

# McLennan C O M M U N I T Y C O L L E G E

WACO, TEXAS

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## **COURSE SYLLABUS AND PROFESSOR PLAN**

**COLLEGE ALGEBRA  
MATH 1314.05**

**GARY DUNCAN**

**NOTE: This is a 16-week course.**

### **COVID 19 Notice:**

McLennan Community College is committed to providing you with every resource you need to reach your academic goals including your safety. We will continue to monitor the evolving situation with COVID 19 and adjust our safety guidelines to make sure we offer a safe environment for you and our faculty. Please make sure to consult your faculty and the MCC website at <https://www.mclennan.edu/crisis-management/coronavirus-updates/index.html> on any changes to these guidelines.

## COLLEGE ALGEBRA

### MATH 1314.05

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#### **Course Description:**

In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability and conics may be included.

#### **Prerequisites and/or Corequisites:**

Prerequisite: TSI complete or MATH 0311 or consent of division chair.

Semester Hours: 3 (3 lec.)

#### **Course Notes and Instructor Recommendations:**

Math 1314 in a face-to-face format involves class meetings as well as graded homework assignments to be done using MyMathLab. Periodic homework quizzes may be given. Reviews for exams will be made available in class.

#### **Professor Information:**

Professor Name: Gary Duncan

MCC E-mail: [gduncan@mcclennan.edu](mailto:gduncan@mcclennan.edu)

Office Phone Number: 254-299-8872

Office Location: MATH 222

Office/Teacher Conference Hours: TBA

Link to Zoom Meeting Room: [Personal ID Number 2542998872](#)

#### **Required Text & Materials:** (Recommended but not Required) *MyMathLab is required*

Author: Rockswold

Title: College Algebra etc (Loose pages) w/MyMathLab

Publisher: PEARSON EDUCATION

Edition: 6<sup>th</sup>

ISBN: 9780134763842

Required: RECOMMENDED

Required graphing calculator – TI-83, TI-83 Plus, TI-84, or TI-84 Plus

**ABSOLUTELY NO TI-89, HP-48 or similar CAS calculators allowed (symbolic integration capable) during exams.**

**MCC Bookstore Website:** <http://www.mcclennan.edu/bookstore/>

#### **Methods of Teaching and Learning:**

Students will be required to attend lectures. Homework will be assigned in MML and discussed at the next class meeting. Your homework average from MML will be uploaded to Brightspace at the end of the semester once all work is done. Occasionally, students may be asked to work collaboratively in teams to reinforce concepts discussed in class. Reviews for exams will be given in class prior to major exams. There will be a minimum of four major exams in addition to a comprehensive final exam and the average of all Pop Quizzes will count as an additional major exam.

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## **Course Objectives and/or Competencies:**

Upon completion of the course, the student will be able to:

1. Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, and inverses.
2. Recognize and apply polynomial, rational, radical, exponential and logarithmic functions and solve related equations.
3. Apply graphing techniques.
4. Evaluate all roots of higher degree polynomial and rational functions.
5. Recognize, solve and apply systems of linear equations using matrices.

## **Course Outline or Schedule:**

*The schedule is subject to change. Should a change become necessary, students will be notified about changes verbally, during class.*

Week	Section	Topic
1	1.3	Functions and Their Representation
	1.4	Types of Functions and Their Rates of Change
	2.1	Equations of Lines
2	2.2	Linear Equations
	2.3	Linear Inequalities
3	2.4	More Modeling with Functions
	2.5	Absolute Value Equations and Inequalities
4		Review Chapters 1 and 2
		<b>Exam 1</b>
5	3.1	Quadratic Functions and Models
	3.2	Quadratic Equations and Problem Solving
6	3.3	Complex Numbers
	3.4	Quadratic Inequalities
	3.5	Transformations of Graphs
7		Review Chapter 3
		<b>Exam 2</b>
8	4.1	More Non-Linear Functions and Graphs
	4.2	Polynomial Functions and Graphs
	4.3	Division of Polynomials
9	4.4	Real Zeros of Polynomial Functions
	4.5	The Fundamental Theorem of Algebra
	4.6	Rational Functions and Models
10	4.8	Radical Equations and Power Functions
		Review Chapter 4
		<b>Exam 3</b>
11	5.1	Combining Functions
	5.2	Inverse Functions and Their Representations
	5.3	Exponential Functions and Models
12	5.4	Logarithmic Functions and Models
	5.5	Properties of Logarithms

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	5.6	Exponential and Logarithmic Equations
13		Review Chapter 5
		<b>Exam 4</b>
14	6.1	Functions and Systems of Equations in Two Variables
	6.3	Systems of Equations in Three Variables
	6.4	Solutions to Linear Systems Using Matrices
15	6.5	Properties and Applications of Matrices
		Review for Final Exam
16		<b>Final Exam</b>

### **Course Grading Information:**

If “Pop Tests” are given, their average (excluding the two lowest grades) will count as an additional major exam and replace a second lowest exam grade. The single lowest major exam grade will be dropped. If you miss an exam, that will count as your dropped grade. The final exam will not be dropped. All exam grades, including the final exam, will be weighted evenly. A team test may be given and will count as an additional major exam. Your homework average from MML will also be included in your final course grade. Extra credit projects may be assigned.

Homework (MyMathLab)	20%
Exams (4)	60%
Final Exam	20%

### **Late Work, Attendance, and Make Up Work Policies:**

It is my policy to drop a student’s lowest test grade at the end of the semester (excluding the final exam). For this reason, I do not give makeup tests, with the exception of school sponsored activities or extreme situations handled on a case-by-case basis. A missed test will be recorded as a 0 and then dropped as the lowest test grade at the end of the semester, provided there is only one missed exam. Otherwise, the zero will count in the average. If a student is aware of a future absence on a test date, they may ask to arrange to take the test early.

Students may be seated alphabetically to facilitate roll checks.

After the drop date, students who quit coming to class must see the professor IN PERSON (not email or phone) in order to receive a W. Otherwise they may receive an F. No drops will be allowed two weeks before the final for ANY REASON.

Students who leave the room during class and return to class on a consistent basis may be penalized by possible grade reduction.

All electronic devices must be turned off during class. *Students must turn off their cell phones.* TEXTING IN CLASS ON ANY ELECTRONIC DEVICE IS ABSOLUTELY FORBIDDEN!!!

### **Student Behavioral Expectations or Conduct Policy:**

Students are expected to maintain classroom decorum that includes respect for other students and the instructor, prompt and regular attendance, and an attitude that seeks to take full advantage of the education opportunity. Students are expected to come to class prepared and with supplies necessary to participate actively in each class meeting. Any student that consistently disrupts this class may experience grade reduction or be withdrawn from this class. For more details of College Conduct Policy, see the [Highlander Student Guide](#).

**[Click Here for the MCC Attendance/Absences Policy](https://www.mclennan.edu/highlander-guide/policies.html)**

**(<https://www.mclennan.edu/highlander-guide/policies.html>)**

Click on the link above for the college policies on attendance and absences. Your instructor may have additional guidelines specific to this course.

# McLennan

C O M M U N I T Y

## COLLEGE

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## ACADEMIC RESOURCES/POLICIES

### **Accommodations/ADA Statement:**

Any student who is a qualified individual with a disability may request reasonable accommodations to assist with providing equal access to educational opportunities. Students should contact the Accommodations Coordinator as soon as possible to provide documentation and make necessary arrangements. Once that process is completed, appropriate verification will be provided to the student and instructor. Please note that instructors are not required to provide classroom accommodations to students until appropriate verification has been provided by the Accommodations Coordinator. For additional information, please visit [www.mclennan.edu/disability](http://www.mclennan.edu/disability).

Students with questions or who require assistance with disabilities involving physical, classroom, or testing accommodations should contact:

[disabilities@mclennan.edu](mailto:disabilities@mclennan.edu)

254-299-8122

Room 319, Student Services Center

### **Title IX:**

We care about your safety, and value an environment where students and instructors can successfully teach and learn together. If you or someone you know experiences unwelcomed behavior, we are here to help. Individuals who would like to report an incident of sexual misconduct are encouraged to immediately contact the Title IX Coordinator at [titleix@mclennan.edu](mailto:titleix@mclennan.edu) or by calling Dr. Drew Canham (Chief of Staff for Diversity, Equity & Inclusion/Title IX) at (254) 299-8645. Individuals also may contact the MCC Police Department at 299-8911 or the MCC Student Counseling Center at MCC at (254) 299-8210. The MCC Student Counseling Center is a confidential resource for students. Any student or employee may report sexual harassment anonymously by visiting <http://www.lighthouse-services.com/mclennan/>.

Go to McLennan's Title IX webpage at [www.mclennan.edu/titleix/](http://www.mclennan.edu/titleix/). It contains more information about definitions, reporting, confidentiality, resources, and what to do if you or someone you know is a victim of sexual misconduct, gender-based violence or the crimes of rape, acquaintance rape, sexual assault, sexual harassment, stalking, dating violence, or domestic violence.

**Student Support/Resources:**

MCC provides a variety of services to support student success in the classroom and in your academic pursuits to include counseling, tutors, technology help desk, advising, financial aid, etc. A listing of these and the many other services available to our students is available at <http://www.mclennan.edu/campus-resource-guide/>

College personnel recognize that food, housing, and transportation are essential for student success. If you are having trouble securing these resources or want to explore strategies for balancing life and school, we encourage you to contact a Success Coach by calling (254) 299-8226 or emailing [SuccessCoach@mclennan.edu](mailto:SuccessCoach@mclennan.edu). Students may visit the Completion Center Monday-Friday from 8 a.m.-5 p.m. to schedule a meeting with a Success Coach and receive additional resources and support to help reach academic and personal goals. Paulanne's Pantry (MCC's food pantry) provides free food by appointment to students, faculty and staff based on household size. Text (254) 870-7573 to schedule a pantry appointment. The Completion Center and pantry are located on the Second Floor of the Student Services Center (SSC).

**MCC Foundation Emergency Grant Fund:**

Unanticipated expenses, such as car repairs, medical bills, housing, or job loss can affect us all. Should an unexpected expense arise, the MCC Foundation has an emergency grant fund that may be able to assist you. Please go to <https://www.mclennan.edu/foundation/scholarships-and-resources/emergencygrant.html> to find out more about the emergency grant. The application can be found at [https://www.mclennan.edu/foundation/docs/Emergency\\_Grant\\_Application.pdf](https://www.mclennan.edu/foundation/docs/Emergency_Grant_Application.pdf).

**MCC Academic Integrity Statement:**

Go to [www.mclennan.edu/academic-integrity](http://www.mclennan.edu/academic-integrity) for information about academic integrity, dishonesty, and cheating.

**Minimum System Requirements to Utilize MCC's D2L|Brightspace:**

Go to <https://www.mclennan.edu/center-for-teaching-and-learning/Faculty-and-Staff-Commons/requirements.html> for information on the minimum system requirements needed to reliably access your courses in MCC's D2L|Brightspace learning management system.

**Minimum Technical Skills:**

Students should have basic computer skills, knowledge of word processing software, and a basic understanding of how to use search engines and common web browsers.

**Backup Plan for Technology:**

In the event MCC's technology systems are down, you will be notified via your MCC student email address. Please note that all assignments and activities will be due on the date specified in the Instructor Plan, unless otherwise noted by the instructor.

**Email Policy:**

McLennan Community College would like to remind you of the policy (<http://www.mclennan.edu/employees/policy-manual/docs/E-XXXI-B.pdf>) regarding college email. All students, faculty, and staff are encouraged to use their McLennan email addresses when conducting college business.

A student's McLennan email address is the preferred email address that college employees should use for official college information or business. Students are expected to read and, if needed, respond in a timely manner to college emails.

**Instructional Uses of Email:**

Faculty members can determine classroom use of email or electronic communications. Faculty should expect and encourage students to check the college email on a regular basis. Faculty should inform students in the course syllabus if another communication method is to be used and of any special or unusual expectations for electronic communications.

If a faculty member prefers not to communicate by email with their students, it should be reflected in the course syllabus and information should be provided for the preferred form of communication.

**Email on Mobile Devices:**

The College recommends that you set up your mobile device to receive McLennan emails. If you need assistance with set-up, you may email [Helpdesk@mclennan.edu](mailto:Helpdesk@mclennan.edu) for help.

**Forwarding Emails:**

You may forward emails that come to your McLennan address to alternate email addresses; however, the College will not be held responsible for emails forwarded to an alternate address that may be lost or placed in junk or spam filters.

**Disclaimer:**

The resources and policies listed above are merely for informational purposes and are subject to change without notice or obligation. The College reserves the right to change policies and other requirements in compliance with State and Federal laws. The provisions of this document do not constitute a contract.