

# MATH 1315

## College Algebra

### Instructor

Dr. Theresa Jones  
tj19@txstate.edu

### Course Description

A course covering linear and quadratic equations, inequalities, word problems, functions, logarithms, systems of equations and other college algebra topics as time permits. Prerequisite: Mathematics ACT Score of at least 21 (SAT-480); or a mathematics placement score of at least 26; or MATH 1311 with a grade of A, B, C, or CR

### Objectives

The goal of College Algebra to provide students an opportunity to learn algebra concepts and to develop algebraic problem solving skills. The goal will be achieved by meeting the following objectives. The student will be able to:

- solve equations and inequalities (linear, quadratic, other polynomial equations, exponential, logarithmic).
- develop the concept of function (inverse, rational, polynomial functions).
- understand related functions through symmetry, transformation and operations with functions.
- solve systems of linear and nonlinear equations.
- operate with matrices and complex numbers.
- translate real world situations into mathematical models.
- use a graphing calculator as a tool for thinking about algebraic concepts.

### Course Materials

The following materials are required:

- Dugopolski, *College Algebra*, 5th edition, 2010 (ISBN: 978-0321644749) - You may purchase a paper copy if you'd like, but an electronic version of the textbook comes with MyMathLab (MML) subscription (discussed below).
- MyMathLab access code - View the [instructions for purchasing an MML access code online](#).
- Scientific calculator - A TI 30XIIS is inexpensive and meets the needs of the course. Note that you will not be allowed to use a graphing calculator or any calculator on your cell phone during exams.
- Scanner or access to a scanner/scanning services - Some of your assignments will need to be scanned and submitted via the Projects link in the left navigation bar. If you do not have a scanner, you can a) check with your public library to see if they have one available for use, b) utilize one of the scanners available at computer labs on the Texas State campus, or c) utilize the scanning services of commercial copy centers such as Staples or FedEx Office. *All scans must be submitted as .pdf files, and students are responsible for ensuring that the .pdf is of sufficient quality for clear printing. Scans not of sufficient quality will be returned with the request to re-scan.*

### Assessments and Grading

Your final grade will be comprised of the following learning opportunities that sum to 1000 points:

- Get Started Quiz (10 points)
- Homework (200 points) - The homework is assigned at the end of each lesson and must be completed in [MyMathLab](#). You may attempt homework as many times as you wish in order to achieve your desired grade.
- Projects (120 points) - six small assignments. For each project, you will print the associated pdf then complete the problems by hand on the printout. You will then scan those pages for submission. If you do not have a personal scanner, you can a) check with your public library to see if they have one available for use, b) utilize one of the scanners available at computer labs on the Texas State campus, or c) utilize the scanning services of commercial copy centers such as Staples or FedEx Office. *All scans must be submitted as .pdf files, and students are responsible for ensuring that the .pdf is of sufficient quality for clear printing. **Note: You may submit no more than two projects within a seven-day period.***
- Chapter Tests (90 points) - You will take a test via MyMathLab at the end of each chapter.
- Midcourse Exam (250 points) - The midterm will be 25 questions inspired by the homework and projects through Chapter 3. To take the midcourse exam, you must have earned a score of 80% or higher on all homework assignments for Chapters 1-3.
- Final Exam (330 points) - The final exam will be 33 questions inspired by the homework and projects through Chapter 6 (comprehensive). To take the final exam, you must have earned a score of 80% or higher on all homework assignments for Chapters 4-6.

*You must earn a score of 60% or better on the midcourse and final exams in order to pass this course. Also, as stated above, you may submit no more than two projects within a seven-day period.*

You will be able to earn a maximum of 1000 points. Final grades will be determined as follows:

- A = 900 points and above
- B = 800-899 points
- C = 700-799 points
- D = 600-699 points
- F = less than 600 points

For the projects, midcourse exam, and final exam, please be aware that I have ten **business** days from the date of receipt to complete grading.

### **Faculty-Student Contact**

Faculty-student contact is very important. Even though this is a correspondence course, I encourage you to contact me if you have any concerns, questions, or difficulties. You are welcome to e-mail me by using the *Mail* tool in the left-hand menu bar. (It is important to keep all mail related to this course contained within this TRACS site.) My policy is that during non-holiday breaks or announced away times, any email I receive between Monday morning and Friday at noon will receive a reply within 48 hours. Emails received between Friday at noon and Sunday night will receive a reply on the next business day.

### **Free Tutoring Resources**

A variety of free tutoring resources are available for students enrolled in correspondence courses. All correspondence students have access to several hours of free online tutoring from Smarthinking for subjects ranging from grammar and writing to mathematics and Spanish. Free online tutoring for writing-related assignments is also available from the Texas State Writing Center. For information on accessing these resources, please visit the Office of Distance and

Extended Learning's [Free Tutoring](#) page. Currently-enrolled, degree-seeking students able to visit the Texas State campus are eligible for free in-person tutoring from the [Student Learning Assistance Center \(SLAC\)](#) on the fourth floor of Alkek Library and from the [Math Lab](#) in Derrick 233.

### **TRACS Technical Support**

Texas State's Information Technology Assistance Center (ITAC) provides phone and LiveChat technical support for TRACS 24 hours a day, seven days a week, 365 days a year. To take advantage of these services, visit [ITAC online](#) or call 512.245.ITAC (4822). Note also that a number of online TRACS tutorials are available from [TRACS Facts](#). I am not qualified to provide TRACS support.

Before beginning this online course, I recommend that you review the minimum hardware and software requirements and other important information available on the ITS [Course Information page](#).

### **Correspondence Course Information**

As a correspondence studies student, it is your responsibility to be familiar with correspondence-related policies and services. To this end, I encourage you to review the [Correspondence Course Information \(.pdf\)](#) page as well as the [Correspondence Studies Student Handbook](#).

### **Students with Special Needs**

The Office of Distance and Extended Learning is committed to helping students with disabilities achieve their educational goals. A disability is not a barrier to correspondence study, and we strive to provide reasonable accommodations to individuals in coursework and test taking. Students who require special accommodations need to provide verification of their disability to the [Office of Disability Services](#), Suite 5-5.1 LBJ Student Center, 512.245.3451 (voice/TTY). Students should then notify the [Office of Distance and Extended Learning](#) of any disability-related accommodation needs as soon as possible to avoid a delay in accommodations.

### **Academic Integrity**

The [Texas State Academic Honor Code](#) applies to all Texas State students, including correspondence students. The Honor Code serves as an affirmation that the University demands the highest standard of integrity in all actions related to the academic community.