Intermediate Algebra (3 credits), Spring 2020

67-103	Sec. 026: M WF 1:50-2:50 Swart Hall 326
Instructor:	Dr. Kandasamy Muthuvel
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Office Hours:	MTWF: 10:20-11:20, MTWF: 12:40-1:10 (Other times by appointment)
Text:	Beginning & Intermediate Algebra (720 Day ALEKS Access Cord w/Ebook) 5th Edition by Miller/ONeill/Hyde
Calculator:	TI-30XA calculator is required and used for homework, quizzes, and tests. Bring your calculator to class every day.

Course Coverage: 7.1 Intro to Rational Exponents,7.2 Multiplying and Dividing Rational Expressions, 7.3 Least Common Denominator, 7.4 Adding and Subtracting Rational Expressions, 7.5 Complex Fractions, 7.6 Rational Equations, 7.7 Applications of Rational Equations and Proportions, 8.1 Introduction to Relations, 8.2 Introduction to Functions, 3.6 Review of Linear Functions and Applications, 8.3 Graphs of Functions, 8.4 Algebra of Functions and Composition, 10.1 Definition of an *n*th root, 10.2 Rational Exponents, 10.3 Simplifying Radical Expressions, 10.4 Addition and Subtraction of Radicals, 10.5 Multiplication of Radicals, 10.7 Solving Radical Equations, 11.1 Square Root Property and Completing the Square, 11.2 Quadratic Formula, 11.4 Graphs of Quadratic Functions, 11.5 Applications of Quadratic Functions, 12.1 Inverse Functions, 12.2 Exponential Functions, 12.3 Logarithmic Functions, 12.4 Properties of Logarithms, 12.5 Irrational number *e* and Change of base, 12.6 Logarithmic and Exponential Equations.

Prerequisite: Math 101with a grade of C or better, or placement.

Learning objectives: 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.

Exams: There will be two one-hour exams and a comprehensive final exam.
Exam 1: March 4, Exam 2: April 15, Final Exam May 15
Class Activities: There will be many in-class activities, including quizzes and group work.

ALEKS: You will be doing homework problems and quizzes on ALEKS, https://www.aleks.com, which is an interactive website where you will work on problems and receive step-by-step help to solve problems. There is more information on Canvas in the content section.

Grading: Exam 1: 20%, Exam 2: 20%, Final Exam: 30%, Quizzes, HW, & Other Class Activities 20%, Aleks: 10%

[92 , 100] A	[84 , 88) B	[75 , 80) C	[90 , 92) A^-	[82 , 84) B^-
[50 , 75) D	[88, 90) B^+	[80, 82) C^+	Below 50 F	

Drop Date: The last day to drop the course is March 18, 2020. Late withdrawals are approved only when there are extenuating circumstances.
Attendance: You are expected to attend and participate in each class. If absent, it is your responsibility to obtain the missed lecture notes and to do the assignment.
Tutor Lab: The Developmental Math Lab, located in Swart 301, provides free walk-in tutoring for Math 103 students. Students are strongly encouraged to use the Tutor Lab as a resource for assistance with any mathematics questions that arise, especially when working on homework or preparing for an exam. The Tutoring schedule is posted at http://www.uwosh.edu/mathematics/developmental-mathematics
Academic Integrity: Examples of Academic Misconduct include, but are not limited to: Plagiarism; Copying another student's homework, assignment; Cheating on an exam; etc.Any form of academic misconduct will be dealt with in accordance with UW system policy UWS 14. Penalties that may be imposed include a failing grade for the course, disciplinary probation, and expulsion from the university.
http://www.uwosh.edu/deanofstudents/university-polices-procedures/academic-misconduct
Remark: If any substantive changes are made in the course syllabus, such as changes in schedule or assignments, notification will be provided in a timely manner and a revised syllabus made available. It is expected that the grading criteria, as distributed to the students, will be adhered to throughout the term.
Cell phones should be turned off during class period.
For accommodations of persons of special needs, talk to me.
The following disclosure statement: "Students are advised to see the following URL for disclosures about essential consumer protection items required by the Students Right to Know Act of 1990: https://uwosh.edu/financialaid/consumer-information/."