

Course Syllabus: Intermediate Algebra

MATH 103-52076 RC Hybrid

Instructor: Mr. Steven Zook

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Reedley College

Spring 2018

Office Hours: TWTh 10am – 11am

Meeting Room: Web/CCI 201
Meeting Days: Monday, Jan. 8 (Introduction)
Monday, Feb. 12 (Exam 1)
Monday, Apr. 2 (Exam 2)
Monday, May 14 (Exam 3)
Meeting Time: 6:00 – 8:00 pm

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)
 - o 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, 4th 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: zook23389**

You will need to first create an account here: 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 online office hours through Canvas on Friday mornings. I will also hold in-person office hours on Tuesday and Wednesday mornings. I want to be available to you if you need assistance outside of class. Please don't hesitate to take advantage of these since I want you to succeed – it's what I am here for! Through Canvas we have access to WorldWideWhiteboard. Of course, I am always available by email and messaging through Canvas.

Attendance: In a traditional face-to-face class you would be expected to attend every class meeting. In an online course, things work differently but the principle is the same. Each week you will be expected to respond to a set of questions in a discussion forum. This will act as a chance to demonstrate class participation and interact with the other students in the class. **Eight (8) missed assignments (discussion, quizzes, homework, exams, etc.)** 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 failing grade. Additionally, I will be recording "attendance" for your participation in the course assignments. This attendance record will appear in Canvas but will not be factored into the course grade (for the graded components of the course, see "Assignments & Exams" below).

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.

Throughout the course there will regularly be **weekly discussion questions** covering material related to the topic for the week. Participation in the weekly discussions is a requirement for this course. I will post a variety of topics for discussion on the Canvas page and there are two types of required responses:

1. You are required to respond to an initial discussion question with a substantive response by midnight Sunday each week. (2 points)
2. You are required to respond to two (2) classmates' responses on at least two *different* days of the week. Multiple responses made on the same day will count as a single response. (each 1 point)

The above requirements will ensure that you participate on at least three (3) different days of each week. A response that is substantive is a response that provides all the needed steps to solve a given problem and uses complete English sentences where necessary. A response that is not appropriate, does not pertain to the topic, or is not substantive will receive no credit. There are a total of 62 available points for the discussion (4 points for each of the 15 discussions + 2 points for your introduction during week 1).

There will be **three (3) exams** 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. These exams are in-person and will be held on the Reedley College campus in room CCI 201 from 6:00 – 8:00 pm.

Assignment Categories and Weighting

<i>Assignment</i>	<i>Weighting</i>
Online Homework	15%
Quizzes	15%
Weekly Discussion Board	10%
Exams (3 @ 20% each)	60%

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: **Course Orientation, Monday, Jan. 8, CCI 201, 6-7pm**
 Begin Chapter 8: A Transition (Linear Equations and Inequalities)
Introduction Discussion due on Friday, Jan. 12
Discussion 1 due by Sunday, Jan. 14
- Week 2: **Homework 1** due on Tuesday, Jan. 16
Quiz 1 due on Friday, Jan. 19
Discussion 2 due by Sunday, Jan. 21
- Week 3: **Homework 2** due on Tuesday, Jan. 23
 Begin Chapter 9: Radical Expressions and Equations
Quiz 2 due on Friday, Jan. 26
Discussion 3 due by Sunday, Jan. 28
- Week 4: **Homework 3** due on Tuesday, Jan. 30
Quiz 3 due on Friday, Feb. 2
Discussion 4 due by Sunday, Feb. 4
- Week 5: **Homework 4** due on Tuesday, Feb. 6
Quiz 4 due on Friday, Feb. 9
Discussion 5 due by Sunday, Feb. 11
- Week 6: **Exam 1 on Monday, Feb. 12, CCI 201, 6-8pm (Chapters 8 and 9)**
 Begin Chapter 10: Quadratic Equations
Homework 5 due on Tuesday, Feb. 13
Discussion 6 due by Sunday, Feb. 18
- Week 7: **Homework 6** due on Tuesday, Feb. 20
Quiz 5 due on Friday, Feb. 23
Discussion 7 due by Sunday, Feb. 25

- Week 8: **Homework 7** due on Tuesday, Feb. 27
Begin Chapter 11: Functions
Quiz 6 due on Friday, Mar. 2
Discussion 8 due by Sunday, Mar. 4
- Week 9: **Homework 8** due on Tuesday, Mar. 6
Quiz 7 due on Friday, Mar. 9
Discussion 9 due by Sunday, Mar. 11
- Week 10: **Homework 9** due on Tuesday, Mar. 13
Quiz 8 due on Friday, Mar. 16
Discussion 10 due by Sunday, Mar. 18
- Week 11: **Homework 10** due on Tuesday, Mar. 20
Begin Chapter 12: Logarithmic and Exponential Functions
Discussion 11 due by Sunday, Mar. 25
- Week 12: **Exam 2 on Monday, Apr. 2, CCI 201, 6-8pm (Chapters 10 and 11)**
Homework 11 due on Tuesday, Apr. 3
Quiz 9 due on Friday, Apr. 6
Discussion 12 due by Sunday, Apr. 8
- Week 13: **Homework 12** due on Tuesday, Apr. 10
Quiz 10 due on Friday, Apr. 13
Discussion 13 due by Sunday, Apr. 15
- Week 14: **Homework 13** due on Tuesday, Apr. 17
Begin Chapter 13: Conic Sections
Quiz 11 due on Friday, Apr. 20
Discussion 14 due by Sunday, Apr. 22
- Week 15: **Homework 14** due on Tuesday, Apr. 24
- Week 16: **Homework 15** due on Tuesday, May 1
Quiz 12 due on Friday, May 4
Discussion 15 due by Sunday, May 6
- Week 17: **Homework 16** due on Tuesday, May 8
- Week 18: **Exam 3 on Monday, May 14, CCI 201, 6-8pm (Chapters 12 and 13)**

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