MAT 152 - College Algebra 30980 MW 11:00AM-12:15 PM, Room 4-114
31024 Online

(3) Modeling of applications using linear, quadratic, exponential and logarithmic functions. Introduction to solving systems of equations using matrices. Prerequisite: MAT 122 or equivalent; or satisfactory score on mathematics placement assessment.(RC/E). Three lecture.

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Office Hours: MW 10:00 -11:00AM, 12:15-2:00PM, TTh 10:00-11:45AM
Course Compass Course ID: graser12333

COURSE CONTENT:

1. Linear Functions
2. Quadratic and other nonlinear functions
3. Exponential and logarithmic functions
4. Polynomial functions
5. Systems of equations and matrices
6. Use of technology in mathematics

LEARNING OUTCOMES:

Upon successful completion of this course, the learner will be able to:

1. Use technology to recognize trends in data. (1,2,3,4,6)
2. Create suitable functions that model data using technology. (1,2,3,4,6)
3. Analyze an application using a function developed from data. (1,2,3,4,6)
4. Add, subtract and multiply matrices in the context of an application. (5,6)
5. Solve a system of equations using matrices and technology. (5,6)

Course Format: *Section 30980* is a section that meets twice each week, but also has a significant component on the Internet. You are expected to work through problems on the Internet outside of class and then to use the class meetings to ask questions during class. Once you have completed the homework online, you'll also need to complete a quiz over the content.

Section 31024 is an online section. The content for this section is delivered through the course website. You will complete homework problems to help you learn the material and then take a quiz to demonstrate that you have learned the course content. You have the opportunity to ask questions via email or through the courses Discussion Board. You may also attend the class meeting of section 30980 if you need more help.

In all sections, you'll be required to complete projects and technology assignments.

All the materials for the course are available at http://www.coursecompass.com .The textbook for the course is "College Algebra in Context with Applications for the Managerial, Life, and Social Sciences" by Harshbarger and Yocco (3rd edition 2009). This book is available in the Yavapai College bookstore and is bundled with a special student access code. The textbook is also available online via a student access code that you can purchase online from within our class website (or use the one bundled with your textbook).