

Math 031-72 Course Syllabus

Instructor:	Terry L. Cox
Office:	none; available before/after class and by pre-arrangement
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MyMathLab ID:	cox60415
Class Time:	M/W 9:00-11:00 a.m.
Student SI	TBD

Required Materials: My Math Lab Student Access Kit, MAT 031 coursepack, LARGE 3-ring binder, graphing calculator (TI-83 or TI-84 preferred), pencils, large eraser

Internet access is required for this section of Math 031. Class homework must be completed on a computer with internet access.

Optional Materials: Textbook (Introductory Algebra, 6th edition, Author: Robert Blitzer, Publisher: Pearson – this text is available for purchase or rent at the JCC bookstore), graph paper, ruler.

Course Description: Math 031 is the study of the following: variables and variable expressions, integers, laws of exponents, equations (linear, quadratic, rational, radical, and absolute value), linear inequalities, linear systems, coordinate graphing and problem solving.

Prerequisite: A 2.0 in Math 020 (or equivalent) or course placement by exam.

Course Goals: The purpose of this course is to develop a progressive understanding of more basic algebraic skills, concepts, and problem solving techniques; to obtain a sense of how and why algebra is used, and to be able to relate these problems and use the learned problem solving techniques to real life applications. Great emphasis will be placed on understanding of terms, concepts, principles and theories rather than cramming and memorization.

Math 031 Core Course Objectives:

Students completing Math 031 – Beginning Algebra should be able to:

1. Simplify basic algebraic, exponential, rational, and radical expressions using mathematical processes and symbol manipulation.
2. Use algebraic processes to solve linear, quadratic, rational, radical and literal equations and linear systems of equations.
3. Demonstrate understanding of concepts of linear equations by: graphing a linear equation, finding x- and y- intercepts, and finding the slope of a line.
4. Solve basic application problems using algebraic processes and procedural techniques.
5. Demonstrate a knowledge of current technology and its uses and/or scientific issues.

Math 031 Associate Degree Outcomes: All courses at Jackson Community College address one or more of the institutionally defined Associate Degree Outcomes (ADOs). Math 031 contributes to the following outcomes.

ADO 3: Demonstrate computational skills and mathematical reasoning

- Demonstrates a basic knowledge of the structure of the real number system.
- Demonstrates computational skills using positive and negative numbers, fractions, and decimals, ratio and percents.
- Demonstrates an understanding of algebra (manipulating algebraic expressions, solving linear equations, applying the rules of exponents), geometry and measurement, data and descriptive statistics.
- Uses and understands basic mathematical terminology.
- Translates situations into mathematical symbols.
- Represents mathematical information symbolically, visually, numerically and/or verbally.
- Understands that connections exist between mathematics and real-world situations.

ADO 7: Rubric for Critical Thinking

- Incorporates new knowledge with old.
- Converts complex concepts into useful personal language.
- Solves new problems in new contexts.

Course Requirements:

Attendance/In-Class Work: A worksheet or class activity will be given most class periods. Participation and involvement in these activities determine class work scores. Class work is to be completed in class, on the day that it is given, and may not be made up.

Online Homework:

- These assignments must be done outside of class time on a computer with internet access at **MyMathLab** (reachable through www.mymathlab.com).
- There is a homework assignment roughly for each section in the course.
- Homework is due per the schedule in MyMathLab and per the textbook homework schedule.
- **You have an unlimited number of tries to do the MML homework before you submit it** (up until the due date). Thus, all of your homework should receive full credit, if you keep trying until you get a perfect score.
- There are videos available on <http://www.youtube.com/user/tuckeyalanaj> to help you navigate completing homework assignments, using the help features, and more

Quizzes: The quizzes for this class will be taken online using MyMathLab. There will be one quiz for each chapter of the book we cover, as well as a final review quiz. The quizzes are designed to be completed after the homework and before the exams for each chapter. Each of quizzes may be repeated as many times as desired. Only the highest grade received from each quiz will be recorded. If I have an SI, he will hold exam reviews. Your attendance at the review will be worth one quiz grade. You will be expected to do the review before you meet the SI.

Project: There will be two projects given throughout the semester that will be done as out-of-class assignments. These assignments will pertain to material that we have covered. These assignments will be due on the date specified when the assignments are given and will not be accepted late.

Exams: Every exam has a few cumulative review questions on it. The final exam is cumulative for the whole course. There are no notes on any exam. Exams **may not be made up** except under extreme, well-documented circumstances (final determination is made by the instructor – **contact me immediately!!**) Make-up tests must be taken before the exam is passed out to the class (i.e. the next class period) or a zero will be given for that exam.

Grading Information: A 2.0 or "C" is a passing grade. Only courses with passing grades count toward graduation. Other colleges transfer in only courses with passing grades. Many financial aid sources, including most employers, require passing grades. Additionally, earning less than a 2.0 in a class results in being unable to participate in the next level of courses in a discipline which requires this course as a pre-requisite. Registering for the next course sequence without passing the pre-requisite course may result in you being dropped from that class.

<u>Grading Scale:</u>		<u>Grading Policy:</u>
90 -100%	4.0	
85 - 89%	3.5	Attendance/In-Class Work: 5%
80 - 84%	3.0	Online Homework: 10%
75 - 79%	2.5	e-text homework: 10%
70 - 75%	2.0	Quizzes: 10%
65 - 69%	1.5	Projects: 5%
60 - 64%	1.0	Exams: 40%
50 - 59%	0.5	Cumulative Final (ch 1-10): 20%
0 - 49%	0.0	

Grades: Your grades will be available in the “Gradebook” area of JetNet.

Intermediate Grading: To comply with college policy and federal regulations you will receive three intermediate grades during the semester. The grades assigned are letters with the following meanings:

- **V:** Verifies that you are participating and your work so far has been acceptable
- **H:** Means that you are participating, but your work shows that you may require Help in order to complete the class successfully. If you receive an H grade, you will be contacted by the Center for Student Success (located in 125 Bert Walker Hall) and offered tutoring services.
- **Q:** Means that you have quit participating in the course. If you receive a Q grade, you will automatically be withdrawn from the course. A Q grade is normally assigned if you have not submitted work (classwork, exams, participation, etc.) for two weeks and have not contacted your instructor regarding your absences.

Important Dates: Be sure to check out the JCC Academic Calendar for Project Success Day, Holidays with no classes, last day to withdraw, etc. at http://www.jccmi.edu/academics/academic_calendar.htm

Extra Credit Policy: There will be no opportunities for extra credit. Your grade is based on your performance in class, not on extras.

Absence Policy: Students are expected to attend all class meetings, arriving on time, and staying until the end. We do a variety of in-class activities involving other students and group participation. If absence is unavoidable, the student is responsible for obtaining the missed lecture notes from another student. Please remember that office hours are not a replacement for class time. Exams **may not be made up** except under extreme, well-documented circumstances (final determination is made by the instructor – **contact me immediately!!**) Make-up tests must be taken

before the exam is passed out to the class (i.e. the next class period) or a zero will be given for that exam.

Incompletes Policy: (Excerpt from JCC Policy) "A student may request an incomplete from the instructor. The incomplete will be granted only if the student can provide documentation that his or her work up to that point is sufficient in quality, but lacking in quantity, due to circumstances beyond the student's control. Furthermore, a written plan for making up the missing work within one semester must be completed by the student. Final determination of whether an incomplete will be given is the instructor's decision."

Academic Honesty Policy: You are *encouraged* to talk to each other, but all your work must be your own. In other words, "group-work" is a great way to learn material, but anything you submit for a grade must be done by you - reflecting your own thought processes, not that of someone else. If I suspect you of academic dishonesty, I will follow JCC's Academic Honesty Policy and take appropriate action up to and including assigning a **failing grade** for the paper, project, report, exam, or the course itself (whichever I deem necessary). The policy can be seen here:

<http://www.jccmi.edu/student-services/catalog/2010-2011/Chapt3.pdf>

Classroom Behavior Policy: *"We know what a person thinks not when he tells us what he thinks, but by his actions."* - Issac B. Singer

1. Be Responsible: for your work, for your learning, for your behavior in class, etc.

The online homework and quizzes in particular are going to require great levels of responsibility on your part. You will need to stay on top of your schedule and your life to make sure that all coursework is done in a timely fashion.

2. Be Respectful: of other students, of the instructor, of the material, of yourself...

Turn off your cell phones and pagers, no chewing tobacco, come on time, stay the full time, be prepared to answer questions and work together.

3. Contact me immediately if there is a problem: with the course, material, instructor, students, etc.

Where to Get Help...

Office Hours: I do not have office hours. I will be on campus from 8:30 to 4:00 on Mondays and Wednesdays. I can have special meetings on other days with prior planning.

Center for Student Success: The JCC-LISD office has tutor information. Make use of the SI's for this course. I will provide their names during class.

Math Help Room: This room is located in 245 McDivitt Hall. Tutoring is available from 8:30 am to 6pm Monday through Thursday and in the morning on Fridays.

MyMathLab: There are videos, extra problems, sample exams, lecture notes, PowerPoint lectures and more available in MyMathLab. It's a great resource!

Each Other: Get a regular study group. Write down names and numbers of your peers and call on each other when needed!

Please Note: This schedule is considered tentative and is subject to revision at the instructor's discretion. Attend class regularly to be made aware of any changes to this proposed schedule.

Math 031-72 Class Schedule Fall 2013			
Day	Date	Section	Topic
1	8/26	1.1 1.2	Introduction to Algebra: Variables and Mathematical Models Fractions in Algebra
2	8/28	1.4 1.8	Basic Rules of Algebra Exponents and Order of Operations
3	9/4	2.1 2.2	The Addition Property of Equality The Multiplication Property of Equality
4	9/9	2.3 2.4	Solving Linear Equations Formulas and Percents
5	9/11	2.5 2.6	An Introduction to Problem Solving Problem Solving in Geometry
6	9/16	Supp. Review	Unit Analysis Review for Exam #1
7	9/18	Exam	Exam #1 over Chapters 1 & 2
8	9/23	3.1 3.2	Graphing Linear Equations in Two Variables Graphing Linear Equations Using Intercepts
	9/24		Project Success Day; Please attend something
9	9/25	3.3 3.4	Slope The Slope-Intercept Form of the Equation of a Line
10	9/30	3.5 4.1	The Point-Slope Form of the Equation of a Line Solving Systems of Linear Equations by Graphing
11	10/2	4.2-4.3	Solving Linear Systems by the Substitution and Addition Methods
12	10/7	4.4 5.1	Problem Solving Using Systems of Equations Adding and Subtracting Polynomials
13	10/9	5.2-5.3 Review	Multiplying Polynomials Review for Exam #2
14	10/14	Exam	Exam #2 over Chapters 3 & 4
15	10/16	5.4 5.5	Polynomials in Several Variables Dividing Polynomials
16	10/21	5.7 6.1	Negative Exponents and Scientific Notation The Greatest Common Factor and Factoring by Grouping

Day	Date	Section	Topic
17	10/23	6.2	Factoring Trinomials Whose Leading Coefficient is 1
		6.3	Factoring Trinomials Whose Leading Coefficient is Not 1
18	10/28	6.4	Factoring Special Forms
		6.5	A General Factoring Strategy
19	10/30	6.6	Solving Quadratic Equations by Factoring
		7.1	Rational Expressions and Their Simplification
20	11/4	7.2-7.5 Review	Multiplying and Dividing Rational Expressions Review for Exam #3
21	11/6	Exam	Exam #3 over Chapters 5 & 6
22	11/11	7.3-7.4	Adding and Subtracting Rational Expressions
23	11/13	7.6	Solving Rational Equations
		7.7	Applications Using Rational Expressions
24	11/18	8.1	Finding Roots
		8.2	Multiplying and Dividing Radicals
25	11/20	8.3	Operations with Radicals
		8.4	Rationalizing the Denominator
26	11/25	8.5	Radical Equations
		9.1	Solving Quadratic Equations by the Square Root Property
27	12/2	9.3	The Quadratic Formula
		Review	Review for Exam #4
28	12/4	Exam	Exam #4 over Chapters 7, 8 & 9
29	12/9	Review	Review for Final Exam
30	12/11	Exam	Final Exam over Chapters 1 – 9

Dates may change to reflect actual course progress