

# Math 3A College Algebra

Fall 2022

Course Syllabus

Hi, and welcome to Math 3A, I have been preparing for you and I hope that you enjoy this course and most importantly that you learn the skills that you need to succeed. You will be challenged in this class but you will also be supported. I want to welcome ALL of you right now to reach out to me whenever you have a question or need of help. College is NOT meant to be done alone, we all had help. To support you in this class you will have my office hours, you can ask to make an appointment if my office hours do not work for you. You also have free tutoring at the math center available to you. I will also form study groups for you and you can meet with them once a week on zoom. After I make the study groups, if your study group is not working out for you, you can ask to be moved to one of the other available study groups. I may also contact you via email, especially if you fall behind.

## General Information

### Instructor

Veronica Andrade

### Office

Math and Science Room 131

### Office Hours

#### Virtual Office Hours:

Mondays and Wednesday 9:00 – 10:30

I will connect automatically on these days and times, click on this link during those times to connect with me: <https://scccd.zoom.us/j/94510604103>

#### In person Office Hours:

Thursdays: 12:30 – 2:00

(these will be held in my office)

### Class Times

We will have one optional orientation meeting (an orientation meeting) on Monday 8/8/2022 at 10 AM click on the following link at that time to join: <https://scccd.zoom.us/j/93987746007>. There are no required synchronous meetings the meetings that I will have will be optional. There will be, for example, review sessions and you will use the same link for those: <https://scccd.zoom.us/j/93987746007>. You can find the dates and times for the unit review session in the class calendar under Unit 0 (at the end of Unit 0). You have video lessons to guide you through the course (they will be available on CANVAS) you need to watch and take notes when it is convenient for you but before the due dates. You must also complete the assignments to gain access to the unit tests. I will be available for you, all you have to do is email me, or visit me during my office hours.

### Email

maria.andrade-romeo@reedleycollege.edu

## Tutoring

The math center is available. If you do not have the RC\_Math Center on your CANVAS Dashboard (It has a tiger on the cover) please go to Unit 0 and there are instructions there on how to self-enroll. If you need help please email me.

## Prerequisites

none

## 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; systems of equations; theory of polynomial equations; analytic geometry among other topics.

## Text and Required Material

1. Lial, Hornsby, Schneider & Daniels "College Algebra" twelfth edition MyMathLab Access Card. The best and cheapest way to purchase the access card is with a credit card through CANVAS. You may also purchase it at the bookstore but it will cost a little more. The MyMathLab access card comes with a digital copy of the book.
2. Scientific Calculator (make sure it has the sin, cos, and tan keys)

## Reasons for which you may be dropped

I may drop students at any time starting on Wednesday August 9<sup>th</sup> through Sunday October 9<sup>th</sup>. Here are the reasons for which you may be dropped:

1. You may be dropped if you have not signed up for MyMathLab by Tuesday August 9<sup>th</sup>. DO NOT purchase the access code by August 9<sup>th</sup> use the free trial at this point.
2. You may be dropped IF YOU HAVE NOT PURCHASED the access code by Tuesday August 23<sup>rd</sup>.
3. Finally, I am very flexible and do not have penalties for turning work in late, but I DO expect you to advance at the pace of the calendar pace; and I will have two checkpoints where if you are not advancing at the right pace you may be dropped.
  - You may be dropped if you have not turned in Unit 1 Test by Thursday 8/25/2022
  - You maybe dropped if you have not turned in Unit 1, Unit 2 and Unit 3 Tests by Thursday 10/06/2022

NOTE: If you want to drop the class, make sure that you do so on Webadvisor, do not depend on me to drop you.

## Important Dates

8/19/2022: Census-Last Day to DROP a full-term class for a full refund

8/26/2022: Last day to drop to avoid a "W" in person

8/28/2022: Last day to drop to avoid a "W" on Webadvisor

10/07/2022: Final Drop Deadline, a letter grade will be assigned after this date

12/07/2022: Last day to submit Any work in MyMathLab

## Grading

Grade	Range
A	90 – 100%
B	80 – 89%
C	70 – 79%
D	60 – 69%
F	0 – 59%

Grade Category	Weight
Tests	100%

**YOUR GRADE IS THE GRADE ON THE CANVAS GRADEBOOK (NOT THE GRADE ON MYMATHLAB).**

## Testing

You may not give or receive help on tests.

## Homework and Quizzes

Homework and Quizzes WILL NOT be part of your grade but you are required to do the homework and the quizzes to help you prepare for the exam (unit test). You will not have access to the unit tests until you complete all of the MyMathLab unit homework with at least a 75%, and the quizzes (the quizzes do not have a minimum percentage requirement).

## Academic Dishonesty

**Cheating** is the act or attempted act of taking an examination or performing an assigned, evaluated task in a fraudulent or deceptive manner, such as having improper access to answers, in an attempt to gain an unearned academic advantage. Cheating may include, but is not limited to, copying from another's work, supplying one's work to another, giving or receiving copies of examinations without an instructor's permission, using or displaying notes or devices inappropriate to the conditions of the examination, allowing someone other than the officially enrolled student to represent the student, or failing to disclose research results completely.

**Plagiarism** is a specific form of cheating: the use of another's words or ideas without identifying them as such or giving credit to the source. Plagiarism may include, but is not limited to, failing to provide complete citations and references for all work that draws on the ideas, words, or work of others, failing to identify the contributors to work done in collaboration, submitting duplicate work to be evaluated in different courses without the knowledge and consent of the instructors involved, or failing to observe computer security systems and software copyrights.

Incidents of cheating and plagiarism may result in any of a variety of sanctions and penalties, which may range from a failing grade on the particular examination, paper, project, or assignment in question to a failing grade in the course, at the discretion of the instructor and depending on the severity and frequency of the incidents.

## Student Learning Outcomes

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

1. Analyze properties of various types of functions.
2. Synthesize results from the graphs and/or equations of functions.
3. Solve various types of equations and inequalities.
4. Apply appropriate techniques to model real world applications.
5. Use formulas to find sums of finite and infinite series.

## Course Objectives

In the process of completing the course, the student will:

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

## Course Outline

1. Functions including linear, polynomial, rational, radical, exponential, absolute value, logarithmic: definitions, evaluation, domain and range;
2. Inverses of functions;
3. Algebra of functions;
4. Graphs of functions including asymptotic behavior, intercepts, vertices;
5. Transformations of quadratic, absolute value, radical, rational, logarithmic, exponential functions;
6. Equations including rational, linear, polynomial, radical, exponential, absolute value, logarithmic;
7. Linear, nonlinear, and absolute value inequalities;
8. Systems of equations and inequalities;
9. Characterization of the zeros of polynomials;
10. Properties and applications of Complex numbers;
11. Properties of conic sections; and
12. Sequences and series.

### Optional Topics

1. Partial Fractions
2. Introduction to Limits
3. Polar Coordinates
4. Introduction to Matrices

## Disclaimer

Ms. Andrade-Romeo reserves the right to make changes to the syllabus with whole class notification.