

## Math 131: Section I50 - Course Syllabus

<b>Instructor:</b>	Dharmesh Gada
<b>Phone:</b>	517-740-7601 (Reaching me via email is faster)
<b>E-mail:</b>	<a href="mailto:gadadharmesj@jccmi.edu">gadadharmesj@jccmi.edu</a>
<b>MyMathLab Website:</b>	<a href="http://www.mymathlab.com">www.mymathlab.com</a>
<b>MyMathLab Course ID:</b>	gada86577
<b>Class Time/Location:</b>	Online – 9/16/13 thru 12/8/13
<b>Office Hours:</b>	By Appointment

**Required Materials:** Coursepack, MyMathLab Student Access, LARGE 3-ring binder, LARGE eraser, pencils, TI-84 Calculator **strongly recommended** (Note: TI-83's cannot run the newest operating system, which puts students using them at a big disadvantage, all notes and instructions assume a TI-84)

**Optional Materials:** Textbook (*Intermediate Algebra: Functions and Authentic Applications, 4<sup>th</sup> edition*, Author: Jay Lehmann, Publisher: Prentice Hall – this text is available for rent in the JCC bookstore), graph paper, ruler

**Please note: Access to a computer with Internet is required for this section of Math 131.** We will be doing homework, projects, and quizzes online. School computers can be used to satisfy these requirements.

**Course Description:** Emphasizes simplifying expressions, solving equations, and graphing functions, including linear, quadric, polynomial, rational, radical, exponential and logarithmic. Problem solving and mathematical modeling are integrated throughout. Appropriate technology includes a graphing calculator. Prerequisite: A 2.0 in MTH 031 or course placement by exam.

**Math 131 Core 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.

**Math 131 Associate Degree Outcomes:** All courses at Jackson Community College address one or more of the institutionally defined Associate Degree Outcomes (ADOs). Math 131 contributes to the following outcomes.

**ADO 3: - Proficient - Demonstrate computational skills and mathematical reasoning**

- Demonstrates algebraic skills using polynomial, rational, radical, exponential, logarithmic, and trigonometric expressions and equations
- Applies properties of numbers and laws of exponents
- Displays “algebra sense”, avoiding common mathematical misconceptions, such as:  
 $(x+4)^2 \neq x^2 + 16$   $\sqrt{x^2 + 9} \neq x + 3$   $\frac{x+3}{x} \neq 3$
- Demonstrates fluency manipulating and communicating with mathematical symbols and terminology
- Uses symbolical, visual, numerical and verbal representations to analyze information.
- Demonstrates logical reasoning
- Carefully documents process used to reach conclusion
- Estimates and checks mathematical results for reasonableness
- Acquires and applies a broad range of mathematical skills and concepts as well as technology to facilitate efforts to visualize, interpret, and solve mathematical problems
- Uses graphic calculator and/or computer algebra systems to support mathematical reasoning and problem solving

**ADO 7 – Developing - Critical Thinking**

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

## ***Course Requirements:***

**Online Assignments:**

These assignments must be done on a computer with internet access at **MyMathLab** (reachable through [www.mymathlab.com](http://www.mymathlab.com)). The assignments for each chapter will follow the following format:

***Homework:*** There is a homework assignment roughly for each section in the course. Homework is due once a week, usually on Monday at 11:59 PM. **You have an unlimited number of tries to do the 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.

***Chapter Quiz:*** There is a Chapter Quiz for each chapter of the course. The purpose of the Chapter Quiz is to give you the means of judging whether or not you are prepared to take the Chapter Post-Test. Unlike the Post-Test, the quiz the may be repeated as many times as desired, only the highest grade received from each quiz will be recorded.

**Post-Test:** The purpose of the Post-Test is to test for mastery of the chapter. You may take the Post-Test up to two times to improve your score. Only the higher of the two grades will count towards your overall grade.

### **Offline Assignments:**

In addition to the online assignments, there will be several offline assignments throughout the course.

**Projects:** There will be two projects given throughout the semester that can be done as pencil-and-paper assignments or may be typed in Word. These assignments will pertain to material that we have covered in the past or current material. These assignments will be due on the date specified when the assignments are given and will not be accepted late.

To submit these offline assignments, choose one of the following options:

- Upload – You may upload a file or scanned image to MyMathLab. This option can be found under Course Tools > Document Sharing.
- Fax – The fax number for the JM main office is 517-796-8637. Please include a coversheet with my name on it. You may want to use a pen to darken your final answers before faxing.
- Mail – My address is 2111 Emmons Road, Jackson, MI 49201. I must receive the project before the due date; please allow at least 4-5 business days for the mail to reach me.
- Hand Deliver – If you live near the Central Campus or can conveniently make the trip, you may deliver your project to me at my mailbox in McDivitt Hall. Please ask the building secretary in the first floor commons area to place the project in my mailbox.

**Midterm and Final Exams:** In order to preserve the integrity of this course, I am asking that you take two proctored exams: a Midterm Exam covering Chapters 1–4, and a Final Exam covering Chapters 1–9. There are no notes on either exam. Please choose between the following options, and follow the directions in the appropriate section of the Proctor Selection form. Return the information to me no later than the date listed in the course announcements.

- **Option 1:** Take the exams in the testing center on JCC’s Central Campus. If you select this option you will need to come to the testing center in Atkinson Hall to take your tests. The tests will be placed in the center one week before the due date, and you may take them whenever the lab is open (varied hours; see <http://www.jccmi.edu/library/testinglab.htm> for specifics). You will need to request the exam in WA 118. You will be asked to show ID, the consultant will show you to the testing room, and you can return the exam to the consultant when you are finished. The lab will send completed exams to me. If you plan to use this option, you can so indicate simply by sending me an e-mail stating that you will take the tests on the Central Campus.
- **Option 2:** Find your own proctor. If you select this option, you will need to find someone who is willing to proctor your exams. This person MUST be a professional testing center employee (a testing center or library at another college). This person CANNOT be a relative of yours. Your exams will be sent directly to your proctor, who will be asked to verify that you have adhered to the rules on the cover sheet (no books or notes or other outside help; test completed in one session, etc.), then seal your completed exam in an envelope and mail it to me by the due date. If you intend to select this option please email to explain why you

require and off-campus proctor, complete the [Proctor Selection Form](#) (with your proctor), and fax or mail the form to me at:

Dharmesh Gada  
2111 Emmons Rd  
Jackson, MI 49201

Fax: (517) 796 – 8637

## ***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.

<b><u>Grading Scale:</u></b>		<b><u>Grading Policy:</u></b>
90 -100%	4.0	
85 - 89%	3.5	
80 - 84%	3.0	Homework: 15%
75 - 79%	2.5	Quizzes: 10%
70 - 75%	2.0	Projects: 10%
65 - 69%	1.5	Post Tests: 20%
60 - 64%	1.0	Midterm Exam: 20%
50 - 59%	0.5	Final Exam: 25%
0 - 49%	0.0	

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

**Intermediate Grading:** To comply with college policy and federal regulations you will receive three intermediate grades on e-services 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.

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

**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](http://www.jccmi.edu/academics/academic_calendar.htm)

**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/policies/Academics/Policies/1004.pdf>

---

## ***Where to Get Help...***

**Office Hours:** Being an Adjunct instructor, I do not have scheduled office hours but I am more than happy to meet with you at Central Campus. Contact me and we can setup some time to meet.

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

**Study Plan:** Your MyMathLab Study Plan is an excellent source of additional practice problems for each section. It will update as you complete regularly scheduled assignments such as the Pre-Test, the Chapter Quiz and the Post-Test or by using the Quiz Me option in the Study Plan. Items marked with the  icon indicate areas that need more study. Items marked with the  icon indicate areas that you have mastered.

**Lead Faculty You-Tube Channel:** (<http://www.youtube.com/user/tuckeyalanaj>) The instructor's You-Tube channel contains a variety of videos aimed at discussing content, reviewing for course exams, answering student questions, etc. This channel is a work-in-progress; please check out the selection

already available and also consider asking for an additional video to be created in an area for which you need additional resources.

**Center for Student Success:** The Center for Student Success has tutoring available for free to students enrolled in Math classes. You can get help with take-home work, MyMathLab homework, and more. The Center is located in Bert Walker Hall Room 125.

**Math Help Room:** This room is located in 245 McDivitt Hall. Tutoring is available Monday through Thursday.

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

---

### **Helpful Tips**

- **How many hours of my time will this class take?** Past students have mentioned this class will require about 16 to 20 hours of your time per week.
- **You are responsible for your own learning.** This is a difficult course to take online but not insurmountable. Remember to stay on top of your schedule. Nothing is worse than waiting till the last minute and having something go wrong. Use the weekly email I send out every Monday as a checklist to make sure you have accounted for all things to be done in that week. This will ensure you do not miss out any assignments.
- **Lack of participation may lead to you being dropped from the class.** If you go two weeks without logging into mymathlab, you may be dropped from the course. If you have some extenuating circumstances occur, contact me immediately to see if any accommodations can be made. Do not wait for weeks to get in touch with me and expect to be let back into the course. Simply not doing anything for weeks would result in you being dropped from the class.

<b>Math 131 – Tentative 12-Week Schedule</b>		
<b>Week</b>	<b>Material Covered</b>	<b>Topics</b>
1 (9/16-9/22)	1.1 - 1.6 2.3 - Part 1	Using Qualitative Graphs; Graphing Linear Equations; Slope of a Line Finding Linear Equations; Functions; Function Notation
2 (9/23-9/29)	2.1-2.2, 2.3 - Part 2 2.4, 3.1-3.2	Linear Modeling; Linear Regression;
		Slope as a Rate of Change; Solving Systems by Graphs, Tables, Substitution, Elimination
3 (9/30-10/6)	3.3 - 3.5	Modeling Systems; Value, Interest, and Mixture Problems
		Linear Inequalities
4 (10/7-10/13)	4.1 - 4.4	Properties of Exponents
		Rational Exponents; Graphing and Finding Exponential Functions
5 (10/14-10/20)	4.5 <b>Mid Term Exam (Ch 1 – 4)</b> 5.1 - 5.3	Exponential Models; Inverse Functions <b>Mid Term Exam (Ch 1 – 4)</b>
		Logarithmic Functions and Properties
6 (10/21-10/27)	5.4 - 5.6	Power Property with Exponential Models; Properties of Logarithms
		Natural Logarithms
7 (10/28-11/3)	6.1 - 6.5	Adding, Subtracting and Multiplying Polynomials
		Factoring: GCF, Grouping, Trinomials, Binomials, and in General
8 (11/4-11/10)	6.6, 7.1 – 7.5	Using Factoring to Solve Polynomials; Graphing Quadratic Functions
		Solving Quadratic Equations: Square Root, Completing the Square, Quadratic Formula
9 (11/11-11/17)	8.1-8.3 8.5	Rational Expressions: Domain, Lowest Terms, Graphs, Models, Multiplying and Dividing
		Adding and Subtracting Rational Expressions; Solving Radical Equations
10 (11/18-11/24)	8.6 9.1	Rational Models
		Simplifying Rational Expressions
11 (11/25-12/1)	9.2 - 9.5	Adding, Subtracting and Multiplying Radical Expressions;
		Graphing Square Root Functions; Solving Radical Equations
12 (12/2-12/8)	9.6; <b>Final Review</b> <b>Final Exam</b>	Modeling with Square Root Functions; <b>Review</b>

**NOTE!!** This schedule is subject to change as the course progresses. Please check your email multiple times a week for any additional details like quizzes, projects, etc.