

## Course Syllabus: Intermediate Algebra

**MATH 103-52067**

**Instructor:** Mr. Steven Zook

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**Reedley College**

**Spring 2018**

**Office Hours:** TWTh 10am – 11am

**Meeting Room:** FEM 4  
**Meeting Days:** MTWThF  
**Meeting Time:** 9:00 – 10:00 am

**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.

**Course Prerequisites:** MATH 201 or equivalent

**Course Advisories:** Eligibility for ENGL 126

### **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.

### **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)

- Generalize arithmetic and geometric sequences and find the  $k$ th term of a binomial expansion.

**Required Text: George Woodbury, Elementary and Intermediate Algebra, Pearson Education, 4<sup>th</sup> Edition, 2015.**

This text is required for reading; however, you do not have to purchase a hard copy of the text since it is available online as an eText with the MyMathLab subscription.

**Required Course Material MyMathLab:** You will be required to obtain access to MyMathLab. To access the course, use the **Course ID: zook08216**

You will need to first create an account here: [www.pearsonmylabandmastering.com](http://www.pearsonmylabandmastering.com)

When creating an account, **use your full first and last name as your name appears in official school records**, using usual capitalization rules.

**WARNING: Any students who do not gain *full paid* access to MyMathLab by 1/22/18 may be automatically dropped from the course.**

**Office Hours:** I will be holding regular office hours. I want to be available to you if you need assistance outside of class. Please visit me during the scheduled times for drop-in questions. You may come unannounced during those times. If the scheduled office hours do not suit your schedule, you may arrange a time to meet me in my office. Please don't hesitate to take advantage of these since I want you to succeed – it's what I am here for.

**Attendance:** As a student, you are expected to attend all classes for the entire period. Please be on time and ready to start when class is scheduled to begin. I ask this out of respect for your classmates and me. **Ten (10) absences** may result in a drop from the course. If you decide to drop, it is your responsibility to drop the class officially through the Administration and Records office. In failing to do so, you run the risk of receiving a **grade of F**.

**Classroom Behavior:** Please take care of any personal responsibilities and needs before entering the classroom. Please **TURN OFF your phones** when entering the class. They should **remain off for the duration** of the class period. If you use your phone in class, you may be asked to leave class. While you are in class, I expect you to participate and pay attention and you may not work on homework in class or prepare for a different class. You are allowed to use a **scientific calculator**, but not a graphing calculator for this class. Also, you may not use your phone as a calculator.

**Drop Deadline:** Friday, March 9

**Assignments & Exams:**

All **online homework** assignments will be completed online at **MyMathLab**. Homework assignments will be due on the due date by **11:59pm** and will cover topics outlined in the course calendar. If you submit your homework late, there is a **10% penalty for each day**

that the assignment is late. An assignment that is late 10 days or more receives no credit (10 days  $\times$  10%/day = 100% penalty).

There will be weekly **quizzes** that will be completed in **MyMathLab**. These will be available on the date they need to be completed and you will be given a time limit in which to complete the quiz. These may not be made up if they are attempted late. If you know in advance that you need to take the quiz early, please let me know.

There will be **six (6) exams including a comprehensive final** throughout the semester and the dates they will be held are in the course calendar and they will cover the specified content. There will be no make-up exams allowed.

### **Assignment Categories and Weighting**

<i>Assignment</i>	<i>Weighting</i>
Online Homework	15%
Quizzes	15%
Exams (5 @ 10% each)	50%
Final Exam	20%

### **Final Grades**

<i>Letter Grade</i>	<i>Percent</i>
A	90-100
B	80-89
C	70-79
D	60-69
F	0-59

**SPECIAL NEEDS REQUESTS:** 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 (ADA) or Section 504 of the Rehabilitation Act, please contact me as soon as possible.

**Please refer to the RC Catalog for the Policies on Academic Dishonesty, Cheating, and Plagiarism, pg. 44.**

### **Course Outline and Schedule**

Week 1: Begin Chapter 8: A Transition (Linear Equations and Inequalities)

Week 2: **Homework 1** due on Tuesday, Jan. 16  
**Quiz 1** due on Friday, Jan. 19

Week 3: **Homework 2** due on Tuesday, Jan. 23  
**Exam 1 on Wednesday, Jan. 24 (Chapter 8)**

Begin Chapter 9: Radical Expressions and Equations  
**Quiz 2** due on Friday, Jan. 26

Week 4: **Homework 3** due on Tuesday, Jan. 30  
**Quiz 3** due on Friday, Feb. 2

Week 5: **Homework 4** due on Tuesday, Feb. 6  
**Quiz 4** due on Friday, Feb. 9

Week 6: **Exam 2 on Tuesday, Feb. 13 (Chapter 9)**  
Begin Chapter 10: Quadratic Equations  
**Homework 5** due on Tuesday, Feb. 13

Week 7: **Homework 6** due on Tuesday, Feb. 20  
**Quiz 5** due on Friday, Feb. 23

Week 8: **Homework 7** due on Tuesday, Feb. 27  
**Exam 3 on Thursday, Mar. 1 (Chapter 10)**  
Begin Chapter 11: Functions

Week 9: **Homework 8** due on Tuesday, Mar. 6  
**Quiz 6** due on Friday, Mar. 9

Week 10: **Homework 9** due on Tuesday, Mar. 13  
**Quiz 7** due on Friday, Mar. 16

Week 11: **Homework 10** due on Tuesday, Mar. 20  
**Exam 4 on Wednesday, Mar. 21 (Chapter 11)**  
Begin Chapter 12: Logarithmic and Exponential Functions

Week 12: **Homework 11** due on Tuesday, Apr. 3  
**Quiz 8** due on Friday, Apr. 6

Week 13: **Homework 12** due on Tuesday, Apr. 10  
**Quiz 9** due on Friday, Apr. 13

Week 14: **Homework 13** due on Tuesday, Apr. 17  
**Exam 5 on Wednesday, Apr. 18 (Chapter 12)**  
Begin Chapter 13: Conic Sections

Week 15: **Homework 14** due on Tuesday, Apr. 24  
**Quiz 10** due on Friday, Apr. 27

Week 16: **Homework 15** due on Tuesday, May 1  
**Quiz 11** due on Friday, May 4

Week 17:     **Homework 16** due on Tuesday, May 8  
              **Quiz 12** due on Friday, May 11

Week 18:     **Comprehensive Final Exam**

If any changes are made, I will announce them in class and post them on Canvas.