

MATH 103 – INTERMEDIATE ALGEBRA

FALL 2011

Instructor: Jamie Shepherd
Phone: 559-905-4869
E-mail: jamie.shepherd@reedleycollege.edu
Office Hours: By appointment
Class Hours: Monday / Tuesday / Thursday 2:00pm – 3:25pm
Room: CCI 206
Schedule No: 51235
Course Id.: shephard80086

Course 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.

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.

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.

Prerequisite: Math 101 or equivalent.

Advisory: Eligibility for English 126.

Textbook

George Woodbury, Elementary and Intermediate Algebra, Second Addition.

All of the work for this course will be done using a website called CourseCompass

(www.coursecompass.com). The textbook will also be available electronically through this website. You will need to purchase an access code for CourseCompass one of the following ways:

- 1) You may purchase the bundled textbook from the Reedley College Bookstore, which includes the textbook and access code to CourseCompass. Be careful, once you open the kit, you will not be able to return it for a full refund.
- 2) You may purchase the access code through CourseCompass and use the textbook electronically.

YOU MUST BE REGISTERED ON COURSE COMPASS BY THE END OF THE DAY ON WEDNESDAY AUGUST 17TH OR YOU WILL BE DROPPED FROM THE COURSE!

Course Materials

- Binder / notebook (for your notes)
- Paper, pens, pencils, ruler (for taking notes)
- Calculator(Non-graphing. Cell phones may not be used as calculators)

Blackboard

This course will use Blackboard for certain announcements and handouts. You can access Blackboard from the Reedley college website or at <http://blackboard.reedleycollege.edu>. Your login is as follows:

Login ID: Your student ID#

Password: Your student ID#

Online Homework

Homework is the basis of learning any mathematics and therefore will be an important part of this course. The majority of the homework assignments in this class will be completed online. Each assignment will have a due date and it will be unavailable to the student after the due date. **NO LATE HOMEWORK WILL BE ACCEPTED**, however your two lowest homework scores will be dropped.

**Note that when working on a homework assignment, you do not have to complete the entire assignment at one time. If you need to stop while in the middle of an assignment, the program will save the problems you have completed and you can come back where you left off at another time.

Written Homework

There may be written homework assigned throughout the semester. The grade on these assignments will be based on completeness, neatness and effort. All work must be shown to receive full credit. Solutions must be in pencil and problems must be in order. If you are absent on the day the assignment is due, your homework will not be accepted for full credit.

In-class Assignments

There may be quizzes, and in-class assignments and group projects assigned throughout the semester. No in-class assignments can be made up so it is very important to attend class every day. These assignments will be included as part of your homework grade.

Attendance

Attendance will be taken daily. You are expected to be in class, on time with any assignments completed, and remain for the entire class session. **If you are absent more than six class sessions before the final drop date, you may be dropped. If you are dropped for poor attendance, you will not be readmitted. If you wish to drop this course it is your responsibility to do so. Do not assume the instructor will.**

*****THE LAST DAY TO DROP THIS CLASS IS FRIDAY OCTOBER 14TH.******

Exams

There will be a total of 6 exams, one for each chapter covered. **Exams may not be taken late or made-up.** To compensate for illness and emergencies, the lowest exam score will be replaced by the final exam score, if it's to the advantage of the student.

Final Exam

There will be a comprehensive final exam required for every student at the end of the semester. **The final exam may not be taken late or made-up.** Arrangements should be made with the instructor if you need to take the final exam or any other exam early.

Grading

Final semester grades will be based on the following:

Homework (Online / Written / In-class):

The total number of points you score on each assignment will be added up and divided by the total number of possible homework points. This number is then multiplied by 100 to give you a homework score between 0 and 100. **Your homework score is worth 20% of your grade.**

Exams and Final:

Your 6 exam percentages and your final exam percentage will be averaged. This average will be multiplied by 100 to give you an exam score between 0 and 100. **Your exam score is worth 80% of your grade.**

Example: If your Homework score is 85 and your Exam score is 75, then you would compute your grade as follows:

$$(0.20)*(85) + (0.80)*(75) = 17 + 60 = 77$$

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

Your current grade in the class will be available through the Course Compass website.

Important Dates:

Last day to drop a full-term class for a refund - 08/26/2011

Last day to register for a full-term fall class - 09/2/2011

Last day to drop a fall full-term class to avoid a "W" - 09/2/2011

Labor Day (no classes held, campus closed) - 09/5/2011

Last day to change a fall class to/from a Pass/No-Pass grading basis - 09/16/2011

Last day to drop a full-term class (letter grades assigned after this date) - 10/14/2011

Short-Term classes, second nine weeks 10/17-12/16/2011

Veterans Day (no classes held, campus is open) - 11/11/2011

Thanksgiving holiday (no classes held, campus closed) - 11/24-11/25/2011

Final exams week - 12/12/2011-12/16/2011

End of Fall semester - 12/16/2011

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.

Academic Dishonesty

Students at Reedley College are entitled to the best education that the college can make available to them, and they, their instructors, and their fellow students share the responsibility to ensure that this education is honestly attained. Because cheating, plagiarism, and collusion in dishonest activities erode the integrity of the college, each student is expected to exert an entirely honest effort in all academic endeavors. Academic dishonesty in any form is a very serious offense and will incur serious consequences.

Cheating is the act or attempted act of taking an examination or performing an assigned, evaluated task in a fraudulent or deceptive manner, such as having improper access to answers, in an attempt to gain an unearned academic advantage. Cheating may include, but is not limited to, copying from another's work, supplying one's work to another, giving or receiving copies of examinations without an instructor's permission, using or displaying notes or devices inappropriate to the conditions of the examination, allowing someone other than the officially enrolled student to represent the student, or failing to disclose research results completely.

Plagiarism is a specific form of cheating: the use of another's words or ideas without identifying them as such or giving credit to the source. Plagiarism may include, but is not limited to, failing to provide complete citations and references for all work that draws on the ideas, words, or work of others, failing to identify the contributors to work done in collaboration, submitting duplicate work to be evaluated in different courses without the knowledge and consent of the instructors involved, or failing to observe computer security systems and software copyrights.

Incidents of cheating and plagiarism may result in any of a variety of sanctions and penalties, which may range from a failing grade on a particular examination, paper, project, or assignment in question to a failing grade in the course, at the discretion of the instructor and depending on the severity and frequency of the incidents.

Note: This syllabus is subject to change at the discretion of the instructor.

Tentative Course Schedule – Math 103 - Fall 2011

Week of	Topic(s)	Textbook Section
08/15/11	Class Intro / Course Compass Linear Equations and Absolute Value Equations Linear Inequalities and Absolute Value Inequalities	8.1 8.2
08/22/11	Graphing Linear and Absolute Value Functions Review of Factoring	8.3 8.4
8/29/11	Solving Systems of equations Exam #1 (Chapter 8) – Thursday September 1st	8.5
09/05/11	No Class Monday September 5th Square Roots, Radical Notation Rational Exponents	9.1 9.2
09/12/11	Simplifying, Adding, and Subtracting Radical Expressions Multiplying and Dividing Rational Expressions	9.3 9.4
09/19/11	Radical Equations and applications The Complex Numbers Exam #2 (Chapter 9) – Thursday September 22nd	9.5 9.6
09/26/11	Solving Quadratic Equations and Completing the Square The Quadratic Formula Equations in Quadratic Form	10.1 10.2 10.3
10/03/11	Graphing Quadratic Equations Applications using Quadratic Equations	10.4 10.5
10/10/11	Quadratic and Rational Inequalities Exam #3 (Chapter 10) – Tuesday October 11th Review of Functions	10.6 11.1
10/17/11	Linear Functions Quadratic Functions	11.2 11.3
10/24/11	The Algebra of Functions Inverse Functions	11.5 11.6
10/31/11	Exam #4 (Chapter 11) – Monday October 31st Exponential Functions Logarithmic Functions	12.1 12.2
11/07/11	Properties of Logarithmic Functions Exponential and Logarithmic Equations Applications of Exponential and Logarithmic Functions	12.3 12.4 12.5
11/14/11	Graphing Exponential and Logarithmic Functions Exam #5 (Chapter 12) – Thursday November 17th	12.6
11/21/11	Parabolas, Circles	13.1, 13.2
11/28/11	Ellipses, Hyperbolas	13.3, 13.4
12/05/11	Non-linear Systems of Equations Exam #6 (Chapter 13) – Tuesday December 6th Final Review	13.5
12/12/11	Final Examination (Chapters 8-13) – Wednesday December 14th, 2:00 pm – 3:50pm in Room CCI 206	

*This schedule is tentative and subject to change at the discretion of the instructor.