Math 3A-52251 College Algebra

Semester/Year: Spring 2019	**Instructor**: Kelly Winter
Units: 4	**Office Location:** FEM 1L
Location: FEM 4	**Phone number:** (559) 638-0300 ext 3471
Office Hrs: Mon, Wed, & Fri 10-11am	**Email**: kelly.winter@reedleycollege.edu
Tues 1-2pm	**Virtual Office Hr**: Thurs. 12-1pm via Canvas
Length: 18 weeks (Jan 14 - May 17)	
Schedule	**Prerequisite:** Math 103 or equivalent
This class meets Tuesday and Thursday from 8-9:50am.	**Final Exam:** Thursday, May 23, 8-10am

Welcome to College Algebra: It is my desire to help each one of my students succeed and gain confidence in their math and statistics skills. I believe that all students can succeed if they stay organized, set aside consistent work time, complete all assigned work, ask questions and prepare for exams. I am here to guide you through the course, answer questions and encourage you to work hard. I am looking forward to this semester.

There are many excellent resources available to you on our campus. Other students in class are a good resource and I would encourage you to form small groups to study and do homework together. If you have an unanswered question, come by my office (FEM 1L) which is in the FEM building located in the Math Center. I am working in the Math Center Mondays 12-2pm and Tuesdays 12-1pm.
Other available resources are:
- The Math Center in the FEM building, room 1. Hours: Monday-Thursday 8:00am - 4:00pm and Friday 8:30am -12:00pm. (559) 638-0300 ext. 3158
- The Tutorial Center. Hours: Monday-Thursday 8am-4pm, Friday 8am-3pm.
- The Library and computer lab. Hours Monday-Thursday 7:30am-8pm, Friday 7:30am-3pm.

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.

Great news: your textbook for this class is available for **free** online!
College Algebra from OpenStax, ISBN 1-947172-12-3

You have several options to obtain this book:

- View online (Links to an external site.) (Links to an external site.)
- Download a PDF (Links to an external site.) (Links to an external site.)
- Order a print copy (Links to an external site.) (Links to an external site.)

You can use whichever formats you want. Web view is recommended -- the responsive design works seamlessly on any device.

Other Course Materials/Technology: Our class will rely heavily on the use of online materials. To access our course materials and homework assignments, you will need to log in to Knewton via Canvas. **Access to Knewton is a requirement for this course. Knewton costs $44 if you buy access online. You must have access to Knewton by Friday, August 17th or you will be dropped from the course. A scientific calculator is a requirement for the course.** A phone, ipod, ipad, computer, or other device will not be allowed during a test.

Makeup Work/Late Assignments
Each week there will be homework assigned online in Knewton. Each week's assignments open on Monday morning and are due the following Monday evening by midnight. This gives you plenty of time to work through each assignment and get help on questions that you may get stuck on. Each assignment is adaptive, which means that every correct response gets you closer to completion and every incorrect response will give you more instruction and practice in order to master the assignment. Therefore, it is in your best interest NOT to guess! All students in this course should spend a minimum of **eight hours per week** outside of the classroom on homework, studying, reading the text and preparing for exams.

Assignment Point Values

Assignment	Value
Homework & Quizzes	20%
Chapter Exams	60%
Final Exam	20%

Final Grades

Letter Grade	%
A	90 -100
B	80 – 89.4
C	70 - 79.4
D	60 - 69.4
F	0-59.4

Grading Policies/Rubrics
Please monitor your grade on Canvas. It is your responsibility to make sure that your grade is accurate. If there is a discrepancy, please email me ASAP.

ACADEMIC DISHONESTY
Students at Reedley College are entitled to the best education that the college can make available to them, and they, their instructors, and their fellow students share the responsibility to ensure that this education is honestly attained. Because cheating, plagiarism, and collusion in dishonest activities erode the integrity of the college, each student is expected to exert an entirely honest effort in all academic endeavors. Academic dishonesty in any form is a very serious offense and will incur serious consequences.

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.

NOTE: If you have a verified need for an academic accommodation or materials in alternate media (i.e, Braille, large print, electronic text, etc.) per the Americans with Disabilities Act or section 504 of the Rehabilitation act please contact me as soon as possible.

Please refer to SCCCD polies for guidance on all matters relating to this course.

Objectives
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