

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

Course Outline for MATH XX55W
INTERMEDIATE ALGEBRA WORKSHOP
Effective: Fall 2016

I. CATALOG DESCRIPTION:

MATH XX55W — INTERMEDIATE ALGEBRA WORKSHOP — 0.75 units

This course is a co-requisite for Math 55: Intermediate Algebra. The course is designed to provide additional support to students who are currently taking an Intermediate Algebra course, such as students who are worried about their success, students who have not placed into Math 55 but hope to accelerate through the sequence of basic skill math courses, or those who are repeating the course. This course will support students in achieving Math 55 learning goals by providing a review of algebraic and geometric concepts that are relevant to their Intermediate Algebra course, by providing study strategies that promote understanding and improve performance, more in-depth investigation of core concepts that are difficult for students to master, and learning skills.

0.75 Units Lab

Corequisite

MATH 55 - Intermediate Algebra for STEM

Grading Methods:

Pass/No Pass

Discipline:

	MIN
Lab Hours:	41.00
Total Hours:	41.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 4

III. PREREQUISITE AND/OR ADVISORY SKILLS:

IV. MEASURABLE OBJECTIVES:

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

- A. Use learning strategies to identify and communicate in their own words the key concepts of Intermediate Algebra.
- B. Use effective strategies to read mathematical text for understanding.
- C. Organize and justify their mathematical thinking on Intermediate Algebra problems.
- D. Apply Intermediate Algebra concepts at a higher level.
- E. Use problem solving process to read mathematical problems with understanding, identify relevant information, define variables, execute relevant procedures and interpret results in the context of the problem.
- F. Develop study skills and life skills that will improve the student's likelihood of succeeding in their academic goals, such as identifying his/her individual growth mindset, brain research, and learn personal time management, study skills, test taking and math anxiety strategies, etc.

V. CONTENT:

- A. Regular classroom and small group discussion will focus on identifying and communicating what learning objectives were covered in their Intermediate Algebra class.
 1. Students will learn note-taking skills and refer to the notes for understanding
 2. Students will learn how to synthesize big ideas in the material.
 3. Students will identify examples or problems that relevant to the learning objectives.
- B. Practice organizing their thinking and justifying each mathematical steps while simplifying or solving Intermediate Algebra problems.
- C. Read Mathematical text for understanding
 1. Make a skeleton outline of material covered in the textbook.
 2. Highlight important facts in the textbook.
- D. Review Intermediate Algebra concepts and practice completing many Intermediate Algebra problems.
- E. Successfully solve Intermediate Algebra context problems by learning how to:
 1. Read context problems with understanding
 2. Identify relevant information
 3. Define variables
 4. Execute relevant procedures
 5. Interpret results in the context of the problem
- F. Learn appropriate skills necessary to become more productive, successful and independent learners.
 1. Students will participate in Growth Mindset, Brain Research and learning skill discussions.

2. Students will learn about free resources available on campus and on the internet to enhance their learning of mathematics.
3. Students will actively participate in classroom discussions around topics such as time management, note-taking, study habits, test taking strategies and dealing with math anxiety.

VI. METHODS OF INSTRUCTION:

- A. **Discussion** - Instructor should allow regular time to discuss what main Intermediate Algebra concepts were covered in their Math 55 course, what the big ideas are citing their classroom notes and mathematical textbook for evidence.
- B. **Demonstration** - Instructor should model examples of what a mathematician should do when approaching the Intermediate Algebra content. Students should then practice applying those strategies to additional problems.
- C. **Lecture** - Lecture will only be in small, relevant amounts, with specific skills-building goal in mind and time left for students to practice applying the demonstrated skill described.
- D. **Individualized Instruction** - Instructor will provide individualized instruction as often as possible.
- E. **Directed Study** - Class will spend time in directed Intermediate Algebra content discussions, with students practicing applying concepts individually or in small groups.

VII. TYPICAL ASSIGNMENTS:

VIII. EVALUATION:

- A. **Methods**
- B. **Frequency**

IX. TYPICAL TEXTS:

X. OTHER MATERIALS REQUIRED OF STUDENTS: