CISCO COLLEGE

Dual Credit Woodson High School Campus

COLLEGE ALGEBRA

MATH 1314.68

Fall 2025

Instructor: Roni Mills Meeting Times-format: In-person at WISD M-Th 8:45-9:42

Phone: 940-345-6521 Office Location: RMills Classroom, WISD HS Campus

Email: roni.mills@woodsonisd.net Office Hours: M-Th 9:45-10:42

<u>roni.mills@cisco.edu</u> My goal is to reply to all messages within one business day.

I. COURSE TITLE AND NUMBER

College Algebra – Math 1314 (Credit: 3 semester hours)

II. TEXTBOOK

My Math Lab access through Cisco College Canvas (required)

College Algebra (8th ed., 2022), Robert Blitzer; Prentice Hall – Pearson (hard copy - optional)

Accessibility and Privacy Statements

https://ciscocollege.instructure.com/courses/14725/pages/accessibility-and-privacy-for-course-technologies

III. Transferability

MATH 1314, College Algebra, is an academically transferable course equivalent to 3 credit hours in Mathematics. Note: This course may not apply toward a major in mathematics but is a prerequisite to mathematics courses that are required

IV. COURSE DESCRIPTION

In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included; may not apply toward a major in math.

V. LEARNING OUTCOMES (ACGM)

Upon successful completion of this course, students will:

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

VI. CORE OBJECTIVES (THECB)

This course meets the Core Objectives of Critical Thinking, Communication Skills, and Empirical & Quantitative Skills for the Foundational Component Area of Mathematics as required by the Texas Higher Education Coordinating Board.

Math 1314 (College Algebra) is the most widely taken and transferred mathematics course within the Cisco College core curriculum. It emphasizes the Core Objective of Empirical & Quantitative Skills through a study of quadratic, polynomial, rational, logarithmic, exponential functions/equations and other topics. Problem solving skills with related algebraic applications to everyday experience require the student to demonstrate the Core Objective of Critical Thinking. Students are required to graph the functions studied in this course and must correctly use algebraic notation and terminology in order to clearly express the key mathematical concepts in this course to meet the Core Objective of Communication Skills.

VII. COURSE REQUIREMENTS

Pre-requisites: Placement testing by TSIA2 with a score of 950+ and two years of high school algebra (Algebra I & II) or successfully completed DMAT 0314 with a minimum grade of C.

Attendance policy: Prompt and regular class attendance is necessary for satisfactory work. Attendance is defined by physical attendance or participation in an academically related activity. Students will be dropped from Math 1314 who are failing due to excessive absences (6 absences in classes meeting 3 times per week, 4 absences in classes meeting twice per week, and 2 absences in classes meeting once per week) and/or failure to make up work due to absence. For an online class, attendance is counted by participating in the assignments for the week. Simply signing in or navigating through the course does Not count as attendance.

Calculator policy: We will use calculators in this course. A graphing calculator may be used for this course (recommendation: TI-83, 83+, 84). Calculators with CAS (Computer Algebra System) technology are NOT permitted. Examples of these calculators are: HP Prime, TI-Nspire CAS, & TI-89. Cell phone calculators and computers are never allowed as calculators in this class. Calculator rental of TI-84's is available at Cisco College at https://www.cisco.edu/degrees-programs/associate-of-arts/mathematics.

Student Conduct, Notices and College Policies: Students are expected to follow all classroom policies listed in the course syllabus.

- College-wide policies can be found in the Official Catalog and the Student Handbook. Inappropriate behavior in the classroom shall result, at a minimum, in a request to leave class. The Student Handbook contains a list of specific prohibitions.
- Dual credit courses are more challenging than high school courses and expect students to complete work on par with any
 other college student, demonstrate maturity and openness to new and varied ideas. Student information, attendance, and
 performance/grades will only be discussed with the student.
- Student Technology Use: Use of communication devices is prohibited during class. Exception to this policy may occur due to collegewide emergency notification or at the discretion of the instructor. In order to protect the privacy of other students and to encourage open discussion, covert digital recording is prohibited in the classroom and material from online classes may not be recorded, shared, or reposted publicly. Students are expected to follow the Student IT Policy as stated in the Student Handbook.

Academic Integrity: It is the intent of Cisco College to foster a spirit of complete honesty and a high standard of integrity. The attempt of students to present as their own any work they have not honestly performed is regarded by faculty and administration as a serious offense and subjects the offender to disciplinary action. The Student Handbook contains a list of academic integrity definitions and other and violations. Violations are reported; multiple violations are tracked. These could include but are not limited to: grade of zero submitted, withdrawal from class, and possibly suspension.

Note: Using AI tools in an unethical or irresponsible manner, such as copying or paraphrasing the output without citation or transparency, using the output as your own work without verification or integration, or using the output to misrepresent your knowledge or skills, is considered a form of academic dishonesty.

Note: It is also academic dishonesty to publish any materials provided by your professor/instructor without written consent. These items include but are not limited to: exams, reviews, paper or electronic assignments, and/ or any posted materials in your course's Learning Management System, Canvas.

- **Course Content:** College-level courses may include controversial, sensitive, and/or adult material. Students are expected to have the readiness for college-level rigor and content.
 - For online classes: An online format does not warrant less respectful behavior and will not excuse offensive behavior. Respecting diversity in an online format requires the respectful address of ideas without personality or identity assumptions.
- For dual credit: Dual Credit students will comply with all enrollments, attendance, and financial and course policies by Cisco College and their high school. Policies regarding disclosure of information regarding student performance, withdrawing from a class, and student support services may be found on the Cisco College Dual Credit webpage.
 - Dual credit classes will be cancelled in the event of Cisco College or ISD campus closure. Make-up work may be required. ISD campus events cannot disrupt dual credit classes.
- Disability Services/ADA Accommodations: Cisco College provides appropriate accommodations to qualified students in accordance with the Rehabilitation Act of 1973 and the Americans with Disabilities (ADA) act of 1990. Accommodations are made on a case-by-case basis. Students with special needs are encouraged to contact the Disability Services Coordinator as early as possible. Early notice is required to prepare for and provide special accommodations by the first week of class. It is the student's responsibility to provide the necessary documentation to the Disability Services Coordinator prior to receiving accommodations.
 - For Dual Credit: Dual Credit students must follow Cisco College procedures to receive accommodations. High school IEPs do not apply to college courses. The high school counselor can assist you in contacting the Disability Services Coordinator. Title IX: The College prohibits Sexual Misconduct and is committed to the timely and fair resolution of Sexual Misconduct cases. The College encourages prompt reporting of all types of Sexual Misconduct. The College has defined Sexual Misconduct as any unwelcome conduct of a sexual nature. The following persons may be contacted regarding Title IX issues: Title IX Coordinator (325-794-4405), Vice President of Instruction (325-794-4401) or any counselor.

VIII. EVALUATION

Breakdown of Final Grade: 20% - Online Homework in My Math Lab

10% - Quiz Average/Check-Ins

60% - 3 In Person Exams

10% - Comprehensive Final Exam (including Post Test)

100% - Final Grade

Grading Scale: 90 - 100 A

80 - 89 B

70 - 79 C

60 - 69 D

< 60 F

Homework: Keep up with the due dates on My Math Lab. There is a 15% penalty on any homework problems completed after the due date.

Exams: There will be 4 In person proctored pencil/paper exams. Exams will be given on the dates listed on our Assignment Schedule at the students High School Campus. No make-up exams allowed unless notification of absence and approval for an alternative test date is given prior to the exam date.

Quiz Average: There will be several quizzes throughout the semester. They will be announced and given online.

Final Exam: A comprehensive final exam will be given at the end of the semester during finals week. The Comprehensive Final Exam which includes the post test will be proctored on the high school dual credit campus like other exams.

Pre- & Post Tests: The Pre- & Post Tests consist of problems designed to measure both the learning outcomes at the course level and Core Objectives of the Core Curriculum at the program level. A departmental Pre-Test will be given on the first day of class. The PreTest will not count toward a student's grade in the course. A departmental Post Test will be taken at the end of the semester and will count as at least 5% of the course grade. The Post Test may be given separately from the Final Exam or included as a portion of the Final Exam.

Tentative Test Dates:

Chapter 1 9/17-18/25

Chapter 2 10/15-16/25

Chapter 3 11/4-5/25

Chapter 4-6 122-3/25

Final 12/09/25

Late Work Policy: As mentioned in the "Homework" section, work will receive a 15% penalty if completed after the due date. It is to your benefit to do the homework even if it is after the due date.

Extra Credit: No extra credit for Math Division courses.

Math Center: A computer equipped math tutoring center is available for students to get extra help and tutoring. The Math Center is in Room 121 AEC and Room 3 SCH. Online tutoring is also available through the Support Services tab in Canvas.

Parenting Students: As a parent, the Title IX office can assist you with reasonable accommodations necessary for your academic success. These accommodations may be provided while a student is pregnant, during any pre- or post-delivery complications, and while parenting or caretaking. If you are a parent or guardian of a child younger than 18 years of age or expecting a child, please complete the Pregnancy and Parenting Support Form. This form is your opportunity to notify Cisco College that you are a parenting or pregnant student and/or may need accommodation due to parenting or pregnancy related issues. Please note that pregnancy and parenting statuses apply to both partners, regardless of sex or gender identity.

Student Help & Resources: Students are encouraged to utilize the Canvas and online learning resources provided on the Distance Education webpage and the Student Resources provided on Canvas. For Canvas assistance: online@cisco.edu or 325-794-4480. For assistance with college computers, software, and email, visit helpsdesk@students.cisco.edu or call 254-442-5010.

Changes to the Syllabus: The schedule and procedures in this syllabus are subject to change if deemed appropriate by the instructor. Students will be notified in advance of any changes.

IX. COURSE TEXTBOOK OUTLINE

This course covers the following chapters and sections of the text:

- 1. Graphs and Graphing Utilities (Optional)
- 2. Linear Equations and Rational Equations
- 3. Models and Applications
- 4. Complex Numbers
- 5. Quadratic Equations
- 6. Other Types of Equations
- 7. Linear Inequalities and Absolute Value Inequalities

- 2.1 Basics of Functions and Their Graphs
- 2.2 More on Functions and Their Graphs
- 2.3 Linear Functions and Slope
- 2.4 More on Slope
- 2.5 Transformations of Functions
- 2.6 Combinations of Functions; Composite Functions
- 2.7 Inverse Functions
- 2.8 Distance and Midpoint Formulas; Circles

- 3.1 Quadratic Functions
- 3.2 Polynomial Functions and Their Graphs
- 3.3 Dividing Polynomials; Remainder and Factor Theorems
- 3.4 Zeros of Polynomial Functions
- 3.5 Rational Functions and Their Graphs (Optional)
- 3.6 Polynomial and Rational Inequalities
- 3.7 Modeling Using Variation (Optional)

- 4.1 Exponential Functions
- 4.2 Logarithmic Functions

4.3 Properties of Logarithms	
4.4 Exponential and Logarithmic Equations	
4.5 Exponential Growth and Decay; Modeling Data (Optional)	
Chapter 5: Systems of Equations and Inequalities	1 day
Chapter 6: Matrices and Determinants	1 week
6.1 Matrix Solutions to Linear Systems	
6.2 Inconsistent and Dependent Systems and Their Applications (Opt	tional)
	24 Required Section

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