

**San Bernardino Valley College
Course Outline**

Math 942A – Vocational Arithmetic: Whole Numbers

- I. Mathematics: Math 942A – Vocational Arithmetic: Whole Numbers
1 hour lecture = 1 unit

This is the first of a basic skills sequence emphasizing arithmetic. The skills to be learned include addition, subtraction, multiplication and division of whole numbers as they apply to vocational fields.

Prerequisite: None

- II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: Once

- III. EXPECTED OUTCOMES FOR STUDENTS:

Upon completion of the course the student will be able to:

- a) Add whole numbers
- b) Subtract whole numbers
- c) Multiply whole numbers
- d) Divide whole numbers
- e) Estimate & Round whole numbers
- f) Solve word problems with real life and work related applications utilizing the learned basic skills

- IV. Course Content:

This course will include the following skills to meet the indicated objectives:

- 1) Reading, writing, rounding, and estimation of whole numbers
- 2) Addition and subtraction of whole numbers
- 3) Multiplication and division of whole numbers
- 4) Exponents, square roots and order of operations
- 5) Prime factorization and least common multiples

- V. Methods of instruction:

a) This course will be computer-assisted and primarily computer-managed and includes supplemental materials which may or may not be computer based. Students will work independently through a series of computer generated activities designed to increase basic math skills. Following a pre-test, students will be placed at appropriate individualized levels and proceed through the activities at their own pace. The instruction will begin upon enrollment in the course, under the supervision of the instructor of record. Periodic meetings between the students and the instructor of record will be arranged to discuss computer managed instruction data.

- b) Sample of assignment(s):

Add.

1. $60 + 28 + 59$

Multiply.

2. 1230×82

VI. Methods of evaluation:

- a) Student may submit, to the instructor of record, periodic written reports of the work they have completed.
- b) All assignments will be completed in an independent study format. Upon completion of this practice, students will be required to demonstrate progress by means of a post test and/or other appropriate assessment measures.
- c) Sample test questions:

Perform the indicated operations.

1. $216 + 78$

2. 168×103

VII. Typical text(s):

No text would be required in this course as appropriate computer software would be the "text". Students may need to purchase, supplemental workbooks designed or approved by mathematics department faculty covering the content of this course, through the bookstore.

Invest Software, and
For example: Novak, Basic Mathematics, D. C. Heath (latest edition)

VIII. Other supplies required of students: None