# Math 103: Intermediate Algebra Syllabus and Course Outline for Spring 2016

### **Class Information**

Section: 51136 Day: Monday, Tuesday, Wednesday, Thursday, and Friday Time: 1:00-1:50pm Building: Classroom Complex I Room: 206

<u>About Your Instructor</u> Name: Ryan Lowenstein Email: ryan.lowenstein@reedleycollege.edu Office phone: (559) 638-3641 ext. 3420 Office Hours Daily: 10:00-10:45am Room: Forestry, Engineering, & Math 1N

<u>Textbook Required</u> Elementary and Intermediate Algebra Author: George Woodbury Edition: 4

#### Textbook Note

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

### **Estimated Schedule:**

Week	Month	Day	Section(s) Covered	Course Topic
1	January	11	Syllabus	Transition from
		12	8.1	Elementary Algebra
		13	8.2	
		14	9.1	Rational Exponents
		15	9.2	and Roots
2		18	Martin Luther King Day (No Class)	
		19	9.3	
		20	9.4	
		21	9.4 continued	
		22	9.5	
3		25	9.5 continued	
		26	9.6	
		27	Mock Test 1	
		28	Test 1	
		29	9.6 continued; Last day to drop without "W"	Quadratic Functions
4	February	1	10.1	
		2	10.1 continued	
		3	10.2	
		4	10.2 continued	
		5	10.3	
5		8	10.3 continued	
		9	10.4	

		10	10.4 continued	
		11	10.5	
		12	Lincoln's Birthday (No Class)	
6		15	Washington's Birthday (No Class)	
		16	10.5 continued	
		17	Mock Test 2	
		18	Test 2	
		19	10.6	Equations and
7		22	10.6 continued	Functions
		23	11.1	
		24	11.1 continued	
		25	11.2	
		26	11.2 continued	
8		29	11.3	
	March	1	11.3 continued	
		2	11.4	
		3	11.4 continued	
		4	Mock Test 3	
9		7	Test 3	
		8	Review for Midterm	
		9	Mock Midterm	
		10	Midterm	
		11	11.5; Last Day to drop	
10		14	11.5 continued	
		15	11.6	Exponential and
		16	11.6 continued	Logarithmic Functions
		17	12.1	
		18	12.1 continued	
11		28	12.2	
		29	12.2 continued	
		30	12.3	
		31	12.4	
	April	1	12.4 continued	
12		4	Mock Test 4	
		5	Test 4	
		6	12.5	
		7	12.5 continued	
		8	12.6	Conic Sections
13		11	12.6 continued	
		12	13.1	
		13	13.1 continued	
		14	13.2	
	1		1 42 2 continued	1
		15	13.2 continued	
14		15 18	13.2 continued 13.3	
14		15 18 19	13.2 continued 13.3 13.3 continued	
14		15 18 19 20	13.2 continued 13.3 13.3 continued Mock Test 5	
14		15   18   19   20   21	13.2 continued 13.3 13.3 continued Mock Test 5 Test 5	

15		25	13.4 continued	Sequences and Series
		26	14.1	
		27	14.1 continued	
		28	14.2	
		29	14.2 continued	
16	May	2	14.3	
		3	14.3 continued	
		4	A-2	
		5	A-2 continued	Transition to Higher
		6	A-2 continued	Level Mathematics
17		9	Mock Test 6	
		10	Test 6	
		11	Review for Final Exam	
		12	Review for Final Exam	
		13	Mock Final Exam	
18		16	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%
Quizzes and Participation	10%

# **Grading Scale**

Minimum Percent Required	Grade
91	A
82	В
73	C
64	D

Grades will be updated regularly Online

#### **Test Dates**

Test	Sections	Date	Weight of Overall Grade
1	8.1-9.6	Thursday, January 28	7%
2	10.1-10.5	Thursday, February 18	7%
3	10.6-11.4	Monday, March 7	7%
Midterm	8.1-11.4	Thursday, March 10	12%
4	11.5-12.4	Tuesday, April 5	7%
5	12.5-13.3	Thursday, April 21	7%
6	13.4-A2	Tuesday, May 10	7%
Final	1 <b>.</b> 1-A2	Monday, May 16	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 Homework	30% of Test
Proficient	Harder Question from Homework	60% of Test
Advanced	Modified Question from Homework	10% of Test

Test questions are **randomly** selected from the homework

### **Miscellaneous Test Information**

Only **one** person may leave the room at a time

Requirements to Receive Full Credit for a Question		
	Work Leading to Correct Answer	
	Correct Answer	
	There is a 50 minute time limit	

There is a 50 minute time limit

#### <u>Quizzes</u>

Several unannounced quizzes will be administered throughout the semester. Quiz questions will be randomly selected from previously due homework assignments and will be graded in the same way as in exams.

### **Participation**

Typical classwork 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 for the semester. Students

who complete less than 90% of the classwork will earn no credit for participation. Also, students who miss more than five classes will automatically be dropped from the class.

### <u>Homework</u>

On a weekly basis, questions are usually assigned online (MyMathLab), which are graded on the correct answer, and occasionally assigned from the textbook (handwritten), which are graded on the correct steps.

#### **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

Up to six homework assignments may be completed after the deadline for a 50% 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.

### <u>Tutoring</u>

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 82%) and students who have trouble meeting deadlines.

### **Examples of Cheating**

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

#### <u>Universal Design</u>

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.

# <u>Disclaimer</u>

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