

Las Positas College
3000 Campus Hill Drive
Livermore, CA 94551-7650
(925) 424-1000
(925) 443-0742 (Fax)

Course Outline for LRNS 119C

SUCCESS IN ALGEBRA

Effective: Fall 2013

I. CATALOG DESCRIPTION:

LRNS 119C — SUCCESS IN ALGEBRA — 2.00 units

Assists students with learning-related disabilities with developing the critical thinking and math reasoning skills necessary to succeed in higher level math courses at the college level. Issues with math anxiety will be discussed. Emphasis will be on developing math study strategies as well as direct instruction to support students in pre-algebra and elementary algebra courses

2.00 Units Lecture

Grading Methods:

Pass/No Pass

Discipline:

	<u>MIN</u>
Lecture Hours:	36.00
Total Hours:	36.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

IV. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

- A. Demonstrate critical thinking skills in areas of deductive and inductive logic.
 1. Define math vocabulary and explaining the language of math by translating phrases and sentences into algebra expressions and equations
 2. Demonstrate through written and oral response an understanding of the basic problem-solving steps needed to solve work problems
 3. Solve problems with at least 70% accuracy in areas involving integers, constants and variables, equations, graphing and order of operations.
 4. Identify online and campus resources specifically available for support of math students.
 5. Describe their preferred learning modality in reference to success in algebra and demonstrate use of at least one strong compensatory strategy in the performance of math problems

V. CONTENT:

- A. Assessing and discussing math learning styles and associated strategies
- B. How to study and learn math
 1. Importance of practice and repetition for fluency
 2. Where can I go when I don't understand
 3. Importance of creating study tools
- C. Sources of math anxiety and strategies to compensate
- D. Using peer support
- E. Individualized instruction on basic math and algebraic concepts
- F. Interpreting and solving word problems

VI. METHODS OF INSTRUCTION:

- A. **Audio-visual Activity** - Online multi-media for instruction and practice exercises
- B. **Classroom Activity** - Practice and drilling as a class.
- C. **Individualized Instruction** -
- D. Small group work. Students will be grouped according to the level of prealgebra or algebra they are currently taking. Students will act as peer support to one another.
- E. **Lecture** -
- F. **Written exercises and case studies** - Self-reflection papers on individual challenges and progress

VII. TYPICAL ASSIGNMENTS:

- A. Take the math learning styles inventory and complete a personal profile that includes your top 2 preferred modalities and the corresponding strategies that you intend to use.
- B. Write a one page paper on areas of difficulty with math and issues with math anxiety. Be sure to include as much of your history of math as you remember and reasons why you feel you haven't been successful to date.
- C. Complete course workbooks at your own pace

VIII. EVALUATION:

A. **Methods**

1. Quizzes
2. Portfolios
3. Papers
4. Class Participation
5. Class Work
6. Home Work

B. **Frequency**

1. Quizzes will be every 2-3 weeks to assess competency on topics as they are covered.
2. Weekly evaluations on the use of strategies in mainstream math coursework
3. 2 written assignments
4. One final examination at the level of the student's attainment (depending on the course level they are working at).

IX. TYPICAL TEXTS:

1. Nolting, P. *Math Study Skills Workbook*. 4th ed., Cengage Learning, 2012.
2. Van Dyke, J., Rogers, J., Adams, H. *Fundamentals of Mathematics*. 10th ed., Cengage Learning, 2011.

X. OTHER MATERIALS REQUIRED OF STUDENTS:

- A. Calculator as is required by their mainstream math class
Colored pencils/pens