MATH 103 Intermediate Algebra
Sec 025

Instructor: Dr. Jae K. Lee

Office: Swart 315

Phone: 424-1520

Email: leej@uwosh.edu

Office Hours: MoWeFr 9:10 AM $\sim$ 10:10 AM & 12:40 PM $\sim$ 2:30 PM

. or by appointment

Class Meets: MoWeFr 10:20 AM $\sim$ 11:20 AM Swart 102

I. COURSE PREREQUISITE

A 67-100 with a "C" or above or placement. Not open to students who have completed 67-104 or higher.

II. REQUIRED COURSE MATERIALS

- Textbook: Miller/O'Neill/Hyde: Beginning and Intermediate Algebra, 5th Ed. (McGraw-Hill) - ALEKS 360.
- Once you have a acquired the ALEKS license , go to **www.aleks.com** and, when prompted, enter the following code: **33EN4-AQRMQ**

III. Learning Objectives

This course provides an introduction to algebra, focused on critical thinking, problem solving and the communication of ideas to help students prepare for future course work and future problem solving opportunities.

Upon successful completion of the course, students are expected to have the ability to complete the following:

- Students will work with linear functions, quadratic functions and exponential functions in the forms of equations, tables and graphs proficiently.
- Students will solve quadratic equations utilizing both completing the square and the quadratic formula.
- Students will determine and interpret the meaning of the x-intercepts and y-intercepts for various functions.
- Students will calculate a discriminant and will identify how features of a calculated discriminant value relate to the features of the equation and graph of a quadratic function.
- Students will factor expressions and solve equations that are quadratic in form.
- Students will determine the solution of 2x2 systems of linear equations utilizing processes by graphing, the substitution method and the addition or elimination method.
- Students will utilize the properties of inequalities to determine the solution of compound inequalities and write the solutions in different representations including the real number line, interval notation and set builder notation.
- Students will graph exponential growth and decay functions.
- Students will utilize the properties of exponents to simplify radical expressions, to solve radical equations and to solve exponential equations that do not require the use of logarithms where a common integer base is determined.
- Students will solve application exercises through a logical and sequential process that emphasizes preparing a plan of action, creating an equation, solving the equation, answering the original question including the correct units,

checking that the answer is a plausible real number solution and rejecting non-plausible real number solutions such as negative distances, negative radicands in even index roots and/or extraneous solutions.

- Students will learn the definition of the logarithmic function as the inverse of the exponential function and will learn how to use the properties of the logarithms to simplify algebraic expressions, solve equations and applied problems involving logarithms and exponentials.

IV. Tutor Lab

The Swart301 Developmental Math Lab provides free walk-in tutoring for 67-103 students. The Swart301 tutoring schedule is posted at http://www.uwosh.edu/mathematics/developmental-mathematics.

V. COURSE REQUIREMENTS AND GRADING

ITEM	%
Exam 1	20
Exam 2	20
Final Exam	30
ALEKS HW	10
Quizzes	20
TOTAL	100

Homework

Your homework problems will be completed on ALEKS. The homework problems will be similar to problems from your textbook. Each week you will get new homework assignments that will usually be due by the end of the week on Sunday(the last week assignments are due on Friday). These problems can be worked on until you

get them correct with no time limit. Please pay attention to the due dates for the homework assignments.

Quizzes

Quizzes will be given in class. The lowest score will be dropped. **No make up quizzes**.

Examinations

Exam 1: Wednesday, March 4^{th}

Exam 2: Wednesday, April 15^{th}

Final Exam: Friday, May 15^{th}

All of exams are closed book/closed notes. Attendance at the scheduled examinations is required. There is no provision for absences due to vacations, family outings and other social activities, other special plans and appointments, etc.
Absences due to illness require a medical excuse on Physician's letterhead, signed by the physician, which must be submitted before any alternate arrangements for the exam will be considered. **Final Exam is cumulative**.

Attendance & Participation

You're expected to be in class every day. You are responsible for all material covered and any announcements made each day in class, whether you are present or not. Your effort, including regular class attendance, participation, and completion of the homework on a daily basis will influence your success in this course. **Attendance will be taken at every class**.

VI. STANDARD GRADING FOR THIS COURSE

Your grade for this course will be given with A, A-, B+, B, B-, C+, C, D+, D, D-, F based on the following scale:

A	A-	B+	B	B-	C+	C	D	F
(92,100)	(90, 92)	(88,90)	(84,88)	(82,84)	(80,82)	(75,80)	(50,75)	(0,50)

VII. COURSE OUTLINE

Exam 1 includes Sec $\mathbf{7.1} \sim \mathbf{8.3}$

Exam 2 includes Sec $\mathbf{10.1} \sim \mathbf{11.5}$

Final Exam includes all section we learned and $\mathbf{8.4, 12.1} \sim \mathbf{12.6}$

VIII. Spring Break

March $\mathbf{22}^{nd} \sim$ March $\mathbf{29}^{th}$

IX. SPECIAL ACCOMMODATIONS

If you need special accommodations in order to meet any of the requirements of the course, please contact me and provide me with a proper documentation as soon as possible.

X. INCOMPLETE POLICY

An Incomplete can only be granted for a student who is passing the class and has a documented emergency that prevents him/her from completing the course.