

**MAT 152 - College Algebra 14885 TT 2:00PM-3:15PM, Room 4-116
14099 Online**

Credit Hours: (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.

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Office Hours: Mon/Tues 11:00AM – 2:00PM, Weds/Thurs 12:30PM -2:00PM

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 14885* is a section that meets twice each week, but also has a significant component online. You are expected to work through problems online 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. The online materials for the course are located at <http://my.yc.edu> (look for the MyLabsPlus link).

Section 14099 is an online section. The content for this section is delivered through the course website at <http://my.yc.edu> (look for the MyLabsPlus link). 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 phone, email or during online office hours. You may also attend the class meeting of section 14885 if you need more help.

In all sections, you'll be required to complete projects and technology assignments. More information on the course requirements can be found in the Common Course Policies. The materials for the course are available through the Yavapai College portal at <http://my.yc.edu> (look for the MyLabsPlus link) with supplemental materials like handouts and videos at <http://www.whyseemath.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). If you have used this textbook for another course, you will be able to reuse the license you have already student access code for the textbook. Contact me for more details.