

**Answers to questions on  
signature page (page 4)**

**Proposed Delivery Method Explanation**

**1. The materials are equivalent to the existing or comparable traditional course.**

*Yes. Math 952 is a 4-unit course. Math 952A, Math 952B, Math 952C and Math 952D are four 1-unit courses that cover the same material. Each course is modularized sequentially to be equivalent to one unit of Math 952.*

**2. The course goals and objectives can be satisfactorily met through the proposed delivery method.**

*Yes. 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.*

**3. The course design uses the proposed delivery method effectively.**

*Yes. Math 952A, Math 952B, Math 952C and Math 952D are self-paced computer-assisted programs of Prealgebra that can be accessed in the laboratory or through the internet.*

**4. Supplemental materials are appropriate for the proposed delivery method.**

*Yes. Supplemental material may be used for further explanation and to help the student to complete assignments.*

**5. The course materials engage the student and stimulate critical thinking.**

*Yes. Students will be able to identify the main idea and discern the significant detail in application problems.*

**6. There are appropriate means and opportunities for students to interact with the instructor.**

*Yes. Students will confer with the instructor to discuss their progress. Contact with students may include in-person meetings, telephone, voice mail, or e-mail.*

## **New Course Proposal: Math 952A, Math 952B, Math 952C, and Math 952D**

### **1. A brief explanation of reasons for proposing the course for distance education.**

*To incorporate the use of technology and provide greater access and flexibility for the students, Math 952 has been modified. It has been redesigned as four one-unit courses, Math 952A, Math 952B, Math 952C and Math 952D. These courses will provide Prealgebra training for local businesses and for application in courses such as chemistry, physics, economics, vocational/technological training and more advanced algebra classes. In these proposed courses students will work independently. A greater number of students can be served through the extended lab hours and the internet.*

*(This answers question #3 on the proposed education delivery how to)*

### **2. A description of the proposed alternative method of instruction**

*This is a four one unit self paced, open entry/open exit course sequence designed as a computer-assisted program for Prealgebra. 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. Students' log-on time and progress will be monitored weekly. Periodic meetings between the instructor of record and the students will be arranged to discuss progress as indicated by the computer managed instruction data. Supplemental materials may be used for further explanation and to help the student complete assignments. Upon completion of each unit, the student will be required to demonstrate progress by means of a post-test and/or other appropriate measures. If it becomes evident to the instructor that a student is not advancing successfully in this instructional format, the student will be directed to an alternative format. When SBVC's Distance education program can support internet delivery of instruction, Math952A, Math 952B, Math 952C and Math 952D may be offered through the web.*

*(This answers question # 5 on the proposed education delivery how to.)*

### **3. A description of fulfilling the requirements for personal contact as per Title 5**

*The instructor of record will have regular scheduled hours and there will always be someone available to assist the students. The lab will be staffed and with knowledgeable tutors. The instructor will monitor students' log-on time and progress weekly. In addition, students will meet with faculty to discuss their progress and work via telephone, in-person meetings, voice-mail or e-mail.*

**(This answers question #6 on the proposed education delivery how to.)**

## Course Outline

### Math 952A – Prealgebra (CAI)

#### I. Course Identification

A. Mathematics: Math 952A – Prealgebra (Integers)

B. 1 – One unit: one-hour lecture

C. Catalog Course Description:

Math 952A is a self-paced, computer-assisted program of operations using positive and negative #'s. Students will meet with faculty to discuss their progress and will work independently through a series of computer activities. In addition, supplemental materials may be used for further explanation and/or to help the student complete assignments at the level of the computer generated assignments that are typical for this type of course. The skills to be learned include addition, subtraction, multiplication and division of integers: introduction of variables: simplifications of algebraic expressions: addition, subtraction and multiplication of polynomials.

D. Schedule Course Description:

Learn basic integer skills through a self-paced series of individualized computer-assisted assignments. This program is based on computerized assessment and prescription for overall basic math skill improvement using integers and using variables.

#### II. Required and/or Recommended Background:

Corequisite: None

Perequisite: Successful completion of Math 942 or Math 942A,B,C or placement through assessment test.

#### III. Expected Outcome for Students:

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

- a) Add integers
- b) Subtract integers
- c) Multiply integers
- d) Divide integers
- e) Simplify algebraic expressions
- f) Add, subtract and multiply polynomials

#### IV. Course Content:

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

- 1) Reading, writing, listening and speaking constants and variables with positive and negative #'s
- 2) Addition, subtraction, multiplication and division of integers
- 3) Powers on integer bases
- 4) Order of operations using integer rules
- 5) Simplification and vocabulary of algebraic expressions
- 6) Addition, subtraction, and multiplication of polynomials

## V. Methods of instruction:

a) This course will be computer-assisted and primarily computer-managed and includes supplementary materials which may or may not be computer based. Students will work independently through a series of computer generated activities designed to increase integer 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)

Subtract:

1)  $-10 - (-3)$

Multiply:

2)  $3(-2)^4$

Add:

3)  $(\chi + 3) + 4(\chi - 1)$

## VI. Methods of evaluation:

a) Student's progress reports from the computer is evaluated regularly (usually weekly).

b) Student may be asked to submit, to the instructor of record, completed worksheets or other written assignments

c) 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.

d) Sample test questions:

Follow order of operations

1)  $\frac{7(-2) - 6}{-10}$ .

2)  $5(-2)^2$

3)  $6y - y$

## 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.

For example: Invest software, and McKeague, Prealgebra, ITP

## VIII. Other supplies required of students: None