

Course Syllabus: Intermediate Algebra

MATH 103-59646

Instructor: Mr. Steven Zook

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Reedley College

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Office Hours: M-F 11am – 12pm

Meeting Room: 100% Online

Meeting Days: n/a

Meeting Time: n/a

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, 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, follow the instructions below:

Enter Your Canvas Course:

1. Sign in to Canvas and enter your Canvas course.
2. Do one of the following:
 - Select any Pearson link from any module.
 - Select the **MyLab & Mastering** link in the Course Navigation, and then select any course link on the Pearson page.

Get Access to Your Pearson Course Content:

1. Enter your Pearson account **username** and **password** to **Link Accounts**. You have an account if you have ever used a Pearson MyLab & Mastering product, such as MyMathLab, MyITLab, MySpanishLab, MasteringBiology or MasteringPhysics.
 - If you don't have a Pearson account, select **Create** and follow the instructions.
2. Select an access option:
 - Enter the access code that came with your textbook or was purchased separately from the bookstore.
 - Buy access using a credit card or PayPal account.
 - If available, get temporary access by selecting the link near the bottom of the page.
3. From the You're Done page, select **Go to My Courses**.

Note: We recommend you always enter your MyLab & Modified Mastering course through Canvas.

WARNING: Any students who do not gain *full paid* access to MyMathLab by 8/27/18 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: 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.

Drop Deadline: Friday, October 12

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 **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

Assignment	Weighting
Online Homework	20%
Quizzes (10 @ 2% each)	20%
Discussion Board (15 @ 1% each)	15%
Chapter Tests (5 @ 6% each)	30%
Final Exam	15%

Final Grades

Letter Grade	Percent
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. 49.

Course Outline and Schedule

Week 1: Begin Chapter 8: A Transition (Linear Equations and Inequalities)
Introduction (Extra Credit) due on Friday, Aug. 17
Discussion 1 due on Friday, Aug. 17

Week 2: **Homework 1** due on Tuesday, Aug. 21
Discussion 2 due on Friday, Aug. 24
Quiz 1 due on Friday, Aug. 24

Week 3: **Homework 2** due on Tuesday, Aug. 28
Begin Chapter 9: Radical Expressions and Equations
Discussion 3 due on Friday, Aug. 31
Quiz 2 due on Friday, Aug. 31

Week 4: **Homework 3** due on Tuesday, Sept. 4
Exam 1 on Friday, Sept. 7 (Chapter 8)
Discussion 4 due on Friday, Sept. 7

Week 5: **Homework 4** due on Tuesday, Sept. 11
Discussion 5 due on Friday, Sept. 14

Quiz 3 due on Friday, Sept. 14

- Week 6: Begin Chapter 10: Quadratic Equations
Homework 5 due on Tuesday, Sept. 18
Discussion 6 due on Friday, Sept. 21
Exam 2 on Friday, Sept. 21 (Chapter 9)
- Week 7: **Homework 6** due on Tuesday, Sept. 25
Discussion 7 due on Friday, Sept. 28
Quiz 4 due on Friday, Sept. 28
- Week 8: **Homework 7** due on Tuesday, Oct. 2
Discussion 8 due on Friday, Oct. 5
Exam 3 on Friday, Oct. 5 (Chapter 10)
Begin Chapter 11: Functions
- Week 9: **Homework 8** due on Tuesday, Oct. 9
Discussion 9 due on Friday, Oct. 12
Quiz 5 due on Friday, Oct. 12
- Week 10: **Homework 9** due on Tuesday, Oct. 16
Discussion 10 due on Friday, Oct. 19
Quiz 6 due on Friday, Oct. 19
- Week 11: **Homework 10** due on Tuesday, Oct. 23
Discussion 11 due on Friday, Oct. 26
Exam 4 on Friday, Oct. 26 (Chapter 11)
Begin Chapter 12: Logarithmic and Exponential Functions
- Week 12: **Homework 11** due on Tuesday, Oct. 30
Discussion 12 due on Friday, Nov. 2
Quiz 7 due on Friday, Nov. 2
- Week 13: **Homework 12** due on Tuesday, Nov 6
Discussion 13 due on Friday, Nov. 9
Quiz 8 due on Friday, Nov. 9
- Week 14: **Homework 13** due on Tuesday, Nov. 13
Discussion 14 due on Friday, Nov. 16
Exam 5 on Friday, Nov. 16 (Chapter 12)
Begin Chapter 13: Conic Sections
- Week 15: **Homework 14** due on Tuesday, Nov. 20
- Week 16: **Homework 15** due on Tuesday, Nov. 27
Discussion 15 due on Friday, Nov. 30

Quiz 9 due on Friday, Nov. 30

Week 17: **Homework 16** due on Tuesday, Dec. 4
Quiz 10 due on Friday, Dec. 7

Week 18: **Comprehensive Final Exam, Monday, Dec. 10**

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