught.

Flexibility:	It is the intention of the instructor to accomplish the objectives specified in the course syllabus. However, circumstances may arise which prohibit the fulfilling of this endeavor. Therefore, this syllabus is subject to change. When possible, students will be notified of any change in advance of its occurrence.
Student Email Accounts	Pensacola State College provides an institutional email account to all credit students. Pirate Mail is the official method of communication, and students must use Pirate Mail when communicating with the College. In cases where companion software is used for a particular class, emails may be exchanged between instructor and student using the companion software.
Note:	For students with a disability that falls under the Americans with Disability Act or Section 504 of the Rehabilitation Act, it is the responsibility of the student to notify Student Resource Center for ADA Services to discuss any special needs or equipment necessary to accomplish the requirements for this course. Upon completion of registration with the Student Resource Center for ADA Services office, specific arrangements can be discussed with the instructor.