

Updated 07/18/2023



WACO, TEXAS

COURSE SYLLABUS
AND
INSTRUCTOR PLAN
INTERMEDIATE ALGEBRA
MATH 0311.L007

GARY DUNCAN

NOTE: This is a 16-week Linked course.

INTERMEDIATE ALGEBRA

MATH 0311.L007

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 Instructor Recommendations:

Math 0311 in a face-to-face format involves class meetings as well as homework assignments to be done using MyMathLab. Periodic homework quizzes will be given. Reviews for exams will be made available in class.

Instructor Information:

Professor Name: Gary Duncan

MCC E-mail: gduncan@mclennan.edu

Office Phone Number: 254-299-8872

Office Location: MATH 222

Office/Teacher Conference Hours: TBA

Other Instruction Information: TBA

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

Title: *Beginning & Intermediate Algebra*

Author: Martin-Gay

Edition: 6th

Publisher: Pearson

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

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

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Methods of Teaching and Learning:

This course is linked to MATH 1314.L007. We will spend the first half of the semester working on MATH 0311 and the last half working on MATH 1314. Students will be required to attend lectures. Homework will be assigned and graded in MML. 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.

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 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.

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Course Outline or Schedule:

This is a TENTATIVE weekly schedule. Changes will be announced in. Course objectives are indicated beside each test.

Section	Topic
6.1	The Greatest Common Factor and Factoring by Grouping
6.2	Factoring Trinomials of the Form $x^2 + bx + c$
6.3	Factoring Trinomials of the Form $ax^2 + bx + c$ and Perfect Square Trinomials
6.5	Factoring Binomials
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
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
	Review for Final Exam
	Final Exam

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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 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. For more details of College Conduct Policy, see the Highlander Student Guide.

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[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.

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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.

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

disabilities@mclennan.edu 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 titleix@mclennan.edu 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

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/. 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/>

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 https://mclennan.co1.qualtrics.com/jfe/form/SV_07byXd7eB8iTqJg. 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

<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

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.