

WACO, TEXAS

# COURSE SYLLABUS AND INSTRUCTOR PLAN COLLEGE ALGEBRA MATH-1314-030

DR. MEERA D GURUNG NOTE: This is a 16-week F2F course.

AN EQUAL OPPORTUNITY INSTITUTION

Fall, 2023

Greetings College Algebra Students! On the next pages you will find the syllabus. Please read it carefully. You must complete the steps below by 4:00pm Aug.21, 2023

Step	Action		
1.	Insure that you correspond with me using your MCC email address. Any		
	trouble to access, please contact MCC tech support 254-299-9077 or		
	helpdesk@mclennan.edu		
2.	Login in <u>www.mclennan.edu</u> , access		
	https://brightspace.mclennan.edu/d2l/login, select your course, get familiar with		
	the links listed on the top, such as announcements, content, and more.		
2.	Find To-Dos in Announcement weekly, access Content, where you shall visit		
	and work all the time for homework, grades, quizzes, videos, and more.		
3.	Send an email from your mcc email to my email address		
	mgurung@mclennan.edu with the following: Subject: your name & 1314-030		
	1. Watched the orientation video in the announcement in		
	https://brightspace.mclennan.edu/d2l/login .		
	<ol><li>Understand the due dates do not mean you should start the</li></ol>		
	assignments on that day but complete them by then.		
	3. Understand the build in opportunities for managing your grade-such as		
	taking the unit tests twice, working homework problems as much as		
	needed until you make 100%, but you must complete up to at least 70%		
	the assignment in order to access the next assignment.		
	4. Completed the Online Orientation found in Brightspace-Content-MyLab		
	Math-MyLab Math All Assignments, where all your homework locates.		
	5. Zoom meeting ID: 852 9740 3106		
	<ol><li>Begun Lesson by clicking on the Lesson tab in</li></ol>		
	https://brightspace.mclennan.edu/d2l/login		

# **Course Description:**

In-depth study and application of linear, polynomial, rational, radical, exponential, and logarithmic functions, and systems of equations using matrices. Semester Hours 3 (3 Lecture) and Graphing Calculator Required.

# **Prerequisites and/or Corequisites:**

Math 0311 or consent of division chair.

# **Course Notes and Instructor Recommendations:**

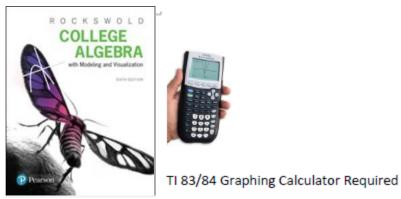
Course note will posted on brightspace and it is important to read the text part before coming to the classes, make note in each class, do not miss classes if possible. There are numerous other learning aids available also in Content, such as, PowerPoint slides for each section, e-book, and some important tips for using graphing calculator will be located at Content <u>https://brightspace.mclennan.edu/d2l/login</u>. I shall constantly keep you informed through Announcement in <u>https://brightspace.mclennan.edu/d2l/login</u>, such as To-Dos list weekly.

# **Instructor Information:**

Instructor Name: Meera Gurung MCC E-mail: <u>mgurung@mclennan.edu</u> Office Phone Number: 254-299-8831 Office Location: Math 226 Office/Teacher Conference Hours : Tuesday & Thursday 9:30am- 11:00am. Other Instruction Information: Other hours are available by appointment (sending me an Other Instruction Information: Zoom meeting ID: 852 9740 3106 <u>https://mclennan.zoom.us/j/85297403106</u> <u>Required Text & Materials:(once you register in Brightspace, you shall have the</u> <u>material and you shall download the graphic calculator by using the link provided</u> in Content in Brightspace)

# Title: COLLEGE ALGEBRA WITH MODELING & VISULAIZATION,

Author: Rockswold Edition: 6<sup>th</sup> edition Publisher: Pearson



# MCC Bookstore Website: <u>http://www.mclennan.edu/bookstore/</u>

Click on the link above for information on the minimum system requirements needed to reliably access your courses in MCC's Brightspace learning management system.

# Methods of Teaching and Learning:

Math 1314\_030 in a face-to-face format involves class meetings as well as online homework assignments found by through Brightspace of MCC. Not only will homework be available at this site, but an electronic version of the text, class notes, videos for homework and your grades. There are review for tests and numerous other learning aids available.

Students will be required to read chapters prior to lecture. Lectures will be posted on brightspace. Students may choose to view the PowerPoint and lectures for further review and learning enhancement. All students will be required to submit homework on peasrsonmylab through Brightspace of MCC and all students will gain at least 70% of the credit of the section in order to access the next section homework. The due day is same for all the sections: 12/05/2023. Reviews are provided for exams, but they are optional. There is no extra credit. Active participation in class (asking questions, answering questions based on reading and lecture) leads to improved test scores.

# Course Objectives and/or Competencies:

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

1. State the definition of a function, determine domain/range of a function, evaluate expressions involving function notation, state the definition of inverse functions, find the inverse of a given function, and find composites of functions.

2. Graph the following functions: linear, quadratic, piecewise-defined, absolute value, polynomial, rational, exponential, and logarithmic.

3. Recognize and use transformations of functions such as shifting, stretching, shrinking, and reflecting.

4. Solve quadratic equations in one variable by factoring, using the square root property, completing the square, using the quadratic formula, and by graphing.

5. Solve both linear and non-linear inequalities and state the solution in interval notation.

6. Find the zeros and extrema of polynomials both algebraically and by graphing.

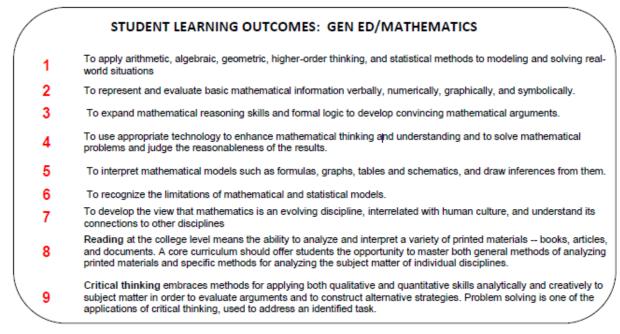
7. Solve exponential and logarithmic equations.

8. Perform operations with matrices, find determinants of matrices, and use matrices to solve systems of equations.

9. Interpret mathematical models such as formulas, graphs, and tables, and draw inferences from them.

10. Use appropriate technology to enhance mathematical thinking and understanding and to solve mathematical problems and judge the reasonableness of the results, such as deriving functions which model sets of data.

11. Use critical thinking and problem-solving techniques to solve real-world application problems.



# Course Attendance/Participation Guidelines:

If a student is not in attendance in accordance with the policies/guidelines of the class as outlined in the course syllabus as of the course census date, faculty are required to drop students from their class roster prior to certifying the respective class roster. A student's financial aid will be re-evaluated accordingly and the student will only receive funding for those courses attended as of the course census date.

Before the 60% point of the semester, a student who is absent for 25% or more of a face-to-face or blended course or who misses 25% or more of assigned work for an online course will be withdrawn from the course with a grade of W. A student may also request to be withdrawn with a grade of W before the 60% point of the semester. After the 60% point of the semester, the student may request to be withdrawn if the student is passing, or be assigned the final grade earned at the end of the semester after grades have been updated to reflect missing work.

**Note, the above paragraph is required in all Instructor Plans.** Provide details on how course attendance and participation will be determine for this course and at what point the instructor will withdraw a student from a course for absences or non-participation.

#### Course Outline or Schedule:

Dates	Lecture/Work
Week #1	Introduction to course requirements (Enroll into Brightspace)
	Sec 1.1 Numbers, Data, and Problem Solving
	Sec 1.2 Visualizing and Graphing data
Week #2	
	Sec 1. 3 Functions and Their Representations
	Sec 1.4 types of Functions and their Rates of Change
Week #3	Sec 2.1 Equations of Lines
	Sec 2.2 Linear Equations
	Sec 2.3 Linear Inequalities
Week #4	Sec 2.4 Piece Wise Functions/Greatest Integer function
	Sec 2.5 Absolute Value Functions
Week #5	Exam I over Chapter 1 & 2 & (Review)
	Sec 3.1 Quadratic Functions and Models
Week #6	Sec 3.2 Quadratic Equations and Problem Solving
	Sec 3.3 Complex Numbers
Week #7	Sec 3.3 Complex Numbers
	Sec 3.4 Quadratic Inequalities
	Sec 3.5 Transformations of Graphs

Week #8	Sec 4.1 Nonlinear Functions and Their Graphs
	Sec 4.2 Polynomial functions and Models
Week #9	Sec 4.3 Division of Polynomials
Week #9	Sec 4.4 Real Zeros of Polynomials
Week #10	Sec 4.5 Fundamental Theorem of Algebra
	Sec 4.6 Rational Functions and Models
	Sec 4.7 More Equations and Inequalities
	Exam II over Chapters 3 & 4 & (Review)
Week #11	Sec 5.1 Combining Functions
	Sec 5.2 Inverse Functions
	Sec 5.3 Exponential Functions and Models
	Sec 5.4 Logarithmic Functions and Models
Week #12	Sec 5.5 Property of Logarithmic Functions
	Sec 5.6 Exponential and Logarithmic Equations
	Sec 6.1 Functions and Systems of Equations in Two Variables
Week #13	Sec 6.2 Systems of Inequalities in Two Variables
	Sec 6.3 Systems of Linear Equations in Three Variables
	Sec 6.3 Systems of Linear Equations in Three Variables
	Sec 6.4 Solutions to Linear Systems Using Matrices
Week #14	Sec 6.5 Properties and Applications of Matrices
	Sec 6.6 Inverses of Matrices
	Sec 6.7 Determinants
Week #15	Review for all the chapters
	Exam III over Chapters 5 & 6 & (Review)
Week #16	FINAL Test

# **Course Grading Information:**

For Math 1314, our grading is the following: Homework 30%, Quizzes 10%, Three Major Tests and Final Test 60%. Total is 100%.

A: +90, B: 80-89, C: 70-79, D: 60-69, F: 59 or less

Having someone else do your online homework assignment and cheating on a test are both violations of the academic integrity policy and either may result in failing grades and/or being dropped from the class. Infractions such as these will be reported to the administration for tracking and possible college action.

#### Late Work and Make Up Work Policies:

Due dates for online homework is clearly declared. They all are due on December 5<sup>th</sup>, 11:59pm. But you must complete at least 70% of the section to access the next section. Otherwise, it is locked to you. Each Quiz lasts for three days and is announced a week earlier and is locked until you complete the chapter homework up to 70%. For each two chapter we have one test, so totally three major tests. There are no makeup tests. A missed test will be recorded as a 0 and will be dropped by the end of the semester. If a student is aware of a future absence on a test date, they may ask to arrange to take the test early.

Attendance is taken in the classroom each class meeting. If you miss more than 25% of the classes, you may be dropped from the course. The attendance is checked each class.

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

Students are expected to maintain classroom decorum that includes respect for other students and the instructor. Students should demonstrate an attitude that seeks to take full advantage of the education opportunity. For more details of College Conduct Policy, see the Highlander Student Guide.

Having someone else do your online homework assignment and quizzes are both violations of the academic integrity policy and either may result in failing grades and/or being dropped from the class. Infractions such as these will be reported to the administration for tracking and possible college action. Students should keep careful notes of all work done in class and have them available for the instructor's review when requested.

#### **<u>Click Here for the MCC Attendance/Absences Policy</u>**

#### (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.

Updated 07/18/2023

# **MCLENNAN** COMMUNITY COLLEGE

# 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 <u>www.mclennan.edu/disability</u>.

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

<u>disabilities@mclennan.edu</u> 2542998122 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 acting Title IX Coordinator at <u>titleix@mclennan.edu</u> or by calling, Dr. Claudette Jackson, (Accommodations/Title IX) at (254) 299-8465. MCC employees are mandatory reporters and must report incidents immediately to the Title IX Coordinator. Individuals may also contact the MCC Police Department at (254) 299-8911 or the MCC Student Counseling Center at (254) 299-8210. The MCC Student Counseling Center is a

#### MCC

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confidential resource for students. Any student or employee may report sexual harassment anonymously by visiting <u>http://www.lighthouse-services.com/mclennan/</u>. Go to McLennan's Title IX webpage at <u>www.mclennan.edu/titleix/</u>. 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 <u>http://www.mclennan.edu/campus-resource-guide/</u>

Academic Support and Tutoring is here to help students with all their course-related needs. Specializing in one-on-one tutoring, developing study skills, and effectively writing essays. Academic Support and Tutoring can be found in the Library and main floor of the Learning Commons. This service is available to students in person or through Zoom. You can contact the Academic Support and Tutoring team via Zoom or email (ast@mclennan.edu) by going to our website (https://www.mclennan.edu/academic-support-and-tutoring/).

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 either MCC CREW – Campus Resources Education Web by calling (254) 299-8561 or by emailing crew@mclennan.edu or a Success Coach by calling (254) 299-8226 or emailing SuccessCoach@mclennan.edu. Both are located in the Completion Center located on the second floor of the Student Services Center (SSC) which is open Monday-Friday from 8 a.m.-5 p.m.

Paulanne's Pantry (MCC's food pantry) provides free food by appointment to students, faculty and staff. To schedule an appointment, go to <u>https://mclennan.co1.qualtrics.com/jfe/form/SV\_07byXd7eB8iTqJg</u>. Both the Completion Center and Paulanne's Pantry are located on the second floor of the Student Services Center (SSC).

# MCC Foundation Emergency Grant Fund:

#### MCC

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Updated 07/18/2023 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.

# MCC Academic Integrity Statement:

Go to www.mclennan.edu/academic-integrity for information about academic integrity, dishonesty, and cheating. The unauthorized use of artificial intelligence (AI) for classwork can be a violation of the College's General Conduct Policy. Whether AI is authorized in a course and the parameters in which AI can be used in a course will be outlined by each instructor.

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

Go to https://www.mclennan.edu/center-for-

teachingandlearning/FacultyandStaffCommons/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

MCC

# ACADEMIC RESOURCES/POLICIES, Page 4 of 4

Updated 07/18/2023 expected to read and, if needed, respond in a timely manner to college emails. For more information about your student email account, go to www.mclennan.edu/studentemail.

# 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 for help.

You can find help on the McLennan website about connecting your McLennan email account to your mobile device:

- Email Setup for iPhones and iPads
- **Email Setup for Androids**

# 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.

For more helpful information about technology at MCC, go to MCC's Tech Support Cheat Sheet or email helpdesk@mclennan.edu.

# **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.