

Ventura College
COURSE OUTLINE OF RECORD

I. Course Information (Printed catalog data elements)

A. Discipline:

Mathematics

B. Course ID:

MATH V03E

C. Course Title: Intermediate Algebra: Module V

D. Units: 1.00

E. Hours:

Lecture/wk: 1.00

Total Semester Contact Hours (based on 16 week semester): 17.50

F. Prerequisite(s):

MATH V03D

G. Corequisite(s):

None

H. Recommended preparation:

None

I. Description:

This course is the fifth of a five-course sequence (MATH V03A-V03E). Completion of all five courses is equivalent to MATH V03. Topics will include composite and inverse functions, properties of logarithms, common and natural logarithms, exponential and logarithmic equations, and solving word problems involving logarithmic and exponential equations. Under the guidance of the instructor, students will complete self-paced interactive competency-based computer assignments, including possible review of previously learned topics. More than one course in the sequence may be completed within the term.

J. Transfer Status:

Non Transferable

II. Course Objectives

Upon successful completion of this course, the student will be able to demonstrate the following measurable skills and abilities:

The students will demonstrate on timed written tests the ability to:

Simplify and evaluate composite functions.

Find and graph the inverse of a function.

Solve logarithmic equations and exponential equations.

Solve word problems involving logarithmic and exponential equations.

III. Course Content

- A. Composite functions.
- B. Inverse functions.
- C. Properties of logarithms.
- D. Common logarithms and natural logarithms (effective use of calculator recommended).
- E. Exponential and logarithmic equations.
- F. Solving word problems involving logarithmic and exponential equations.

IV. Assignments

A. Representative In-class Assignments that develop critical thinking (required for degree applicable courses) may include, but are not limited to:

Student Activities:	Write composition(s) and/or report(s) and/or essay(s)	Write research paper(s) and/or term paper(s) and/or other paper(s)	Solve computational and/or symbolic problems	Conduct and experiment or survey	Engage in analytical discussions	Prepare oral presentations	Develop skills in performance/activities	Create and analyze projects	Other (specify below)
Critical Thinking Skills	Student Activities involved in each skill								
Evaluating			X		X				
Appraising and assessing			X		X				
Justifying	X		X		X				
Synthesizing			X		X				
Developing and formulating			X		X				
Analyzing	X		X		X				
Solving problems	X		X		X				
Applying principals	X		X		X				
Comprehending concepts	X		X		X				
Identifying knowledge			X		X				
Other (describe):									
Comments:									

B. Representative Out-of-class Assignments

Reading: Students will progress at their own pace to read instructional material either in the software program or in supplemental texts, equivalent to approximately two chapters.

Writing: Examinations and homework may include writing definitions, justifications, and/or explanations.

Problem solving: Work includes use of interactive computer software. Students will be assigned problems for their skill level, building to a level that demonstrates mastery in course content. Students will start with as few as five problems per topic to as many as 50 or more.

V. Representative Instructional Modes -

Lecture
Audio Visual Presentations
Collaborative Group Work
Computer-aided Presentation/Assignments
Demonstrations
One-on-one conference

VI. Evaluation Methods - Substantively related to the course objectives.

A. Writing.

written homework

B. Problem Solving. Computational or non-computational problem-solving demonstrations, including:

exam(s)
quiz(zes)
homework problem(s)
other (specify) : interactive computer assignments

C. Skills demonstrations. Including:

performance exam(s)
other (specify) : interactive computer assignments

D. Objective examinations. Including:

multiple choice
true/false
matching items
completion

VII. Textbooks

List representative textbooks, manuals, and other instructional materials/publications, including those materials to be put in the Library/LRC(Learning Resources Center).

Author(s)	Title(s)	Publisher(s)	Date(s)
Elayn Martin-Gay	Intermediate Algebra	Pearson	2009
Miller/O'Neill	Intermediate Algebra, 2e	McGraw-Hill	2008

Other appropriate publications/instructional materials such as representative recommended readings, repertoire, non-print media (eg., websites, audio/visual recordings), and software.

Other

Other Appropriate Publications: Interactive Math Software (Required)
Discipline-specific websites: Yes