



El Camino College

COURSE OUTLINE OF RECORD - Official

I. GENERAL COURSE INFORMATION

Subject and Number: Educational Development 38
Descriptive Title: Increased Learning Performance: Mathematics

Course Disciplines: Special Education

Division: Health Sciences and Athletics

Catalog Description: In this laboratory course, students will increase learning performance and study skills which relate to the content of the El Camino College Mathematics course in which the student is concurrently enrolled. Students will enhance their critical thinking and time management skills. Students will evaluate appropriate campus resources and assistive technologies which promote academic success in math.

Note: This course is appropriate for students with disabilities.

Note: Pass/no pass only.

Conditions of Enrollment: Enrollment Limitation

Concurrent enrollment in an El Camino College Mathematics course.

Other (please specify)

Course Length: Full Term Other (Specify number of weeks):
Hours Lecture: 0 hours per week TBA
Hours Laboratory: 3.00 hours per week TBA
Course Units: 1.00

Grading Method: Pass / No Pass
Credit Status Non-Degree Credit

Transfer CSU: No
Transfer UC: No

General Education:

El Camino College: _____

CSU GE: _____

IGETC: _____

II. OUTCOMES AND OBJECTIVES

A. COURSE STUDENT LEARNING OUTCOMES (The course student learning outcomes are listed below, along with a representative assessment method for each. Student learning outcomes are not subject to review, revision or approval by the College Curriculum Committee)

1. Students will use course support appropriately to complete assignments from their ECC Math class.
2. Students will navigate both on-line and hard copy/textbook assignments from their ECC Math class.
3. Students will use at least one campus tutoring resource for math; examples: the LRC or MBA 119
4. Students will identify and use the appropriate order of operations for the math problems assigned.
5. Students will recognize and use mathematical vocabulary appropriately.

The above SLOs were the most recent available SLOs at the time of course review. For the most current SLO statements, visit the El Camino College SLO webpage at <http://www.elcamino.edu/academics/slo/>.

B. Course Student Learning Objectives (The major learning objective for students enrolled in this course are listed below, along with a representative assessment method for each)

1. Students will recognize their two strongest learning styles and articulate how to use these effectively for developing their skills in math.

Written homework

2. Students will demonstrate accurate translation of the assigned word problems into equations.

Class Performance

3. Students will demonstrate the technique of paraphrasing key concepts.

Class Performance

4. Students will develop and demonstrate techniques to memorize and retain information.

Class Performance

5. Students will articulate their comprehension of course-specific mathematical vocabulary.

Oral exams

6. Students will demonstrate the use of visual organizers or manipulatives to illustrate a concept or process.

Class Performance

7. Students will organize study materials and will demonstrate effective planning and time-management techniques in order to complete assignments on time and prepare appropriately for tests.

Class Performance

8. Students will develop dyad or small group learning techniques through in-class mini-lessons in mathematical concepts, problem-solving, and/or vocabulary.

Class Performance

9. Students will examine and apply various assistive technologies for reading printed math material and/or for recording information, as appropriate, per student need.

Other (specify)

Oral Report

10. Students will identify appropriate campus resources to promote success in their ECC Math class.

Written homework

III. OUTLINE OF SUBJECT MATTER (Topics are detailed enough to enable a qualified instructor to determine the major areas that should be covered as well as ensure consistency from instructor to instructor and semester to semester.)

Lecture or Lab	Approximate Hours	Topic Number	Major Topic
Lab	14	I	Applied Learning Strategies A. Surveying, questioning, and chapter-outlining techniques B. Memory and mnemonic strategies C. Paraphrasing D. Temporal and/or visual sequencing, such as the correct order of operations to solve an equation, accurate interpretation of the place values chart and/or the number line, etc. E. Time-management skills, including use of a weekly grid, semester-long calendar, and personal planner
Lab	14	II	Applied Study Skills A. Organizing text/lecture notes and materials B. Effective math practice methods, such as reading the problem aloud, making a drawing or diagram, etc., as per the student's preferred learning style. C. Locating the formula or procedure D. Developing a procedure to identify and articulate what is known in a math problem and what must be figured out in order to solve the problem. E. Effective collaboration, such as studying with a partner or small group F. Coping with test anxiety
Lab	13	III	Critical Thinking Skills A. Predicting and estimating B. Analyzing a math problem to identify the formula and the steps needed C. Evaluation techniques, such as checking math computation
Lab	13	IV	Campus Resources, including Assistive Technologies A. Using appropriate resources as a bridge towards

		independent learning B Using technology as an alternative to print or handwriting, especially for classes requiring that homework assignments be submitted on-line C. Using technology to record information D. Choosing appropriate educational tools, resources, and strategies for individual learning preferences, such as interactive websites, videos, Supplemental Instruction, tutoring options, etc.
Total Lecture Hours	0	
Total Laboratory Hours	54	
Total Hours	54	

IV. PRIMARY METHOD OF EVALUATION AND SAMPLE ASSIGNMENTS

A. PRIMARY METHOD OF EVALUATION:

Problem solving demonstrations (computational or non-computational)

B. TYPICAL ASSIGNMENT USING PRIMARY METHOD OF EVALUATION:

- I. Examine the math assignment you have brought to Ed. Dev. 38.
 Calendar the due date in your planner. Be aware of other assignments due close to the same date. Determine if you will need to do research or to prepare in some other way to start the assignment. Identify the materials, supplies, or resources you anticipate needing. List the steps you will take to complete the assignment. Estimate the time you will need, and draw up a schedule to complete those steps so that you are able to turn in the assignment by its due date.

C. COLLEGE-LEVEL CRITICAL THINKING ASSIGNMENTS:

1. Analyze the way you use mathematical thinking in your personal life to make decisions, such as the following:
 - a. Compare/contrast credit card offers
 - b. Estimate how much paint/wallpaper is needed for a decorating project
 - c. Evaluate whether driving to a county with a lower sales tax rate is worthwhile when purchasing an expensive item, given the increased gas cost.

2. Looking at the two "graphics" which illustrate the "geography of math," the number line and the place values chart, answer the following questions:
 - a. Is there a "place-holder" or "scrimmage line" for either or both?

- b. Is there a clear indication of positive and negative values on both the number line and the place values chart?
- c. How might you use the number line and the place values chart together?

D. OTHER TYPICAL ASSESSMENT AND EVALUATION METHODS:

- Class Performance
- Completion
- Other (specify):
- Notebook organization and maintenance

V. INSTRUCTIONAL METHODS

- Demonstration
- Discussion
- Group Activities
- Laboratory
- Multimedia presentations

Note: In compliance with Board Policies 1600 and 3410, Title 5 California Code of Regulations, the Rehabilitation Act of 1973, and Sections 504 and 508 of the Americans with Disabilities Act, instruction delivery shall provide access, full inclusion, and effective communication for students with disabilities.

VI. WORK OUTSIDE OF CLASS

Course is lab only - minimum required hours satisfied by scheduled lab time and estimated student hours outside of class per week is zero.

Estimated Independent Study Hours per Week: 0

VII. TEXTS AND MATERIALS

- A. UP-TO-DATE REPRESENTATIVE TEXTBOOKS
 - B. ALTERNATIVE TEXTBOOKS
 - C. REQUIRED SUPPLEMENTARY READINGS
 - D. OTHER REQUIRED MATERIALS
- Calculator, if permitted by mathematics instructor.

VIII. CONDITIONS OF ENROLLMENT

A. Requisites (Course and Non-Course Prerequisites and Corequisites)

Requisites	Category and Justification
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B. Requisite Skills

Requisite Skills

C. Recommended Preparations (Course and Non-Course)

Recommended Preparation	Category and Justification
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D. Recommended Skills

Recommended Skills

E. Enrollment Limitations

Enrollment Limitations and Category	Enrollment Limitations Impact
Concurrent enrollment in an El Camino College Mathematics course. Special Education 1	

Course created by Julia Land on 10/10/2014.

BOARD APPROVAL DATE: 02/17/2015

LAST BOARD APPROVAL DATE:

Last Reviewed and/or Revised by Julia Land on 10/10/2014