

**Reedley College Spring 2018**

Math-103-52070 Intermediate Algebra Syllabus  
MTWTHF 11:00-11:50 AM (Social Science Room 31)

**Instructor:** Maria Veronica Andrade-Romeo

Office: FEM 4A

Office Hours: TWTh 9:00 - 9:50

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**Prerequisites:** Mathematics 201 or equivalent

**Course Description:**

This course is designed to provide students with a strong foundation in algebra, graphing, and problem-solving skills. This course will cover many algebraic concepts including: equations and inequalities in two variables, rational exponents and roots, quadratic functions, exponential and logarithmic functions, and conic sections.

**TEXT:**

(Optional) George Woodbury, Elementary and Intermediate Algebra, Pearson/Addison Wesley, 4<sup>rd</sup> Edition, 2015.

**Required Material:**

1. MyMathLab Access Code
2. A scientific calculator (you may not use your cell phone as a calculator)

**Classroom Behavior:**

1. Absolutely no cell phones (You may be dismissed).
2. Do not pack up early.
3. In general, be considerate. We are here to learn.
4. If you are tardy (less than 20 minutes) or leave early (less than 20 minutes) you will be marked tardy and tardies will count as half absences. If you are more than 20 minutes late or leave more than 20 minutes early you will be marked absent.

**You may be dropped if:**

- You have 3 or more absences at Noon on January 25, 2018
- You have 6 or more absences at Noon on March 8, 2018.
- You do not have PAID access to MyMathLab by NOON on January 25, 2018.

**If you want to drop the class, you are responsible for making it official and dropping yourself on Webadvisor, do not rely on me to drop you.**

**Important Dates:**

1/26/2018: Census-Last Day to ADD/Drop a full-term class

3/9/2018: Drop Deadline-Last day to drop a full-term class to avoid a letter grade

5/16/2018: 11:00 - 12:50 Final Exam

**Grading:**

90 - 100% = A                      80 - 89% = B                      70 - 79% = C

60 - 69% = D                      0 - 59% = F

Tests: 70% **NO RETAKES**

Quizzes: 5%

Homework: 20%

Participation: 5% to receive credit for participation you must come to class, make your best effort to succeed and you may NOT be on your cell phone.

I do not round up grades. You will have plenty of time to raise your grade yourself.

### **Testing**

Follow directions, be prompt, NO CELL PHONES allowed, NO NOTES, Testing must be completed in a single sitting you may not leave the room once you have started. The SCCCD policy regarding ACADEMIC DISHONESTY will be applied when appropriate. **THERE ARE NO RETAKES.**

### **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.

### **Students with Disabilities:**

If you have any special needs addressed by the American Disability Act and need course materials in alternate modes, or alternate testing circumstances, it is your responsibility to notify me as soon as possible. Upon notification, immediate reasonable efforts will be made to accommodate your special needs.

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

### **Student Learning Outcomes:**

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

1. simplify and/or factor mathematical expressions into forms more conducive to analysis

2. solve equations introduced in Intermediate Algebra (linear, quadratic, exponential, logarithmic, and radical)
3. graph functions and relations introduced in Intermediate Algebra (linear, quadratic, exponential, logarithmic, and radical)
4. apply Intermediate Algebra topics (linear, quadratic, exponential, logarithmic, and radical functions) to solve real-life problems

### **Course Objectives:**

*In the process of completing this course, students will:*

1. use the properties of lines and linear inequalities, and apply operations on functions
2. simplify radical and complex expressions and perform operations on them
3. solve quadratic equations using various techniques including factoring and quadratic formula, and graph parabolas
4. apply the properties of exponents and logarithmic functions to change the base of a logarithm
5. manipulate and graph equations of conic sections
6. optional Topics (if time permits)
  - o generalize arithmetic and geometric sequences and find the kth term of a binomial expansion.

### **Course Outline**

#### A. Equations and Inequalities in Two Variables

1. Slope of a line
2. The equation of a line
3. Linear inequalities in two variables
4. Operations on functions

#### B. Rational Exponents and Roots

1. Rational exponents
2. Simplified form for radicals
3. Arithmetic operations on radical expressions
4. Equations with radicals
5. Complex numbers

#### C. Quadratic Functions

1. Quadratic equations
2. Graphing parabolas

#### D Exponential and Logarithmic Functions

1. Exponential Functions
2. The Inverse of a function
3. Logarithms and their properties
4. Exponential and logarithmic equations and change of base

#### E. Conic Sections

1. Circle
2. Ellipses and Hyperbolas

Optional Topics (if time permits)

#### F. Quadratic Functions

3. Quadratic inequalities

G. Conic Sections

3. Second-degree inequalities and non-linear systems

H. Sequences and Series

1. Arithmetic and geometric sequences
2. Series
3. Binomial Expansion

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