

WACO, TEXAS

# COURSE SYLLABUS AND

# **INSTRUCTOR PLAN**

**Intermediate Algebra** 

MATH 0311.L89

**Matt Shelton** 

**NOTE:** This is a Summer course. **NOTE:** This is an Online course.

AN EQUAL OPPORTUNITY INSTITUTION

Summer 2023

# Course Description:

A study of relations and functions, inequalities, algebraic expressions and equations (absolute value, polynomial, radical, rational), with a special emphasis on linear and quadratic expressions and equations. Provides further study of algebraic concepts, operations, and applications to real world problems. Topics will include factoring polynomials and solving equations with quadratic models, operations with rational expressions and solutions of rational equations, further investigation of linear functions and linear inequalities, operations with radical expressions and solutions of radical equations, various solution methods for quadratic equations, graphing quadratic functions, and graphing systems of linear inequalities. Semester Hours 3 (3 lec)

# Prerequisites and/or Corequisites:

MATH 0307 or consent of division chair.

# **Instructor Information:**

Instructor Name: Matt Shelton MCC E-mail: mshelton@mclennan.edu Office Phone Number: I am not on campus during the summer Office Location: I am not on campus during the summer Office/Teacher Conference Hours (Online via Zoom): Wednesday 1:00p – 2:00p Thursday 10:00a – 11:00a

# Required Text & Materials:

Title: MyMathLab Access Code (Included as part of the McLennan IncludED program) Publisher: Pearson ISBN: 9780135962770

TI-83 or 84 graphing calculator

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

# Methods of Teaching and Learning:

MyMathLab is the online component that will house the course information. Homework will be done online in this environment. Lecture notes, reference materials and videos are available there as well

- Communications: Students participate in assignments involving topics related to finite math or other mathematics with an emphasis on business and social science application problems. They then share their results with their instructor and/or colleagues in class via written, oral, and visual methods.
- Critical Thinking: Critical thinking is the essence of all mathematical studies. Through inductive and deductive reasoning, students explore problems using the logical process of inquiry, analysis, evaluation, and synthesis.
- Empirical and Quantitative Skills: 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 processes.

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

- 1. Define, represent, and perform operations on real and complex numbers
- 2. Recognize, understand, and analyze features of a function.
- 3. Recognize and use algebraic (field) properties, concepts, procedures (including factoring), and algorithms to combine, transform, and evaluate absolute value, polynomial, radical, and rational expressions.
- 4. Identify and solve absolute value, polynomial, radical and rational equations.
- 5. Identify and solve absolute value and linear inequalities.
- 6. Model, interpret and justify mathematical ideas and concepts using multiple representations.
- 7. Connect and use multiple strands of mathematics in situations and problems, as well as in the study of other disciplines.

### **Course Outline or Schedule:**

This is only a suggested schedule to keep you on pace. See below regarding due dates for assignments.

Dates	Lecture/Work	Tests/Objectives	
Week 1	6.1 The GCF and Factoring by Grouping		
	6.2 Factoring Trinomials of the Form x^2 + bx + c		
	6.3 Factoring Trinomials of the Form ax <sup>2</sup> + bx + c		
	6.4 Factoring Trinomials of the Form ax <sup>2</sup> + bx + c by		
	Grouping		

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Week 2	6.5 Factoring Binomials	Ch. 6 Quiz
	6.6 Solving Quadratic Equations by Factoring	(OBJ 1,3,4,6,7)
	6.7 Quadratic Equations and Problem Solving	
Week 3	7.5 Solving Equations Containing Rational Expressions	
	7.6 Proportion and Problem Solving with Rational	
	Equations	
	7.7 Simplifying Complex Fractions	
	8.3 Shifting and Reflecting Graphs of Functions	
Week 4	9.2 Absolute Value Equations	Ch. 7 - 9 Quiz
	9.3 Absolute Value Inequalities	(OBJ 1-7)
	10.1 Radicals and Radical Functions	
	10.2 Rational Exponents	
Week 5	10.3 Simplifying Radical Expressions	Ch. 10 Quiz
	10.6 Radical Equations and Problem Solving	(OBJ 1-4,6,7)
	11.1 Solving Quadratic Equations by Completing the	
	Square	
Week 6	11.2 Solving Quadratic Equations by the Quadratic	Final Exam
	Formula	(OBJ 1-7)
	11.5/11.6 Graphing of Quadratic Functions	
Week 7 – 11	MATH 1324 Material	

This course will use a variety of internal and external assessments. A faculty developed comprehensive final exam will access the core objectives of critical thinking and empirical/quantitative analysis. These core objectives will also be assessed using parts of a standardized test (CAAP). A faculty designed rubric will be used to assess communication skills as well. Review of such items such as GPA, retention levels, and success in following course may be used to evaluate the effectiveness of student learning.

# **Course Grading Information:**

<u>Homework</u>: There is an online homework assignment for each section that is covered during the semester. All of the homework assignments need to be completed by 11:59pm on the final day of class August 10<sup>th</sup>. They will be your main source of practice for the quizzes. You can work on a homework assignment as many times as you want to improve your grade up until the due date. Your homework average will count 20% of your final grade.

<u>Chapter Quizzes</u>: There will be three online quizzes over some of the chapters covered in this course. Unlike the homework, the quizzes can only be attempted once (see make-up section below), and they are timed. You will have 120 minutes (the same amount of time you would get in a face-to-face course) to complete each quiz once you start. There is no way to save your progress and return at a later time to finish. You must make sure that when you start a quiz you have enough time to complete it. Also make sure that when you are done you hit the "Submit

Test" button or else it may not record your grade, and you will not be permitted to access it again. If you accidentally close the quiz window or click a link that takes you away from the quiz, you will be locked out of all assignments. You will need to contact me to unlock your assignments. Depending on the situation I may not be able to reopen the locked quiz. The quizzes will look exactly like the homework problems for the sections covered. The quizzes must be completed by 11:59pm on August 10<sup>th</sup>. Each quiz will count 20% of your final grade for a total of 60%.

<u>Final Exam</u>: There will be a comprehensive final exam. It will be done online and will also be timed. You will have 120 minutes to complete the final exam. The problems on the test will look like the homework or quiz problems from the covered chapters. The final exam will be due by 11:59pm on August 10<sup>th</sup>. It will count as 20% of your final grade.

You can check your grades using the "Gradebook" button on the left side of the MathLab component. The standard grading scale applies:

70 and higher = CR (credit) 69 and lower = NC (no credit)

Since this class is linked to a MATH 1324 course you will be able to continue to take the 1324 course regardless of your grade in this course.

Communication Assignments Rubric (not applicable in the summer)

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Course name/number/section: Student
name/number:
Type of Communication Event:
____Boardwork
___Classtime explanation
___Personal interview
___Case study presentation ___Poster
board project presentation
___Small group presentation ___Online
presentation
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# Intermediate Algebra

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			1	
	4	3	2	1
	Student	Student	Student	Student does <b>not</b>
	demonstrates full	demonstrates	demonstrates	have a grasp of
IN WRITTEN	knowledge with no	good knowledge	limited knowledge	the mathematical
LANGUAGE	mistakes and	but does <b>not</b>	but makes <b>several</b>	information.
	elaborates on	elaborate.	mistakes.	
	mathematical			
	concepts.			
	4	3	2 Student	1
	Student uses fluent	Student uses	uses vague words	Student uses
	and accurate words	somewhat	to describe	incorrect and
IN ORAL	to describe	appropriate words	mathematical	confusing words
LANGUAGE	mathematical	to describe	concepts and	to describe
	concepts and	mathematical	processes.	mathematical
	processes.	concepts and		concepts and
		processes.		processes.
	4	3	2	1
	Student uses	Student uses	Student uses <b>some</b>	Student uses <b>total</b>
	appropriate and	somewhat	inaccuracy in	inaccuracy in
IN VISUAL	accurate visual	appropriate visual	visual	visual
PRESENTATION	representation of	representation of	representation of	representation of
	mathematical	mathematical	mathematical	mathematical
	concepts and	concepts and	concepts and	concepts and
	processes.	processes.	processes.	processes.

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

Due dates are set for all homework, quizzes, and tests. If students do not make the deadlines, those grades become zero. I plan on dropping a couple of the lowest homework grades at the end of the semester. Each student will be allowed one make-up quiz for the semester in case you accidentally get locked out or you just make a low score. Your make-up assignment will need to be completed by 11:59pm on August 10<sup>th</sup>. It is your responsibility to contact me when you've decided which quiz you would like to make up.

Attendance will be monitored every week. If you are counted absent 3 times before July 13<sup>th</sup> you will be automatically dropped from the course unless you already have 6 drops on your record. In that case you will have to stay enrolled and earn a grade at the end of the semester. To be counted as present during a week you must submit work on at least one homework assignment in MyMathLab or submit a chapter quiz. A week will begin on Monday and ends Sunday night at 11:59pm. Since this course is linked to a 1324 course, work in either course counts as attendance for both courses.

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

Cheating will not be tolerated in class. Having someone else do your online homework assignment or tests 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. At any time a student can be asked to prove that the work submitted is their own.

# 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 11/04/2022

# 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 www.mclennan.edu/disability.

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

disabilities@mclennan.edu 254-2998122 Room 319, Student Services Center

# <u>Title IX:</u>

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, (Diversity, Equity & Inclusion/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 confidential resource for students. Any student or employee may report sexual harassment anonymously by visiting <u>http://www.lighthouse-services.com/mclennan/</u>.

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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 <a href="http://www.mclennan.edu/campus-resource-guide/">http://www.mclennan.edu/campus-resource-guide/</a>

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 from 7:30 am - 6:00 pm Monday through Thursday and 7:30 am - 5:00 pm on Friday. You can contact the Academic Support and Tutoring team via Zoom (https://mclennan.zoom.us/j/2542998500) or email (ast@mclennan.edu) during the above mentioned times.

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 <u>crew@mclennan.edu</u> or a Success Coach by calling (254) 299-8226 or emailing <u>SuccessCoach@mclennan.edu</u>. 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:

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

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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 <u>www.mclennan.edu/academic-integrity</u> for information about academic integrity, dishonesty, and cheating.

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

Go to <u>https://www.mclennan.edu/center-for-teaching-and-</u> <u>learning/FacultyandStaffCommons/requirements.html</u> 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 (<u>http://www.mclennan.edu/employees/policy-manual/docs/E-XXXI-B.pdf</u>) 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. For more information about your student email account, go to <u>www.mclennan.edu/studentemail</u>.

# 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 <u>Helpdesk@mclennan.edu</u> 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 <u>MCC's Tech Support</u> <u>Cheat Sheet</u> or email <u>helpdesk@mclennan.edu</u>.

# 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.