



Beginning Algebra

MAT 039.I1 – Note: This course *must* be taken with MAT 131A.I1
Spring 2021

Number of Credits: 4

Instructor: Dharmesh Gada

Days Class Meets: T/ TH

Contact Phone: 517-740-7601

Virtual Meeting Times: 6:00 – 8:00 pm

Contact Email: gadadharmesj@jccmi.edu

Location/Venue: BigBlueButton (via JetNet)

Online Office Hours: By Appointment

Synchronous Sessions

This online course utilizes synchronous (live) class sessions (see meeting dates and times above). Discussion and participation in the live sessions is one of the best ways to receive support and feedback as you learn and grow throughout the course. Students who do not, or are unable to, attend synchronous sessions may be tasked watching the live session videos and completing the session's work on their own, or with an assigned partner, and may also be assigned additional learning-check assignments.

Course Description

Students will build algebraic skills working with expressions and linear and quadratic equations. The course particularly emphasizes graphs and equations of lines, factoring techniques, methods of solving quadratic equations, and linear and quadratic modeling.

Prerequisite(s)

Course placement or equivalent SAT/ACT score.

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.

Course Objectives

Students completing MAT 039 – Beginning Algebra should be able to:

1. Simplify basic algebraic and exponential expressions using mathematical processes and symbol manipulation.
2. Use algebraic processes to solve linear, quadratic 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 application problems using algebraic processes and procedural techniques.
5. Demonstrate knowledge of current technology and its uses 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 039 does not meet a GEO requirement

Textbook

- Materials for MAT 039 are co-listed with MAT 131. You do not need to re-purchase materials for this course.
 - Mathematics In Action, 6e (ISBN-13: 9780135115619)
 - MyMathLab Access
 - **Text Book Zero!** This text is available in a digital format and is included with your MyMathLab access and registration.
 - **See MAT 131A syllabus for additional information.**

Extras

- Materials for MAT 039 are co-listed with MAT 131. You do not need to re-purchase materials for this course.
 - 3-Ring Binder, Pencils, Pens, Highlighters, Dry Erase Markers, Erasers, Ruler/Straight Edge
 - Device with internet access such as a laptop, chromebook, or smartphone [NOTE: We will use DESMOS as a graphing calculator, but you may wish to bring a graphing or scientific calculator.]
 - Access to a laptop or desktop computer (not a tablet, chromebook or smartphone) will be required for online proctored course exams.

Grading Procedure

Learning Checks (LCs): There will be frequent opportunities to check your learning throughout the course. Learning Check points can be earned in either of the following ways:

- **During Live Sessions:** There will be frequent partner and group-based in-class activities during our synchronous sessions. These may be turned in for credit or scored based on participation during the live class session (either for completion or correctness). Students may be able to choose their own partner/group or may have a partner/group assigned by the instructor. Students must be active and present during the live class session to receive credit for the session's learning check activity.
- **Session Recording and Learning Check Assignments:** If you are unable to attend a synchronous/live session, you may watch the live session video and complete the day's Learning Check assignment. Learning Check assignments will be posted to JetNet on the day of the live session. You will have (at least) 2 days to complete or make up any live session's LC assignments.

Journals: Your journal for this class will consist of your in-class notebook with additional responses to specific topics. Some journal assignments may be completed collaboratively via discussion forums, some may be completed individually essay-style, while others may be marked up copies of your post-class notes.

- **Discussion Forums:** When Discussion Topics are assigned on JetNet, you will post and original post by the first deadline, then respond to two classmates by the second deadline. Only posts that are meaningful and contribute to the conversation or topic will be awarded high scores. Posts that are very short (yes/no) or do not contribute additional insight or information may receive 0 credit.
- **Essay-Style:** These assignments will include a worksheet with an essay-style prompt. Responses to the essay-style prompt do not need to be overly wordy, but need to include all essential points. Be sure to be thorough in your explanations and ask your instructor for additional clarification or assignment requirements.

MyMathLab (MML) Quizzes: These assignments must be done outside of class time on a computer with internet access at MyMathLab (reachable through <http://www.mymathlab.com>). MML Quizzes are assigned as readiness checks and integrated review at the beginning of each Chapter and/or Cluster and post-skills (how can I practice?) checks at the end of each Cluster. There may also be additional quizzes posted on MyMathLab for students to take outside of class.

- You have an unlimited number of tries to do each quiz/test (up until the due date), however the entire quiz/test must be resubmitted each time.

- Your score on the Skills Check (Integrated Review) quizzes will determine how many homework questions you will need to complete in the Skills Review (Integrated Review) homework.
- If your score on a Skills Check quiz is less than 80%, I suggest that you retake the Skills Check to improve your score and practice before completing the Chapter.

MyMathLab (MML) Homework: These assignments must be done outside of class time on a computer with internet access at MyMathLab (reachable through <http://www.mymathlab.com>). Homework will be due every week, as announced in class, usually twice per week such as Monday and Wednesday. Check MyMathLab for particular due dates.

- You have an unlimited number of tries to do the homework (up until the due date). Thus, all of your homework should receive full credit, if you keep trying (via Similar Exercise) until you get a perfect score.
- The number and types of homework questions you need complete are personalized based on your prior knowledge via the Chapter or Cluster Skills Check Quizzes.

Group Exams: Each chapter exam (for MAT 131) will be preceded by a group exam (for MAT 039). Group exams will be completed collaboratively, in real-time, via screen sharing and multi-user editable documents. Activity and completion of group exams will be recorded and reviewed by the instructor. Equal participation is expected from all group members. Group members may receive the same or individual grades based upon participation in the recorded session and feedback from group members.

- Exams may not be made up except under extreme, well-documented circumstances. Final decisions as to whether a make-up exam will be allowed rest solely with the instructor, so contact me immediately if there is a problem. Make-up exams must be arranged before the exam deadline has elapsed or a zero will be given for that exam.
- The Final Group Exam is during the last week of the course and can NOT be taken early so do not schedule travel plans during that week or you will receive a ZERO on the final.

Grading Scale

GPA	GRADE RANGE	GRADE CALCULATION
4.0	90-100%	Journals – 15%
3.5	85-89%	Activities (Synchronous) – 15%
3.0	80-84%	Homework – 15%
2.5	75-79%	Quizzes – 15%

2.0	70-74%	Chapter Group Exams – 30%
1.5	65-69%	Final Group Exam – 10%
1.0	60-64%	
0.5	50-59%	
0.0	0-49%	

Attendance/Participation Policy

For online sections

Just as in a traditional classroom course, regular class participation and keeping up on the reading and assignments is strongly correlated with survival in college. It is my recommendation that you plan to do your assignments and take your exams BEFORE the last day they are due. If problems occur, there is time to fix them before the deadline.

In compliance with Federal Title IV funding requirements, as well as college initiatives, I will be monitoring student participation on a regular basis and officially reporting student activity throughout the term to assure compliance with college policy and federal regulations. It is imperative that you log in to the course and actively participate within the first couple of days of the term to validate your enrollment in the course. After that, not actively participating in class may result in you being withdrawn from the course. Being withdrawn from a course can have an impact on financial aid, billing, athletic eligibility, and housing status. As a college student you are responsible for how your participation impacts your academic progress; the accountability lies with you.

To be “present” during a given week, students will:

- Attend and participate in synchronous class sessions OR complete learning check (LC) assignments in place of missed activities.
- Complete online assignments by the required due date OR establish, and follow, a make-up plan with the instructor.
- Engage in regular communication with the instructor.

Academic Honesty Policy

Academic Honesty is defined as ethical behavior that includes student production of their own work and not representing others' work as their own, by cheating or by helping others to do so.

Plagiarism

Plagiarism is defined as the failure to give credit for the use of material from outside sources.

Plagiarism includes but is not limited to:

- Submitting other's work as your own
- Using data, illustrations, pictures, quotations, or paraphrases from other sources without adequate documentation
- Reusing significant, identical or nearly identical portions of one's own prior work without acknowledging that one is doing so or without citing this original work (self-plagiarism)

Cheating

Cheating is defined as obtaining answers/material from an outside source without authorization.

Cheating includes, but is not limited to:

- Plagiarizing in any form
- Using notes/books/electronic material without authorization
- Copying
- Submitting others' work as your own or submitting your work for others
- Altering graded work
- Falsifying data
- Exhibiting other behaviors generally considered unethical
- Allowing your work to be submitted by others

Accessibility

Jackson College understands that cultivating a broadly diverse community is crucial to our educational mission and to our foundational commitment to leadership and service. Jackson College is fully committed to ensuring our courses are accessible to everyone including those with disabilities. We are currently working to increase accessibility and usability of our course materials in order to meet or exceed the requirements of Section 508 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1991 and Web Content Accessibility Guidelines (WCAG) 2.0. For more information about Jackson College's efforts to ensure accessibility please visit the [Jackson College accessibility web page](#).

If you have an accessibility need in any of our classes please e-mail the Center for Student Success at JCCSS@jccmi.edu or visit the [Center for Student Success web page](#).

At the Center for Student Success (CSS), we are committed to providing all students the opportunity to achieve academic success by providing a variety of support services free of charge to Jackson

College students. This includes, but is not limited to, peer and faculty tutoring, mental health referral, temporary assistance with transportation, various workshops/seminars, and the TRIO program.

In addition, the CSS staff is committed to adapting the College's general services to meet the individual needs of otherwise qualified students with disabilities, for the purpose of providing equal access to all programs and facilities.

Academic Advising

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. Please e-mail JCCSS@jccmi.edu or visit the [Accommodations for Students with Disabilities](#) web page.

Absence Policy

Students are expected to attend all synchronous class sessions, arriving on time, and staying until the end. We do a variety of individual and group activities which must be made up if you are unable to attend the session. Please remember that office hours are not a replacement for class time. If absence from a synchronous session is unavoidable the student is responsible for the following:

1. Email the instructor regarding your absence. Include your course and section number.
2. Request any new worksheets or activities from the synchronous session, complete them, and return them to the instructor.
3. Complete the related textbook notes for the given sections.
4. Complete the related homework, quiz, or text assignments.
5. Come to the next synchronous class session prepared and ready to move into new material.

Incomplete Policy

A student may request an incomplete from the instructor, who will follow the JC Incomplete Policy. 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 the instructor's decision. Note: An "Incomplete" grade is not a way to avoid a failing one.

Extra Credit Policy

There will be no opportunities for extra credit. Your grade calculation is based solely on your performance on course assignments listed above.

Help

Your fellow students and I are your best, most immediate, resources for learning. Even so, there are many other sources to consider and investigate. Be creative, be resourceful, and share what you find -- we're all in this together!

I strongly suggest you start up a regular study group as soon as you are able with some of your classmates. At the very least, write down names and contact information for your peers and call on each other when needed. 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:

- Office Hours: Meet with me during my open office hours or contact me to request an individual meeting.
- Jackson College's Center for Student Success (CSS): Peer tutoring is available most days (<https://www.jccmi.edu/center-for-student-success/tutoring-center/>). There are usually several tutors available for each class. Check through the tutors' schedules until you find one whose availability matches yours. You do not have to return to the same tutor each time, sometimes it is advantageous to try several tutors until you find a person that you feel comfortable working with.
- Supplemental Instruction: Some sections of this 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 students and are completely voluntary, but highly recommended. In a recent semester, students that utilized SI study sessions experienced an increase of over 18% in their pass rates, compared to those who did not. Even if your class doesn't have an SI Leader, you are encouraged to attend SI Sessions for your course. For times and locations of SI sessions, visit the Center for Student Success webpage and click on "Supplemental Instruction" in the menu or go to <https://www.jccmi.edu/supplemental-instruction/>.
- MyMathLab: There are videos, extra problems, sample exams, lecture notes, PowerPoint lectures and more available in MyMathLab. It's a great resource! In particular, the Study Plan in MyMathLab can help with studying for exams as it gives you unlimited extra problems to do for practice, without affecting your gradebook.

Important Dates:

DATE	EVENT
MAY 10	FIRST DAY OF SP21 SEMESTER
MAY 29 – 31	MEMORIAL DAY HOLIDAY
JUL 3 – 5	INDEPENDENCE DAY HOLIDAY
AUG. 9	END OF SP21 SEMESTER

Calendar

**Calendar timelines and assignments are an approximation and could be changed.*

WEEK #	DATE	TOPIC	HOMEWORK
1	5/10 – 5/15	Chapter 1, Cluster 1: Modeling with Functions	Sections 1.1 – 1.5
2	5/16 – 5/22	Chapter 1, Cluster 2: Linear Functions	Sections 1.6 – 1.10
3	5/23 – 5/29	Chapter 1, Cluster 3: Systems of Linear Equations, Inequalities, and Absolute Value Functions	Sections 1.11 – 1.16
4	5/30 – 6/5	Chapter 2, Cluster 1: Addition, Subtraction, and Multiplication of Polynomial Functions	5/31 – Memorial Day Holiday Sections 2.1 – 2.2
5	6/6 – 6/12	Chapter 2, Cluster 2: Composition and Inverses of Functions	Sections 2.3 – 2.6
6	6/13 – 6/19	Chapter 3, Cluster 1: Exponential Functions	Sections 2.7 – 2.8, 3.1 – 3.3

7	6/20 – 6/26		Sections 3.4 – 3.7
8	6/27 – 7/3	Chapter 3, Cluster 2: Logarithmic Functions	Sections 3.8 – 3.12
9	7/4 – 7/10	Chapter 4, Cluster 1: Introduction to Quadratic Functions	7/5 – Independence Holiday Sections 4.1 – 4.2
10	7/11 – 7/17		Sections 4.3 – 4.6
11	7/18 – 7/24	Chapter 4, Cluster 2: Curve Fitting and Higher-Order Polynomial Functions	Sections 4.7 – 4.10
12	7/25 – 7/31	Chapter 5, Cluster 1: Rational Functions	Sections 5.1 – 5.5
13	8/1 – 8/7	Chapter 5, Cluster 2: Radical Functions	Sections 5.7 – 5.8 Final Exam