# Math 103: Intermediate Algebra <br> Syllabus and Course Outline for Fall 2015 

## Class Information

Section: 56007
Day: Monday, Tuesday, Wednesday, Thursday, and Friday
Time: 8:00-8:50am
Building: Classroom Complex I
Room: 201

About Your Instructor
Name: Ryan Lowenstein
Email: ryan.lowenstein@reedleycollege.edu
Office phone: (559) 638-3641 ext. TBA
Cell phone: (562) 965-9355

Office Hours
Monday: 9:00-10:00am
Tuesday: 10:00-11:00am
Wednesday: 11:00-12:00am
Thursday: 12:00-1:00pm
Friday: 2:00-3:00pm
Room: Forestry, Engineering, \& Math 1N

## Textbook Required

Elementary and Intermediate Algebra
Author: George Woodbury
Edition: 3
ISBN: 978-0-321-66548-5

## Textbook Note

Homework Assignments will come directly from this textbook and from MyMathLab, an online account synced with Blackboard. Both the hardcover and MyMathLab are included in the bookstore price of \$122.70. All homework assignments will be posted on Blackboard.

Estimated Schedule:

| Week | Month | Day | Section(s) Covered | Course Topic |
| :--- | :--- | :--- | :--- | :--- |
| 1 | August | 17 | Syllabus | Transition from |
|  |  | 18 | 8.1 | Elementary Algebra |
|  |  | 19 | 8.2 | Rational Exponents |
|  |  | 20 | 9.1 | and Roots |
|  |  | 21 | 9.2 |  |
| 2 |  | 24 | 9.3 |  |
|  |  | 25 | 9.4 |  |
|  |  | 26 | 9.4 continued |  |
|  |  | 27 | 9.5 |  |
| 3 |  | 38 | 9.5 continued |  |
|  |  | 31 | 9.6 | Quadratic Functions |
|  |  | 2 | Review for Test 1 |  |
|  |  | 3 | Test 1 |  |
| 4 |  | 4 | $10.1 ;$ Last day to drop without receiving a "W" |  |
|  |  | 7 | Labor Day (No Class) |  |
|  |  | 8 | 10.1 continued |  |
|  |  | 9 | 10.2 | 10.2 continued |


| 5 | September | 14 | 10.3 continued |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 15 | 10.4 |  |
|  |  | 16 | 10.4 continued |  |
|  |  | 17 | 10.5 |  |
|  |  | 18 | 10.5 continued |  |
| 6 |  | 21 | Review for Test 2 |  |
|  |  | 22 | Test 2 |  |
|  |  | 23 | 10.6 |  |
|  |  | 24 | 10.6 continued |  |
|  |  | 25 | 11.1 | Equations and |
| 7 |  | 28 | 11.1 continued | Functions |
|  |  | 29 | 11.2 |  |
|  |  | 30 | 11.2 continued |  |
|  | October | 1 | 11.3 |  |
|  |  | 2 | 11.3 continued |  |
| 8 |  | 5 | 11.4 |  |
|  |  | 6 | 11.4 continued |  |
|  |  | 7 | Review for Test 3 |  |
|  |  | 8 | Test 3 |  |
|  |  | 9 | Review for Midterm; Last day to drop |  |
| 9 |  | 12 | Review for Midterm |  |
|  |  | 13 | Midterm |  |
|  |  | 14 | 11.5 |  |
|  |  | 15 | 11.5 continued |  |
|  |  | 16 | 11.6 |  |
| 10 |  | 19 | 11.6 continued |  |
|  |  | 20 | 12.1 | Exponential and |
|  |  | 21 | 12.1 continued | Logarithmic Functions |
|  |  | 22 | 12.2 |  |
|  |  | 23 | 12.2 continued |  |
| 11 |  | 26 | 12.3 |  |
|  |  | 27 | 12.4 |  |
|  |  | 28 | 12.4 continued |  |
|  |  | 29 | Review for Test 4 |  |
|  |  | 30 | Test 4 |  |
| 12 | November | 2 | 12.5 |  |
|  |  | 3 | 12.5 continued |  |
|  |  | 4 | 12.6 |  |
|  |  | 5 | 12.6 continued |  |
|  |  | 6 | 13.1 | Conic Sections |
| 13 |  | 9 | 13.1 continued |  |
|  |  | 10 | 13.2 |  |
|  |  | 11 | Veterans Day (No Class) |  |
|  |  | 12 | 13.2 continued |  |
|  |  | 13 | 13.3 |  |
| 14 |  | 16 | 13.3 continued |  |
|  |  | 17 | Review for Test 5 |  |
|  |  | 18 | Test 5 |  |


| 14 | November | 19 | 13.4 |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | 20 | 13.4 continued | Sequences and Series |
| 15 |  | 23 | 14.1 |  |
|  |  | 24 | 14.1 continued |  |
|  |  | 25 | 14.2 |  |
|  |  | 26 | Thanksgiving Day (No Class) |  |
|  |  | 27 | Thanksgiving Break (No Class) |  |
| 16 |  | 30 | 14.2 continued | Level Mathematics |
|  | December | 1 | 14.3 |  |
|  |  | 2 | 14.3 continued |  |
| 17 |  | 3 | A-2 |  |
|  |  | 4 | A-2 continued |  |
|  |  | 7 | Review for Test 6 |  |
|  |  | 9 | Test 6 |  |
| 18 |  | 10 | Review for Final Exam | Review for Final Exam |

## Catalog Description

This course will deal with many algebraic concepts, including equations and inequalities in two variables, rational exponents and roots, quadratic functions, exponential and logarithmic functions, and conic sections.

Grade Breakdown

| Category | Weight of Overall Grade |
| :---: | :---: |
| Tests | $70 \%$ |
| Homework | $20 \%$ |
| Participation | $10 \%$ |

Grading Scale

| Minimum Percent Required | Grade |
| :---: | :---: |
| 93 | A |
| 83 | B |
| 73 | C |
| 63 | D |

Grades will be updated regularly on Blackboard

| Test | Sections | Date | Weight of Overall Grade |
| :---: | :---: | :---: | :---: |
| 1 | $8.1-9.6$ | Thursday, September 3 | $7 \%$ |
| 2 | $10.1-10.5$ | Tuesday, September 22 | $7 \%$ |
| 3 | $10.6-11.4$ | Thursday, October 8 | $7 \%$ |
| Midterm | $8.1-11.4$ | Tuesday, October 13 | $12 \%$ |
| 4 | $11.5-12.4$ | Friday, October 30 | $7 \%$ |
| 5 | $12.5-13.3$ | Wednesday, November 18 | $7 \%$ |
| 6 | $13.4-\mathrm{A} 2$ | Tuesday, December 8 | $7 \%$ |
| Final | $1.1-\mathrm{A} 2$ | To Be Announced | $16 \%$ |

## Test Materials

| Approved | Unapproved |
| :---: | :---: |
| Pencil | Textbook |
| Eraser | Notes |
| Four-function Calculator | Scientific Calculator |
| Ruler | Cellphone |
| Pen | Anything Else |

Formula sheets and scratch paper will be provided

## Types of Test Questions

| Difficulty | Brief Description | Prevalence |
| :---: | :---: | :---: |
| Basic | Easier Question from Course | $30 \%$ of Test |
| Proficient | Harder Question from Course | $60 \%$ of Test |
| Advanced | Question Never Seen Before | $10 \%$ of Test |

Any concept discussed during class or assigned in homework will be on the test in some way

## Miscellaneous Test Information

Only one person may leave the room at a time

| Each Question is Worth | $\mathbf{1 2}$ Points |
| :---: | :---: |
| Work Leading to Correct Answer | 11 Points |
| Correct Answer | 1 Point |

There is a 50 minute time limit

## Classwork

Typical assignments include clicker questions, group work, and other activities. About 90\% of these assignments must be completed in order for a student to earn full participation and attendance for the day. Students who come to a class and complete less than $90 \%$ of the classwork will earn no more than half of the day's participation and attendance. Students who miss more than five classes will automatically be dropped from the class.

## Homework

On a twice a week basis, questions are usually assigned online (MyMathLab), which are graded on the correct answer, and sometimes assigned from the textbook (handwritten), which are graded on the correct steps. To offer encouragement, if a student is stuck on an online problem, he or she should turn in his or her handwritten work to the instructor. Also, students should resubmit any questions marked as incorrect from returned handwritten assignments (see Flexibility Pass).

## Behavior

| Expected | Unwelcome |
| :---: | :---: |
| Asking Questions | Talking over the Instructor |
| Taking Notes | Texting or on the Phone |
| Helping Others | Checking Facebook or Email |
| Participating | Sleeping |
| Positive Attitude | Doing Homework |
| Punctual Attendance | Packing up Early |

The instructor has the right to remove students from the classroom at any time

## Late Work Policy

Late work is never accepted for handwritten homework assignments, unless it is turned in with a flexibility pass (see below). MyMathLab homework assignments may be completed after the deadline for a $10 \%$ reduction in overall score.

## Make-Up Test Policy

Students who miss a test are never guaranteed a make-up. Make-up tests are only administered to students in extenuating circumstances and must be scheduled as far in advance as possible. Students may replace their lowest test score with the grade they earn on the final exam only if they complete all homework from the semester with the exception of four missing assignments or less.

## Flexibility Pass

Students will be given four opportunities in the form of passes to turn in late homework. Also, half of each pass can be used to redo already graded homework assignments or to write out MyMathLab assignments and have them graded by hand. However, it is recommended that students mainly use these passes for emergencies because no additional passes will be handed-out later in the semester.

## Tutoring

Both Reedley College's Tutorial Center (Library Building, Room LRC 111) and STEM Math Study Center (Forestry, Engineering, \& Math, Room 1) offer free tutoring for both students who need help with the concepts presented in this class (recommended when one's grade falls below $83 \%$ ) and students who have trouble meeting deadlines.

| Tests | Classwork and Homework |
| :---: | :---: |
| Using a forbidden test material | Copying another person's assignment |
| Looking away from one's paper | Looking at the solutions (manual or online) |
| Talking to another person | Having another person do the assignment for you |

Cheating violates Reedley College's Academic Integrity; zero credit will be earned for cheated assignments

## Universal Design

This class will try its best to incorporate the special needs of English Learners, students with disabilities, and everyone else. If one feels that his or her needs are not being met, please bring this to the instructor's attention so a solution can be found.

## Students with Disabilities Policy

In compliance with ADA guidelines, students who have any condition, either permanent or temporary, that might affect their ability to perform in this class are encouraged to inform the instructor at the beginning of the term. Use of accommodations can start when the instructor receives the Notification of Authorized Services form with the accommodations listed. The granting of any accommodation will not be retroactive and cannot jeopardize the academic standards or integrity of the course.

## Equity and Diversity

Reedley College is committed to ensuring equality and valuing diversity. Students and instructors are reminded to show respect at all times.

## Course Outcomes

At the end of the course, students should be able to relate and apply algebraic concepts in their everyday lives. More specifically, they should be able to simplify and factor mathematical expressions into forms more conductive to analysis, and they should be able to solve and graph linear, quadratic, exponential, logarithmic, and radical equations as well as functions and relations. These strategies are frequently used in real life situations in which an unknown quantity exists.

## 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

## Personal Statement

The instructor of this course understands that the subject of mathematics is difficult and carries a negative preconception among many students. Hence, he values a conceptual understanding of the content and wants to help students succeed in his class, as long as they are willing to do their share of the work.

## Disclaimer

The information in this syllabus is subject to change in the event of extenuating circumstances

| Flexibility Pass |  |
| :---: | :---: |
| Name | Name |
| Date | Date |
| Assignment | Assignment |
|  | Flexibility Pass |
| Name | Name |
| Date | Date |
| Assignment | Assignment |


| Name | Flexibility Pass |
| :---: | :---: |
|  | Name |
| Date | Date |
| Assignment | Assignment |



