

**PALOMAR COLLEGE**  
**COURSE OUTLINE OF RECORD FOR**  
**CREDIT COURSE NOT APPLICABLE TO THE A.A. DEGREE**

(Use this form only for courses which do not apply to the A.A. Degree)

**COURSE NUMBER AND TITLE:** Math 42 – Supplemental Instruction for Beginning Algebra.

**UNIT VALUE:** 1

**MINIMUM NUMBER OF SEMESTER HOURS:** 16

**BASIC SKILLS REQUIREMENTS:** Appropriate language and computational skills.

**ENTRANCE REQUIREMENTS**

**PREREQUISITE:** None

**COREQUISITE:** None

**RECOMMENDED PREPARATION:** None

**SCOPE OF COURSE:** Supplemental instruction for students enrolled in Math 50 – Beginning Algebra. Designed for students who need additional review of beginning algebra topics.

**SPECIFIC COURSE OBJECTIVES:** The successful student will be able to:

1. Apply the Algebra concepts learned in Math 50 – Beginning Algebra.
2. Solve problems using techniques learned in Math 50 – Beginning Algebra.

**CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:**

At least the following topics will be covered:

- I. Use of properties of real numbers, order of operations, and properties of integer exponents (including scientific notation) to reorganize and simplify polynomial expressions.
- II. Introduction to the concept of variables to represent relationships from tables, graphs, problem situations, and geometric diagrams.
- III. Comprehensive coverage of linear relationships including the formulations,

graphing, analyzing and solving of linear equations, linear inequalities, and two variable systems of linear equations.

- IV. Use of various problem-solving strategies to analyze problems and to formulate and carry out appropriate solution strategies.
- V. Exposure to a variety of nonlinear relationships and their graphs.
- VI. The distributive property and factoring. To include factoring the greatest common factor from a polynomial and quadratics of the form  $x^2 + bx + c$ .
- VII. Relationship between the factored form of a quadratic expression and its graph. Also, use of the factored form to solve quadratic equations resulting from application problems.
- VIII. Introduction to rational equations and proportions using similar triangle relationships, percents, rates, or slopes resulting from application problems or literal formulas.
- IX. Solving application problems involving radicals including those resulting from the Pythagorean Theorem.

Additional topics may be included at instructor's discretion.

**REQUIRED READING:** Text appropriate for the course such as the following:

Aufmann, Richard N., Vernon C. Barker, and Joanne S. Lockwood. Beginning Algebra with Applications. 5th Edition. Boston: Houghton Mifflin, 2000.

OR

Larson, Roland E., and Robert P. Hostetler. Elementary Algebra. 2nd Edition. Lexington, MA: D.C. Heath and Company, 1992.

OR

Kaseberg, Alice. Introductory Algebra, A Just in Time Approach. Boston: PWS Publishing, 1996.

**SUGGESTED READING:** None

**REQUIRED WRITING:** Algebra problem-solving exercises on homework assignments, quizzes, and written tests are appropriate. In addition, students may be required to write reports from one paragraph to several pages explaining concepts or explaining and interpreting solutions to non-routine or applied problems.

**OUTSIDE ASSIGNMENTS:**

**Students are expected to spend a minimum of three hours per unit per week in class and on outside assignments, prorated for short term classes.**

This preparation will include reading the textbook, reviewing lecture material, and completing the assigned problem sets, as deemed necessary by the instructor.

**INSTRUCTIONAL METHODOLOGY:**

**Check all that apply:**

lecture

laboratory

lecture-laboratory combination

directed study

**DISTANCE LEARNING:**

**This course may be offered as a distance learning course and meets Title 5 regulations 55370, 55372, 55374, 55376, 55378, and 55380.**

Yes  No

**If yes, check all that apply.**

- Television Course (Video one-way, e.g. ITV, video cassette, etc.)
- Online Course (Text one-way, e.g. newspaper, correspondence, electronic file, etc.)
- Two-Way Video Conferencing (Two-way interactive video and audio)
- One-Way Video Conferencing (One-way interactive video and two-way interactive audio)
- Computer Assisted Instruction (A specialized form of mediated instruction relying primarily on student access to information and prepared lessons or teaching materials through a computer terminal, but not under immediate supervision of a qualified instructor.)

**GRADING POLICY AND STANDARDS** (include methods of determining whether the stated objectives have been met by students):

Credit/No credit	Participation	10% - 100%
	Quizzes and practice tests	10% - 30%

**IS COURSE REPEATABLE FOR REASON(S) OTHER THAN DEFICIENT GRADE?**

Yes  No  Number of times course may be taken for credit: 2

If yes, identify specific provision of Title 5 Division 2 section(s) 55761-55763 and 58161 which qualifies course as repeatable:

Section 58161 d2A and Section 58161 d2B

**CONTACT PERSON:** Cynthia Torgison      **EXTENSION:** 2550

**SIGNATURES:**

SIGNATURES ON FILE