Intermediate Algebra

MAT 131

Instructor: Greg Severance

Office: JM 250

Contact Phone: 517.796.8489

Contact Email: severangrege@jccmi.edu

Course Description

MAT 131

This course emphasizes simplifying expressions, solving equations, and graphing functions, including linear, quadratic, polynomial, rational, radical, exponential and logarithmic. Problem solving and mathematical modeling are integrated throughout.

Prerequisite(s)

Course placement or equivalent SAT/ACT score.

Course Goals

The purpose of this course is to develop a progressive understanding of intermediate 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 to real life applications.

Course Objectives

Students successfully completing Math 131 should be able to:

1. Simplify Algebraic expressions involving polynomial, rational, radical, exponential, and logarithmic functions.
2. Solve equations, inequalities, and systems of equations and inequalities.
3. For functions described algebraically or graphically:
    a. evaluate, find domain and range, find inverse
    b. perform algebraic operations and graphical translations
4. Solve application problems, including the ability to:
    a. represent a situation using a graph, table or equation
    b. forecast outcomes from above representations
    c. solve optimization problems

5. Use appropriate technology as part of their completing the objectives above.
6. Demonstrate knowledge of current technology and/or scientific issues.

GENERAL EDUCATION OUTCOMES: The course goals and objectives incorporate specific General Education Outcomes (GEOs) established by the JC Board of Trustees, administration, and faculty. These goals are in concert with four-year colleges and universities and reflect input from the professional communities we serve. GEOs guarantee students achieve goals necessary for graduation credit, transferability, and professional skills needed in many certification programs. The GEOs and course objectives addressed in this class include the following:

MAT 131: GEO3 - Demonstrate Computational Skills and Mathematical Reasoning

Textbook

- MyMathLab Access
- Elementary and Intermediate Algebra, 3e by Lehmann*
  Text Book Zero! *This text is available in a digital format and is included with your MyMathLab access and registration.*

Other Materials

You will need a device with internet access such as a laptop, chromebook, or smartphone. You will use DESMOS as a graphing calculator. You may also use a graphing or scientific calculator such as the Texas Instruments TI-83 or TI-84 calculator.

Grading Procedure

In-Class Activities: In class exercises will be assigned and graded. Unless otherwise specified by the instructor, in class exercises are to be completed immediately and are due upon completion

MML Homework/Quiz/Tests: These assignments must be done outside of class time on a computer with internet access at the MyMathLab website (http://www.mymathlab.com). Due dates for assignments are found in MyMathLab.

- You have an unlimited number of tries up until the due date.
- Homework assignments submitted after the due date will have a 10% credit deduction.
- Quiz/Tests submitted after the due date will have a 5% credit deduction.

Exams: Each exam may include written portion, a group portion, and an oral portion. A standard formula sheet may be provided given by the instructor. Students are not permitted to use other note sheets. The final exam is cumulative for the entire course. The final exam is given during the last week of the course and cannot be taken early.

Grading Scale

GRADE	PERCENT AVERAGE	GRADE CALCULATION
4.0	90-100%	Homework/Class Activities – 40%
3.5	85-89%	Semester Exams – 40%
3.0	80-84%	Final Exam – 20%
2.5	75-79%	
2.0	70-74%	
1.5	65-69%	
1.0	60-64%	
0.5	55-59%	
0.0	0-54%	

Attendance Policy

In compliance with Federal Title IV funding requirements student attendance will be recorded and reported to Jackson College daily. ***Students who do not attend regularly and constructively engage in course activities will be dropped from the class.***

Makeup Policy

You must notify the instructor in advance if you must a miss class session during which an exam is scheduled or an assignment is due. The instructor, at his discretion, may allow you to take the exam or submit the assigned work early. If this is not possible, the following provisions apply.

- Exams cannot be made up.
- In class quizzes or graded exercises that are missed cannot be made up.

Cell Phone Policy

Cell phones are not allowed to be used during exams unless specifically allowed by the instructor.
Cell phones are not allowed to be used for any purpose that disrupts the class.
Cell phones are not allowed to be used for any purpose that distracts another student.

Incomplete Policy

Refer to the JC academic incomplete policy in the JC handbook for a complete policy description. A student may request an incomplete from the instructor. An incomplete may 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 solely at the discretion of the instructor.

Academic Honesty Policy

Refer to the JC academic honesty policy in the JC handbook for a complete policy description. The potential consequences of violating the academic honesty policy are as follows. If I suspect a student of academic dishonesty I may penalize the student by taking appropriate action up to and including assigning a failing grade for the paper, project, report, exam, or the course itself.

Cell phones are not allowed to be used for any purpose during exams unless specifically allowed by the instructor.

Extra Credit Policy

Extra credit is not available for any reason.

Where to Get Help

Your fellow students and I are often your best and most available resources for learning. You should start/join a regular study group for this class. For more information on starting and maintaining a study group, check out the following link: http://bit.ly/math-study-group

Other sources of help:

- MyMathLab: There are videos, extra problems, sample exams, lecture notes, PowerPoint lectures and more available in MyMathLab.
- Supplemental Instruction: Some sections of the course have Supplemental Instruction (SI) Leaders assigned to them. These students will serve as peer "math coaches" for the students in that section, and will facilitate weekly study sessions. These study sessions are open to all MAT 039/131 students. Find times and locations of SI sessions at http://bit.ly/jcsischedule .
- The Center for Student Success. Drop in tutoring is available at the Center for Student Success (http://www.jccmi.edu/Success/Tutor/) in Walker Hall room 138. Regular tutoring and additional support for academic success can be arranged by calling 517.796.8415 or by stopping by the Center for Student Success.
- The JC Information Technology Solution Center. If you are having problems with JetNet or internet access contact the JCC Information Technology Solution Center by calling 517.796.8639
- The Kahn Academy online at http://www.khanacademy.org/ which covers topics including developmental math and prealgebra. Scroll down until you get to the appropriate category.
- A variety of other math help exists online and can be found by doing an internet key word search for math help on your topic.
- Meet with your instructor during office hours.

Accommodations for students with disabilities

It is important to contact a Center for Student Success professional prior to the start of the semester in order to receive accommodations in a timely manner. While we will make every effort to coordinate accommodations in a timely manner, failure to self-identify prior to the start of the semester may delay notification to instructors and timeliness of acquiring accommodations. Accommodations do not automatically carry over to the next semester.

Calendar

Calendar dates are an approximation and are subject to change.

Day	***Section(s)***	***Day***	***Section(s)***
1	4.4,4.6,	16	10.3,10.4,
2	5.1,5.2,5.3,	17	10.5,11.2,
3	5.4,5.5,	18	11.3,11.4,
4	5.6,6.1,	19	11.5,11.6,
5	6.2,6.3	20	***Exam 3***
6	***Exam 1***	21	11.7,12.1,
7	6.4,6.5,	22	12.2,12.3,
8	7.2,7.3,7.4,	23	12.5,12.7,
9	7.5,8.1,	24	12.8,13.1,
10	8.2,8.3,8.4,	25	13.2,13.3,
11	8.5,9.1,9.2,	26	13.4,13.5,
12	9.3,9.4,	27	***Exam 4***
13	***Exam 2***	28	Final Exam Review
14	9.6,9.8,9.9,	29	***Final Exam***
15	10.1,10.2,	30	Review Final Exam

Revisions to this Document

The instructor may revise any part of this document throughout the semester. Revisions, if they occur, will be announced during class.