

Dual Credit College Algebra (3 credit hours)
Mat 1414

Instructor
Dodie Boyd

South Plains College

Taught at
TRINITY CHRISTIAN HIGH SCHOOL

2024-2025

Trinity Christian High School

Instructor: Dodie Boyd

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Conference hours: 2:15 - 3:35 pm

R3 Google Classroom Code: [yl2doyh](#)

N1 Google Classroom Code: [ycs6b2c](#)

Textbook (Provided by school): College Algebra, by Blitzer, 6th edition

Welcome to Dual Credit Algebra. This course information will tell you about the course. Almost all of your questions can be answered by reading this document. If you still have questions after reading over this information, please contact me. I would be glad to clarify anything for you. Let's get started and have an awesome year!

COURSE DESCRIPTION

MATH 1414 College Algebra (Stem) - 3 hours

In-depth study and applications of rational, real, and complex number systems; functions including polynomial, rational, exponential and logarithmic functions, and related equations; inequalities, sequences and series; systems of linear equations using matrices; partial fractions; conic sections; and probability.

Prerequisite: Algebra 1, Geometry, Algebra 2 and TSI-compliant in Mathematics.

COURSE OBJECTIVES

Upon successful completion of this course, students will:

- **Communication skills** - to include effective written, oral and visual communication
- **Critical thinking skills** - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.
- **Empirical and quantitative competency skills** - to manipulate and analyze numerical data or observable facts resulting in informed conclusions.

Course Student Learning Objectives:

Learning Outcomes upon successful completion of this course and receiving a passing grade, students will be able to:

- Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, and inverses.
- Recognize and apply polynomial, rational, radical, exponential and logarithmic functions and solve related equations.
- Apply graphing techniques.
- Evaluate all roots of higher degree polynomial and rational functions.
- Recognize, solve and apply systems of linear equations using matrices.

Required Materials:

- TI 84 Plus graphing calculator
- Folder/Notebook 1 1/2" to 2"
- Something to take notes on
- Pencil and grading pen (not black)

USE OF CALCULATORS:

Although calculators and computers have made a distinct difference in the study of mathematics, they have *not* replaced mathematical thought. Calculators cannot decide whether to add, subtract, multiply, or divide in order to solve a problem! The student must make this decision. At that point, the calculator can be used to efficiently determine the solution to the problem.

Graphing calculators can provide important graphical and numerical support to the validity of a mathematical solution. They are capable of exposing errors in logic and pointing to patterns. They are, however, incapable of possessing mathematical insight. Therefore, calculators will be used to *complement* the human mind, not *replace* it!

Method of Instruction:

- Live lecture
- Multiple sample problems worked using Promethean Board
- Small groups
- Projects

ATTENDANCE & MAKE-UP WORK

Attendance and effort are the most important activities for success in this course. If you are absent for any reason, make-up work is your responsibility. All lectures and homework missed will be in google classroom. The number of days to turn in work missed equals the number of days the student was absent. This applies to work assigned during the time the student was absent. A test or quiz being given on the day of return from an extended absence will be made up at a time arranged by the teacher. Students who will miss class due to a school sponsored activity which they are aware of in advance are expected to turn work in and pick up assignments **before** missing class. All assignments missed due to an extracurricular activity are due on the day you return to class. A student who stops attending or misses five classes may be administratively dropped with a grade of F or W.

TUTORING

I will be in my classroom by 7:45 a.m. each morning if help is needed. Other tutorial time will be during academic coaching.

GRADING

30% - homework and quizzes 70% - tests and projects

AVERAGE

GRADE IN COURSE

90-100

A

80-89

B

75-79

C

70-74

D

0-69

F

Final Grade is calculated as follows:

$((1^{\text{st}} \text{ Quarter grade} \times 4) + (2^{\text{nd}} \text{ Quarter grade} \times 4) + (\text{Final Exam Grade} \times 2)) = \text{Semester Final Grade}$

All homework assignments will be graded in class and are due on the assigned date. No late papers are accepted. If you do not have your homework when it is due, then you will receive a zero for that assignment. If you miss class due to an extracurricular event, you are required to pick up your work before you leave or get your assignment from google classroom. All missed assignments due to your extracurricular event are due the day you return to class. You may come in during morning tutorials (7:45 – 8:00 am) or academic coaching to check your homework and ask questions. Homework is due when you come to class. The only exceptions for late homework papers will be if you were absent due to an illness, family illness and/or a death in the family. If possible, please let me know ahead of time if you are going to be absent. Quizzes will be given throughout the chapter as needed. Tests will be administered at the completion of each chapter. **There are no retests on quizzes or tests.**

GENERAL/MISCELLANEOUS

Student Responsibilities and Expectations

1. Each student is responsible for following all rules in the 2024-2025 Student Handbook for Trinity Christian School.
2. Come to class on time and be prepared to learn.
3. Respect all property.
4. Respect all ideas given in class and do not talk while others are speaking.
5. Exemplify academic honesty and do your very best!

Things you need to know!!!

1. All homework, quizzes and tests will be completed in pencil.
2. You must show all the work when answering a problem.
3. You will not be allowed to leave the classroom. Restroom breaks can be taken after classroom instruction.
4. You will not be allowed to bring any food into the classroom. You may bring drinks in the classroom as long as they have a lid.

Course Policies for South Plains College - Please see the following link for information about the following policies: [Syllabus Statements](#)

Intellectual Exchange Statement

Disabilities Statement

Non-Discrimination Statement

Title IX Pregnancy and Parenting Accommodations Statement

Campus Assessment, Response, and Evaluation Team

Campus Concealed Carry Statement

Covid-19

Artificial Intelligence Statement

Mat 1414 Course Outline – Fall 2024

This schedule is tentative and subject to change. Changes will be announced in class.

Chapter	Suggested Date
1 – Sects. 1.1-1.7	08/15 – 09/06
Ch. 1 Test	09/09 & 09/10
2 – Sects. 2.1-2.8	09/11 – 09/20
Ch. 2 Test	09/25 & 09/26
3 – Sects. 3.1-3.5	09/23 – 10/04
Ch. 3 Test	10/09 & 10/10
4 – Sects. 4.1-4.4	10/07 – 10/17
Ch. 4 Test	10/22 & 10/23
5 – Sects. 5.1-5.3	10/18 – 10/31
6 – Sects. 6.1-6.4, 6	
Ch. 5 & 6 Test	11/05 & 11/06
7 – Sects. 7.1-7.3	11/01 – 11/21
8 - Sects. 8.1-8.3, 8.	
Ch. 7 & 8 Test	11/22 & 12/02
Project Assessment	12/03 & 12/04
Final	12/09 & 12/10

