

WACO, TEXAS

# AND PROFESSOR PLAN

# MATH 0311.L89

#### **GARY DUNCAN**

**NOTE:** This is a 16-week Online 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 <a href="https://www.mclennan.edu/crisis-management/coronavirus-updates/index.html">https://www.mclennan.edu/crisis-management/coronavirus-updates/index.html</a> on any changes to these guidelines.

#### MATH 0311.L89

#### **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.

#### Prerequisites and/or Corequisites:

Prerequisite: MATH 0307 or consent of division chair. Corequisite: READ 0302. Semester Hours 3 (3 lec)

#### **Course Notes and Professor Recommendations:**

Math 0311 in an online format involves online discussions, homework and exams. Lessons are taught by both publisher and instructor lecture videos. Online homework assignments as well as publisher videos and ancillaries will be located at <a href="Pearson's MyMathLab">Pearson's MyMathLab</a>. Class notes and videos will be available in Brightspace to assist student success.

#### **Professor Information:**

Professor Name: Gary Duncan

MCC E-mail: <a href="mailto:gduncan@mclennan.edu">gduncan@mclennan.edu</a>
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

Title: Beginning & Intermediate Algebra

Author: Martin-Gav

Edition: 6<sup>th</sup>

Publisher: Pearson

ISBN-10: 0-13-419309-1 | ISBN-13: 978-0-13-419309-0

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

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

This course is linked to MATH 1314. We will spend the first half of the semester working on MATH 0311 and the last half working on MATH 1314. Make sure to set your notifications in Brightspace to receive text/email when any announcement is posted. I use announcements to communicate with the class.

The best way to approach the course is to watch the lecture video while taking notes (or print out the attached pdf file with lecture notes), do the homework, and take the quizzes, then the exams in the assigned order. Work through the weekly checklists in Brightspace in the order material and tasks are presented. Be sure to check off items in the checklist once they are completed.

Lecture notes and videos are located inside the checklists for each component in the Content area of Brightspace. To "unlock" a component, you must check off EVERY ITEM in the preceding checklist. You will not see Component 1 until you check off EVERY ITME in the Orientation Checklist.

#### MATH 0311.L89

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

Students successfully completing Intermediate Algebra should be able to:

- 1. Factor polynomials and solve quadratic equations by factoring
- 2. Simplify and perform operations with rational expressions
- 3. Solve rational equations
- 4. Use slope and y-intercepts to graph linear equations
- 5. Write the equation of a line from given information
- 6. Solve inequalities involving absolute value
- 7. Graph linear inequalities in two variables
- 8. Simplify expressions with roots and radicals
- 9. Solve radical equations
- 10. Solve quadratic equations by the square root property, completing the square, and the quadratic formula
- 11. Solve application problems defined by a quadratic equation
- 12. Graph quadratic functions

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

In order to be successful in this course, I strongly urge you to do the following each week:

- 1. Go to Brightspace, click on the Week you are working on.
- 2. Follow the steps in the Weekly Checklist in the order they appear. Do not try to skip around or work out of order. The course is designed to help you move through the material as efficiently as possible.

Pay attention to the calendar below. Begin each week by opening the Checklist. Be sure to check off items as you complete them.

Work through the course in the order items are presented in the Checklists. The next component will not be visible until you have checked every item off in the checklist.

Remember Due Dates are NOT Start Dates. It is always easier to keep up than to catch up. Consequently, you may want to work ahead to build in a buffer for when "life happens", as it usually does, at the most inopportune time.

Due Date	Assignments Due by 5:00pm CST	<b>Due Date</b>	Assignments Due by 5:00pm CST
Component 1	Discussion 1, Sec 6.1 and 6.2	Component 9	<b>Discussion 5</b> , Sec 9.2 – 9.4
August 25		September 22	
Component 2	Sec 6.4 and 6.5	Component 10	Review and Exam 2
August 28		September 25	
Component 3	Discussion 2, Sec 6.6 and 6.7	Component 11	<b>Discussion 6</b> , Sec 10.1 – 10.3
September 1		September 29	
Component 4	Review and Exam 1	Component 12	Sec 10.4 – 10.7
September 4		October 2	
Component 5	Discussion 3, Sec 7.1 and 7.2	Component 13	<b>Discussion 7</b> , Sec 11.1, 11.2, 11.5 and 11.6
September 8		October 6	
Component 6	Sec 7.3 – 7.5	Component 14	Review and Exam 3
September 11		October 9	
Component 7	<b>Discussion 4</b> , Sec 7.6 – 8.1	Component 15	COMPREHENSIVE FINAL EXAM
September 15		October 13	
Component 8	Sec 8.2 & 9.1	December 7	Grades due to Registrar
September 18			

#### MATH 0311.L89

#### **Course Grading Information:**

Discussion Board 10% Homework (MyMathLab) 10% Exams (4) 60% Final Exam 20%

The lowest major exam grade will be dropped. The comprehensive final exam will NOT be dropped. You will have only one homework grade in Brightspace that will be the average of all the homework grades in Pearson's MyMathLab. This grade will be entered into Brightspace at the end of the course.

All work for ALL EXAMS must be handwritten, numbered and NEAT. It MUST be uploaded in the Assignment area in Brightspace within 15 minutes of submitting your exam in MyMathLab. Failure to do so will cause you to lose 50% of your score in MyMathLab. Any work that does not support your answer will cause points to be deducted from the grade in MyMathLab. You will not receive credit for "guessing" or divine inspiration.

Your official course grades can be found in Brightspace under "Assessments". The grades in Pearson's MyMathLab will be used to determine the grades entered into Brightspace but do NOT reflect your official weighted average. The weighted average is the grade in Brightspace.

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 disciplinary action.

This is a list of the topics that will be covered in each section in the calendar above.

Section	Topic		
6.1	The Greatest Common Factor and Factoring by Grouping		
6.2	Factoring Trinomials of the Form $x^2 + bx + c$		
6.4	Factoring Trinomials by Grouping		
6.5a	Sum and Difference of Two Squares		
6.5b	Sum and Difference of Two Cubes		
6.6	Solving Quadratic Eq. by Factoring		
6.7	Problem Solving with Quadratics		
7.1	Rational Functions & Simplifying		
7.2	Multiplying & Dividing Rational Expressions		
	Review Chapters 6 & 7		
	Exam 1		
7.3	Adding & Subtracting Rational Expressions with LCD		
7.4	Adding & Subtracting Rational Expressions with Unlike Denominators		
7.5	Solving Equations Containing Rational Expressions		
7.6	Proportion and Problem Solving with Rational Equations		
7.7	Simplifying Complex Fractions		
8.1	Graphing & Writing Linear Functions		
8.2	Reviewing Function Notation		
8.3	Transformations		
8.4	Variation & Problem Solving		
	Review Chapters 7 & 8		
	Exam 2		

#### MATH 0311.L89

9.1	Compound Inequalities	
9.2	Absolute Value Equations	
9.3	Absolute Value Inequalities	
10.1	Radicals and Radical Functions	
10.2	Rational Exponents	
10.3	Simplifying Radical Expressions	
10.4	Adding, Subtracting, & Multiplying Radical Expressions	
10.5	Rationalizing Denominators and Numerators of Radical Expressions	
10.6	Radical Equations and Problem Solving	
10.7	Complex Numbers	
	Review Chapters 9 & 10	
	Exam 3	
11.1	Solving Quadratic Eq. by Square Root Property & Completing the Square	
11.2	Solving Quadratic Eq. by the Quadratic Formula	
11.3	Solving Equations using Quadratic Methods	
11.5	Quadratic Functions and their Graphs	
	Review Chapter 11	
	Exam 4	
	Final Exam	

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

Due dates for online homework, exams and discussion boards will be clearly communicated. Because the work will be done online (available 24/7), any assignments done late will be penalized heavily. Any late homework will result in a 20% deduction and late exams will have 10% automatic reduction in grade. I will update grades in Brightspace based upon the due dates. I update grades manually, so double check your grades in Brightspace against what you see in MML to ensure there are no type-o's. All work must be completed by 5:00 pm on the day that it is due, NO EXCEPTIONS. The entire course is available the first day of class. You should **plan on working ahead** when possible in order to build in a buffer for when "Life Happens" as it usually does at the *most inopportune* times. PLAN AHEAD! Due dates are NOT start dates! I will not accept any excuse for late work. **No drops will be allowed two weeks before the final for ANY REASON.** 

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

Students are expected to participate fully in Discussions by making an initial post and respond to *at least two others*. Students are expected to respond to questions asked by classmates in their discussion post just as if they were asked a question in a face-to-face class. It is expected all communication will be professional, using proper grammar and punctuation, with no offensive, abusive, or slang content. Students are also expected to make every effort to keep up with the due dates and **reach out to the instructor** if they fall behind or have difficulty with the content and need help.

#### **Instructor Attendance Policy:**

Make attendance a priority. Weekly activity and discussion participation in the course will be counted as attendance. You must spend at least three hours per week working in MyMathLab. Attendance is very important in this class. In order to receive credit for the course, you must be in attendance at least 75% of the time scheduled for the class. You MUST LOG IN to Brightspace daily or you will be marked absent. Your participation in Discussions will also be used to document

#### MATH 0311.L89

your attendance. You must make an initial post and *at least two replies*. These posts will be used to determine your class attendance. If you fall more than two Components behind in coursework in MML, you may be dropped from the course for lack of participation.

## \* Click Here for the MCC Academic Integrity Statement

(www.mclennan.edu/academic-integrity)

The link above will provide you with information about academic integrity, dishonesty, and cheating.

#### \* 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 guidelines specific to this course.

\* You will need to access each link separately through your Web browser (for example: Internet Explorer, Mozilla, Chrome, or Safari) to print each link's information.



# **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 <a href="https://www.mclennan.edu/disability">www.mclennan.edu/disability</a>.

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

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 <a href="mailto:titleix@mclennan.edu">titleix@mclennan.edu</a> 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 <a href="http://www.lighthouse-services.com/mclennan/">http://www.lighthouse-services.com/mclennan/</a>.

Go to McLennan's Title IX webpage at <a href="www.mclennan.edu/titleix/">www.mclennan.edu/titleix/</a>. 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 <a href="SuccessCoach@mclennan.edu">SuccessCoach@mclennan.edu</a>. 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 <a href="https://www.mclennan.edu/foundation/scholarships-and-resources/emergencygrant.html">https://www.mclennan.edu/foundation/scholarships-and-resources/emergencygrant.html</a> to find out more about the emergency grant. The application can be found at <a href="https://www.mclennan.edu/foundation/docs/Emergencygrant">https://www.mclennan.edu/foundation/docs/Emergencygrant</a> 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 <a href="https://www.mclennan.edu/center-for-teaching-and-learning/Faculty-and-Staff-Commons/requirements.html">https://www.mclennan.edu/center-for-teaching-and-learning/Faculty-and-Staff-Commons/requirements.html</a> 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 (<a href="http://www.mclennan.edu/employees/policy-manual/docs/E-XXXI-B.pdf">http://www.mclennan.edu/employees/policy-manual/docs/E-XXXI-B.pdf</a>) 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 <a href="https://www.mclennan.edu/student-email">www.mclennan.edu/student-email</a>.

#### **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 <a href="mailto:Helpdesk@mclennan.edu">Helpdesk@mclennan.edu</a> for help.

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

- <u>Email Setup for iPhones and iPads</u> (https://support.microsoft.com/en-us/office/set-up-an-outlook-account-in-the-ios-mail-app-b2de2161-cc1d-49ef-9ef9-81acd1c8e234?ui=en-us&rs=en-us&ad=us)
- Email Setup for Androids (https://support.microsoft.com/en-us/office/set-up-email-in-android-email-app-71147974-7aca-491b-978a-ab15e360434c?ui=en-us&rs=en-us&ad=us)

#### **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.