

Updated 07/18/2023



WACO, TEXAS

COURSE SYLLABUS
AND
INSTRUCTOR PLAN
INTERMEDIATE ALGEBRA
MATH 1314.O080

GARY DUNCAN

NOTE: This is a 16-week Online course.

INTERMEDIATE ALGEBRA

MATH 1314.O080

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.

Prerequisites and/or Corequisites:

Prerequisite: TSI complete or MATH 0311 or consent of division chair.

Semester Hours: 3 (3 lec.)

Course Notes and Instructor Recommendations:

Math 1314 in an online format involves optional meetings during office hours and mandatory online discussions. Class notes and lecture videos will be available in Brightspace to assist student success. Online homework assignments and exams will be located at www.pearsonmylabandmastering.com.

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*

Author: Rockswold

Title: College Algebra etc (Loose pages) w/MyMathLab

Publisher: PEARSON EDUCATION

Edition: 6th

ISBN: 9780134763842

Required graphing calculator – TI-83, TI-83 Plus, TI-84, or TI-84 Plus

ABSOLUTELY NO TI-89, HP-48 or similar CAS calculators allowed (symbolic integration capable) during exams. Calculators may be checked out from the math lab for exams.

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

Methods of Teaching and Learning:

All work will be done online. **Make sure to set your notifications in Brightspace to receive text/email when any announcement is posted.**

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 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.**

Course Objectives and/or Competencies:

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

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.

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.

INTERMEDIATE ALGEBRA

MATH 1314.O080

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 week's assignments 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	Due Date	Assignments Due by 5:00pm CST
Component 1 August 25	Discussion 1 , Sec 1.3 & 1.4	Component 9 October 20	Discussion 9 , Sec 4.5 & 4.6
Component 2 September 1	Discussion 2 , Sec 2.1 & 2.2	Component 10 October 27	Discussion 10 , Sec 4.8, Exam 3
Component 3 September 8	Discussion 3 , Sec 2.3 & 2.4	Component 11 November 3	Discussion 11 , Sec 5.1 – 5.3
Component 4 September 15	Discussion 4 , Sec 2.5, Exam 1	Component 12 November 10	Discussion 12 , Sec 5.4 & 5.5
Component 5 September 22	Discussion 5 , Sec 3.1 – 3.3	Component 13 November 17	Discussion 13 , Sec 5.6, Exam 4
Component 6 September 29	Discussion 6 , Sec 3.4 & 3.5, Exam 2	Component 14 November 24	Discussion 14 , Sec 6.1, 6.3 & 6.4
Component 7 October 6	Discussion 7 , Sec 4.1 & 4.2	Component 15 December 1	COMPREHENSIVE FINAL EXAM
Component 8 October 13	Discussion 8 , Sec 4.3 & 4.4	December 5	Grades due to Registrar

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

Section	Topic
1.3	Functions and Their Representation
1.4	Types of Functions and Their Rates of Change
2.1	Equations of Lines
2.2	Linear Equations

INTERMEDIATE ALGEBRA

MATH 1314.0080

2.3	Linear Inequalities
2.4	More Modeling with Functions
2.5	Absolute Value Equations and Inequalities
	Exam 1
3.1	Quadratic Functions and Models
3.2	Quadratic Equations and Problem Solving
3.3	Complex Numbers
3.4	Quadratic Inequalities
3.5	Transformations of Graphs
	Exam 2
4.1	More Non-Linear Functions and Graphs
4.2	Polynomial Functions and Graphs
4.3	Division of Polynomials
4.4	Real Zeros of Polynomial Functions
4.5	The Fundamental Theorem of Algebra
4.6	Rational Functions and Models
4.8	Radical Equations and Power Functions
	Exam 3
5.1	Combining Functions
5.2	Inverse Functions and Their Representations
5.3	Exponential Functions and Models
5.4	Logarithmic Functions and Models
5.5	Properties of Logarithms
5.6	Exponential and Logarithmic Equations
	Exam 4
6.1	Functions and Systems of Equations in Two Variables
6.3	Systems of Equations in Three Variables
6.4	Solutions to Linear Systems Using Matrices
6.5	Properties and Applications of Matrices
	Final Exam

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.

INTERMEDIATE ALGEBRA

MATH 1314.0080

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.

Late Work and Make Up Work Policies:

Due dates for online homework, quizzes, exams and discussion boards will be clearly communicated. Because the work will be done online, 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 Weekly Discussions by making an initial post by Monday at 5:00 pm and respond to at least two others by Wednesday at 5:00 pm. **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 twice a week or you will be marked absent. Your participation in weekly Discussions will also be used to document your attendance. **You must make an initial post by Monday at 5:00 pm and at least two replies by Wednesday at 5:00pm.** These posts will be used to determine your class attendance. **If you fall more than two weeks behind in coursework in MML, you may be dropped from the course for lack of participation.**

INTERMEDIATE ALGEBRA

MATH 1314.O080

[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.

Updated 07/18/2023



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.