

WACO, TEXAS

COURSE SYLLABUS AND

INSTRUCTOR PLAN

College Algebra

Math 1314.040

Holly Webb

NOTE: This is a 16-week course.

This is a Face-to-Face course.

AN EQUAL OPPORTUNITY INSTITUTION

Fall 2023

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. Problem solving with algebraic applications relevant to today's world is emphasized. Graphing calculator required

Prerequisites and/or Corequisites:

Prerequisite: TSI Math complete or MATH 0311. Semester Hours 3 (3 lec)

Course Notes and Instructor Recommendations:

The best way to progress through this course is:

- 1. Attend each class for the full class period.
- 2. Participate in all activities and discussions.
- 3. Complete assignments both in-class and out side of class by the due date provided.
- 4. Attend 10 or more SI meetings during the semester, either in person or on Zoom.
- 5. Utilize resources on Brightspace including example videos and PDF notes.
- 6. Visit your instructor in person or on zoom during office hours to get help as needed.
- 7. Utilize tutors in the LTC Learning Commons when needed.

Instructor Information:

Instructor Name: Holly Webb

MCC Email: hwebb@mclennan.edu

Office Phone Number: 254-299-8878

Office Location: Math Department Room 208

Office/Teacher Conference Hours: See Brightspace for information about office hours

Required Text & Materials:

This is an IA (Inclusive Access Couse) the online textbook and course software has been included in the price of enrollment. Our textbook title and edition is included here for reference. No additional purchase is required.

College Algebra with Modeling & Visualization

- 1. Edition: 6th
- 2. ISBN: 9780134753324
- 3. Author: Pearson PPC

Publisher: Pearson MCC Bookstore Website: http://www.mclennan.edu/bookstore/

Methods of Teaching and Learning:

This class will consist of lectures and discussions with opportunities for students to: see examples, ask questions, work problems, utilize technology and work in groups. Homework will be completed though Brightspace using Pearson MyStatsLab. The course will include both on line and paper exams.

Course Objectives and/or Competencies:

Upon successful completion of this course, students will:

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.

<u>Critical Thinking:</u> Students use inductive and deductive reasoning, explore problems using logical process of inquiry, analysis evaluation and synthesis. Assessment will use discussion, independent practice, collaborative experience, instructional technology.

<u>Communications:</u> Students turn in written assignment involving topics related to College Algebra or other mathematics. They then share their result with their instructor and/or colleagues in class via written, oral, and/or visual methods. Assessment will use at least one of the following: discussion boards, class time explanation, case study presentation,

poster board presentation, or small group presentation. Evaluation process will use departmental rubric for communication assessment.

<u>Empirical/Quantitative</u>: Students work on various mathematical problem-solving skills throughout the course. The course focuses on the manipulation and analysis of numerical data or observable facts as presented in application problems and/or problem skill sets in which students demonstrate their ability to reach informed conclusions using mathematical process. Assessment will include discussion, independent practice, collaborative experience, or Instuctional technology.

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.

Absences: Roll will be taken every class and recorded on Brightspace. Life happens and sometimes absences occur. Students who are absent 25% of class time (7 classes) will be dropped for excessive absence.

If an absence is unavoidable, it remains your responsibility to seek help from Ms. Webb during office hours, from your SI leader, or from a tutor at the LTC and complete all assignments associated with the lessons missed.

Course Outline or Schedule:

Week	Lectures & Assignments	Due Dates-Online assignments due by 11:59 pm on the date below.
Week of 8/22	Orientation to course Sec 1.3 Functions and their Representations Sec 1.4 Types of Functions and Their Rates of Change	8/29
Week of 8/29	Sec 2.1 Equations of Lines Sec 2.2 Linear Equations Sec 2.3 Linear Inequalities	9/6
Week of 9/5	Sec 2.4 More Modeling with Functions Sec 2.5 Absolute Value Equations and Inequalities Review for Chapters 1 & 2	9/11
Week of 9/12	Exam over Chapters 1 & 2 9/12 Sec 3.1 Quadratic Functions and Models Sec 3.2 quadratic Equations and Problem Solving	9/19
Week of 9/19	Sec 3.3 Complex Numbers Sec 3.4 Quadratic Inequalities Sec 3.5 Transformations of Graph Review for Chapter 3	9/25
Week of 9/26	Exam over Chapter 3 9/26 Sec 4.1 More Nonlinear Functions and Their Graphs Sec 4.2 Polynomial Functions and Models	10/3
Week of 10/3	Sec 4.3 Division of Polynomials Sec 4.4 Real Zeros of Polynomials Sec 4.5 The Fundamental Theorem of Algebra	10/10

	Sec 4.6 Rational Functions and Models		
Week of 10/10	Sec 4.7 More equations and Inequalities Sec 4.8 Radical Equations and Power Functions Review for Chapter 4	10/16	
Week of 10/17	Exam over Chapter 10/17 Sec 5.1 Combining Functions Sec 5.2 Inverse Functions and Their Representations	10/24	
Week of 10/24	Sec 5.3 Exponential Functions and Models Sec 5.4 Logarithmic Functions and Models Sec 5.5 Properties of Logarithms Sec 5.6 Exponential and Logarithmic Equations and Inequalities	10/31	
Week of 10/31	Sec 5.7 Constructing Nonlinear Models Review for Chapter 5	11/6	
Week of 11/7	Exam over Chaper 5 11/7 Sec 6.1 Functions and Systems of Equations in Two Variables Sec 6.2 Systems of Inequalities in Two Variables	11/14	
Week of 11/14	Sec 6.3 Systems of Linea Equations in Three Variables Sec 6.4 Solutions of Linear Systems Using Matrices Sec 6.5 Properties and Applications of Matrices Sec 6.6 Inverses of Matrices	11/21	

Week of	Sec 6.7 Determinants 11/28			
11/21	Review for Chapter 6			
	Happy Thanksgiving 11/23			
Week of	Review for Final Exam	12/5		
11/28	Review for Final Exam			
	Exam over Chapter 6 online due by			
	12/5			
Week of	FINAL EXAM DECEMBER 7 9:35am-	12/7		
12/5	11:35am			

Course Grading Information:

College Algebra course is a focus on problem solving using technology to assist in the learning process. The class will expose students to methodology to understand the reasoning of predicating, satisfying conditions and finding solutions. This will involve engagement by everyone in the learning process.

- **Orientation (5% of grade)**-The orientation consists of a syllabus quiz and a discussison board assignment in which you introduce yourself to the class, and respond to classmates posts.
- Homework (20% of course grade)-Assignments are to be done on MyMathLab.. Each homework assignment must be completed with a minimum of 75% in order to take the associated exam. Homework may be completed after the due date, with a 10% late penalty. This component is worth 20% of your course grade.
- SI Participation (10% of course grade)-We are privileged to have a supplemental instruction (SI) leader working with our class. "Supplemental Instruction bolsters student success by pairing a previously successful student with a faculty partner to support that faculty member's courses according to their own content and teaching style. The S.I. leader then offers multiple opportunities each week for students to attend structured, group study sessions tailored to their specific course and instructor"- MCC Center for Teaching and Learing.

There will be scheldued meeting in addition to our regular class time, with your SI leader during the semester. (See SI schedule for times and locations of meetings) You will need to attend and participate in 10 of these meetings to earn full credit for SI participation.

- Exams (50% of Course Grade) -Exams will focus on each chapter's main components. All associated homework must be completed with at least 75% before each exam is taken. One makeup exam is available for each student upon request. If you miss an exam or if you are not satisfied with your grade on an exam you may use that exam as your makeup. All associated homework must be completed with at least 75% before taking a makeup exam. Contact Ms. Webb if you need a makeup exam.
- **Comprehensive Final (15% of Course Grade)-** At the end of the course, there will be an in-class final exam to fully insure concept understanding. This proctored final will be worth 15% of your final grade.

Breakdown of gradebook:

79-70

69-60

Orientation		5%
Homework		20%
SI Participation		10%
Exams		50%
Final Exam		1 <u>5%</u>
		100%
100 – 90	А	
89 - 80	В	

Below 60 F Check the Brightspace gradebook for current, up to date grades. Pearson

С

D

gradebook may not be accurate.

Late Work and Make Up Work Policies:

Late Work: See course grading information for the late work policy.

Student Behavioral Expectations or Conduct Policy:

Learning involves many components:

• Attend every class. This commitment affords exposure to course expectations and objectives to master.

- Ask questions to clarify understanding. There is a need to inquire about concepts not understood, procedures to process solutions and technology instructions to fully participate in the learning process. Participating in each discussion board assignment is part of that process. This may also mean seeking help outside of class from Ms. Webb, your SI leader or the tutors at the MCC Learning Commons.
- Act with courtesy and respect towards others in the classroom and MCC community.

Click Here for the MCC Attendance/Absences Policy

(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

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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:

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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

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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.