

MATH 3A: COLLEGE ALGEBRA FOR STEM SPRING 2023

Instructor Information

- Mrs. Kelsey Casteel
- When you need to get in contact with me, please message me through the Canvas messaging system. When you are in Canvas click on the "inbox" tab on the main left hand side menu. If Canvas is down (fingers crossed that never happens), then please email me @ kelsey.casteel@reedleycollege.edu
- Campus office hours: Mondays and Wednesdays from 11:30 am to 12:20 pm in the Math and Science Building (where the Math Center is) office 133. I am also available to meet online via Zoom. If you would like to schedule a zoom session with me, please send me a message through Canvas and we will schedule it and I will send you the meeting information.

Course Information

Welcome to Math 3A, College Algebra for STEM! Our course section number is 52032. If you have a verified need for an academic accommodation or materials in alternate media (ie: Braille, large print, electronic text, etc.) per the American With Disabilities Act or Section 504 of the Rehabilitation act please contact me as soon as possible.

This class lasts from Monday January 9th through Friday May 19th. We meet in person on Mondays and Wednesdays from 8:00 – 9:50 am in Classroom Complex I (CCI) room 206.

Course Description

This is a college level course in algebra for majors in science, technology, engineering, and mathematics. Students will study polynomial, rational, radical, exponential, absolute value, and logarithmic functions. Topics include systems of equations, theory of polynomial equations, and analytic geometry.

Advisories: English 1A or English 1AH

Prerequisite(s): Mathematics 103 or equivalent

• Units: 4

Course Materials

- The majority of assignments are through an online platform called MyOpenMath, which is completely FREE to you! You won't need to make an account or sign up for anything everything is integrated into Canvas.
- Some form of calculator, can be physical or online. I really enjoy using the FREE Desmos scientific and graphing calculators which can be found at desmos.com

• Our textbook is completely FREE! We are using *College Algebra 2E* by OpenStax. You can find links to the textbook in Canvas.

Student Learning Outcomes

Upon completion of this course, students will be able to:

- Analyze properties of various types of functions using their graphs and/or equations.
- Solve various types of equations and inequalities.
- Apply appropriate techniques to model real world applications.
- Use formulas to find sums of finite and infinite series.

Course Objectives

In the process of completing this course, students will:

- Analyze and investigate properties of functions, including linear, polynomial, absolute value, rational, radical, exponential, and logarithmic functions.
- Synthesize results from the graphs and/or equations of functions, including linear, polynomial, rational, radical, exponential, and logarithmic functions.
- Apply transformations to the graphs of functions.
- Recognize the relationship between functions and their inverses graphically and algebraically.
- Solve and apply rational, linear, polynomial, radical, absolute value, exponential, and logarithmic equations and solve linear, nonlinear, and absolute value inequalities.
- Solve systems of equations and inequalities.
- Apply techniques for finding zeros of polynomials and roots of equations.
- Apply functions and other algebraic techniques to model real world applications.
- Analyze conics algebraically and graphically.
- Use formulas to find sums of finite and infinite series.

Grading

You can see your individual assignment grades and overall class grade anytime in Canvas. Your overall class percentage is broken down as follows:

• Exams (including mandatory cumulative final exam): 60%

• Assignments: 30%

• Discussions: 10%

How does this actually work? Say that at the end of the class you have the following percentages in each category: 82% in exams, 70% in assignments, and 90% in discussions. Your overall class percentage is calculated as follows:

$$.60*82 + .30*70 + .10*90 = 49.2 + 21 + 9 = 79.2\%$$

Letter grades given according to the following intervals:

89.5 - 100% A

79.5 - 89.4% B

69.5 - 79.4% C

59.5 - 69.4% D

0-59.4% F

Assignments/Discussions

Most assignments are set up through MyOpenMath with direct access through Canvas (you will NOT need to set up any sort of account outside of Canvas). In assignments, you will have unlimited time on each question and can reset the question as many times as you need. Discussions are posted using the discussion feature in Canvas. You will see all assignments and discussions organized in the modules. Your grades are constantly updated as you work on assignments. It may take some time for the system to sync the grades, so do not panic if you finish something and do not instantly see the correct grade in the gradebook. There are no penalties for a late assignment or discussion.

Extra Credit

There are no extra credit opportunities available for this class.

Exams

The content of the course is divided into four exams which will take place during class. If you need to take an exam on a different day than scheduled please let me know as soon as possible so we can make other arrangements. **If you have testing accommodations through the DSP&S office, please talk with me as soon as possible.

Final Exam

There will be a **mandatory** cumulative final exam at the end of the class. It will contain questions from throughout the semester.

Technology

As a student of SCCCD, you are given a free student email account. Make sure you are able to login to this account and check it on a regular basis (at least once a day). You can also set it up through your smart phone if you have one and set up email alerts so that you never miss anything important. Your student email is the official way your instructors communicate with you outside of class. In addition to your email account, you also have a Canvas account set up by the college. Everything for our course will be available in the Canvas shell.

Access to reliable internet is **mandatory** for success in this class. If you do not have access to the internet from home, you need to figure out places you can go to work. **Not having access to the internet is not an excuse for incomplete work.**

Drop Policies

If you do not participate in the course for 2 weeks I will assume you are no longer interested in the course and will drop you. If you desire to drop the course, you can do so through Self Service.

Important Dates

- Monday January 9th first day of class
- Monday January 16th Martin Luther King, Jr. Day observed, no classes, campus closed
- Friday January 20th last day to drop a full-term class for a full refund
- Sunday January 29th Last day to drop the class to avoid a "W" (withdrawal)
- Friday February 17th Lincoln Day observed, no classes, campus closed
- Monday February 20th Washington Day observed, no classes, campus closed
- Friday March 10th Last day to drop the course to receive a "W" instead of a letter grade (you are dedicated to a letter grade if still enrolled after this date)
- April 3 7 Spring Break, no classes, campus is open Monday through Thursday
- Wednesday May 17th Final exam in class from 8:00 9:50 am
- Friday May 19th Last day of class!

*** This syllabus is subject to change at the discretion of the instructor ***