

WACO, TEXAS

# AND INSTRUCTOR PLAN

# INTERMEDIATE ALGEBRA/COLLEGE ALGEBRA (CO-REQ/ONLINE) MATH 311.L87 / MATH 1314.L87

PROF. PAULINA SIDWELL
DR. APRIL ANDREAS

NOTE: This is a 16-week, online, co-requisite 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.

#### **Course Description**:

Linked course which includes 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. May include the following topics: linear, quadratic, polynomial, exponential, logarithmic, and rational functions, their graphs, and their use in mathematical modeling; composition and inverses of functions, systems of linear equations and inequalities; matrices and determinants; and sequences and series. Problem solving with algebraic applications relevant to today's world is emphasized throughout.

#### **Prerequisites and/or Corequisites:**

Prerequisite: MATH 0307, appropriate TSI score, or consent of division director. Semester Hours 3 (3 lec/1 lab)

#### **Course Notes and Instructor Recommendations:**

You are taking two online courses over 16 weeks. In order to complete both courses' requirements, the class will be very fast-paced. You will typically have assignments due on *Mondays, and Thursdays*. Please plan accordingly.

Your first and only non-math homework assignment (Homework 0) is the class orientation. You should take the Online Class Orientation Quiz by 11:59 pm on Thursday, January 13th so you have plenty of time for HW 1. The Orientation Quiz is available on MyMathLab and you must get 100% on it in order to move forward in the course.

The first math homework (HW 1) is due by 11:59 pm on Monday, January 17th. Not finishing this homework by this date could set you permanently behind.

NOTE: THESE ARE LINKED COURSES. IF YOU DROP EITHER CLASS, YOU WILL BE DROPPED FROM BOTH.

#### **Instructor Information:**

Instructor Name: Dr. April K. Andreas MCC E-mail: aandreas@mclennan.edu

Office Phone Number: (254) 299-8130 Office Location: S 221

Office Hours: By appointment only, over ZOOM. Also by appointment. http://cleverfred.appointy.com/

Department Website: <a href="http://www.mclennan.edu/departments/math/">http://www.mclennan.edu/departments/math/</a>

Instructor Name: Paulina Sidwell

MCC E-mail: psidwell@mclennan.edu

Office Phone Number: (254) 299-8544 Office Location: S 144

Office Hours: By appointment only, over ZOOM.

Also by appointment. <a href="http://psidwell.appointy.com/">http://psidwell.appointy.com/</a>

Department Website: <a href="http://www.mclennan.edu/departments/math/">http://www.mclennan.edu/departments/math/</a>

#### **Required Text & Materials:**

• MyMathLab. We will use MyMathLab for all homework, tests, and other graded work.

- Calculator: This course requires a TI-84 or TI-83 graphing calculator
- Optional book: College Algebra: Concepts through Functions, Robert Blitzer, any edition
- A webcam for taking exams

MCC Bookstore Website: <a href="http://www.mclennan.edu/bookstore/">http://www.mclennan.edu/bookstore/</a>

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

Lecture videos have been provided by both the instructor and the textbook. Through these videos, the resources, assignments, and tests on MyMathLab, and communication (email/phone) with the instructor, students will gain competency with the course material.

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

Upon successful completion of Math 311, the student will be able to:

- 1. Define, represent, and perform operations on real and complex numbers. (All work)
- 2. Recognize, understand, and analyze features of a function. (All work)
- 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. *(Chapter P)*
- 4. Identify and solve absolute value, polynomial, radical, and rational equations. *(Chapter P)*
- 5. Identify and solve absolute value and linear inequalities. (Chapter 5)
- 6. Model, interpret and justify mathematical ideas and concepts using multiple representations. (All work)
- 7. Connect and use multiple strands of mathematics in situations and problems, as well as in the study of other disciplines. (All work)

Upon successful completion of Math 1314, the student will be able to:

- 1. State the definition of a function, determine domain/range of a function, evaluate expressions involving function notation, state the definition of inverse functions, find the inverse of a given function, find composites of functions. (Chapters 1 and 2)
- 2. Graph the following functions: linear, quadratic, piecewise-defined, absolute value, polynomial, rational, exponential, and logarithmic. (Chapters I-4)
- 3. Recognize and use transformations of functions such as shifting, stretching, shrinking, and reflecting. *(Chapter 2)*
- 4. Solve quadratic equations in one variable by factoring, using the square root property, completing the square, and using the quadratic formula. *(Chapter 1)*
- 5. Solve both linear and non-linear inequalities and state the solution in interval notation. *(Chapter 1)*
- 6. Find the zeros of polynomials both algebraically and by graphing. (Chapters 1-3)
- 7. Solve exponential and logarithmic equations. (Chapter 4)
- 8. Perform operations with matrices, find determinants of matrices, and use matrices to solve systems of equations. *(Chapter 6)*
- 9. Interpret mathematical models such as formulas, graphs, and tables, and draw inferences. (Chapters 1-4 and 6)
- 10. Use appropriate technology to enhance mathematical thinking and understanding and to solve mathematical problems and judge the reasonableness of the results, such as deriving functions which model sets of data. (Chapters 1-6)
- 11. Use critical thinking and problem solving techniques to solve real-world application problems. (Chapters 1-6)

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

You are responsible for everything in the sections listed in the detailed calendar below. You should watch the videos associated with each section on or before the dates listed so you will have time to complete the related homework. Any changes in this schedule will be announced on MyMathLab or through email.

Start date	Section	Topics	Due	Due date	
10-Jan	P1	Introduction to course	Orientation Quiz	13-Jan	
14-Jan	P2	Exponents	HW 1	17-Jan	
18-Jan	Р3	Radical and Rational Exponents	HW 2	20-Jan	
21-Jan	Р3	Radical and Rational Exponents	HW 3	24-Jan	
25-Jan	P4	Polynomials	HW 4	27-Jan	
Communication Project due Monday, Jan 31st on Brightspace					
28-Jan	P5	Factoring	HW 5	31-Jan	
1-Feb	P5	Factoring	HW 6	3-Feb	

4-Feb	311 Practice Midterm			10-Feb	
311 Midterm (Respondus Monitor) - Thurs, Feb 10					
11-Feb	P6	Rational Expressions	HW 7	14-Feb	
15-Feb	P6	Rational Expressions	HW 8	17-Feb	
18-Feb	1.5	Quadratic Equations	HW 9	21-Feb	
22-Feb	1.5	Quadratic Equations	HW 10	24-Feb	
25-Feb	311 Practice Final			3-Mar	
311 Final (Respondus Monitor) - Thurs, March 3rd					
4-Mar	2.1 - 2.2	Functions	HW 11	14-Mar	
		Spring Break			
15-Mar	2.3 - 2.4	Graphing Functions	HW 12	17-Mar	
18-Mar	2.5 - 2.7	More Functions	HW 13	21-Mar	
22-Mar	1.7	Inequalities	HW 14	24-Mar	
25-Mar	3.6	Inequalities	HW 15	28-Mar	
29-Mar	4.1	Exponential Functions	HW 16	31-Mar	
1-Apr	4.2	Logarithms	HW 17	4-Apr	
5-Apr	4.3	Logarithms	HW 18	7-Apr	
8-Apr	•			14-Apr	
1314 Midterm (Respondus Monitor) - Thursday, April 14					
15-Apr	4.4	Exp and Log equations	HW 19	18-Apr	
19-Apr	5.1	Systems of Equations	HW 20	21-Apr	
22-Apr	5.2	Systems of Equations	HW 21	25-Apr	
26-Apr	6.3	Matrices	HW 22	28-Apr	
29-Apr 1314 Practice Final			3-May		
1314 Final (Respondus Monitor) - Tuesday, May 3rd					

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

Grading rubric for 311:

	Percent of
Item Type	<b>Total Grade</b>
Homework	40%
Midterm	20%
Final Exam	40%
Total	100%

#### Grading rubric for 1314:

	Percent of
Item Type	Total Grade
Homework	30%
Midterm	20%
Communication assignment	10%
Final Exam	40%
Total	100%

**Homework:** All assignments should be completed through MyMathLab (which can be accessed within Brightspace). You will have unlimited tries to complete each problem, and your highest grade on each assignment will be recorded. Completing and understanding each problem is essential to your success in class. It is your responsibility to keep up with the assignments and to let us know if you need help. DO NOT wait until right before an exam to get help with the homework. There will be a 5% penalty for every day an assignment is late. This is to encourage you to not fall behind, while also allowing some flexibility for unforeseen circumstances.

The first "special" homework assignment (HW 0) has no 5% penalty. You can't do any other homework until you get a 100% on it, as it serves as an orientation for the course. You can take it as many times as you want as well, and other homework assignments will still be due as assigned in the calendar even if you haven't finished this one.

There is another requirement, the Technology Check. It also has no penalty, but you will not be able to access anything after Homework 3 until you get 100% on it as well. If you cannot get it working, email me immediately so I can help troubleshoot and/or so we can make alternate arrangements.

**Tests:** All tests will be taken using the MyMathLab software using Respondus Lockdown Monitor, unless other arrangements are made (including ADA accommodations, etc.). The tests are two hours long. You can use a graphing calculator and a 3x5 notecard with anything you want written on it, front and back, You can also use scratch paper, as long as it's blank.

There is a practice test for each test. You must earn a 60% or higher on the associated practice test in order for the actual test to be available. The practice test must be completed with a 60% or higher prior to going in to take the actual test, and is due a few days before the actual test is due (see the calendar for details). You may attempt the practice test as many times as you like, and only your highest attempt will count. Again: you cannot take the actual test until you've earned a 60% or higher on the practice test.

You can get up to 10 bonus points on your test by completing the related practice test. You can retake the practice tests as many times as you want.

Score on Practice	<b>Bonus Points on</b>
<b>Test (%)</b>	Associated Test
95 - 100	10
90 – 94	8
85 - 89	6
80 - 84	4
75 - 80	2
74 or below	0

**Communication Assignment:** Since College Algebra is a core curriculum class, there is a communication component as well. You will have the option of writing a short paper or recording a video. More information will be provided.

**Academic Integrity.** Any student that is found guilty of academic dishonesty such as cheating, plagiarism, or collusion, will receive a zero on every test or assignment involved. For repeated violations, a guilty student can be assigned a failing grade in this course and can be recommended for suspension from the McLennan Community College District.

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

MCC allows for "excused" absences caused by (1) authorized participation in official College functions, (2) personal illness, (3) an illness or a death in the immediate family, or (4) the observance of a religious holy day.

If you miss an exam for Math 311 or Math 1314 due to illness or other excused absence as defined by the MCC attendance policy, you must provide documentation in order to be able to get an extension on the exam.

Note that children getting sick is an approved MCC absence. If you are home caring for a sick child (or any family member), get documentation (take them to the doctor and get a doctor's note) so we can extend your time.

We recognize that sometimes things happen, work calls you in, etc. If...

- you are unexpectedly unable to take a test on the test day (whether officially MCC-approved or otherwise),
- and you have completed the practice test with a 60% or higher on time,

• <u>and</u> you can email us your request before the test is due, then we will extend the test time for you for exactly one day.

Attendance will be based on participation in the course. You should have activity (homework or test) in the course each week. A report will be run each week (on Mondays) to determine activity in the course. Any week in which no work is logged, will count as an absence. This will not be enforced for students who are ahead of the week's activities. You are allowed four weeks of inactivity (25% of the course), before you can be dropped. You will receive an email when you are on the Inactivity report in any week.

### NOTE: THESE ARE LINKED COURSES. IF YOU DROP EITHER CLASS, YOU WILL BE DROPPED FROM BOTH.

If you wish to drop this class, you must email me from your MCC student account before 5 pm on the last day for student-initiated drops, with the request "Please drop me from COURSE ID and SECTION NUMBER." An email that says something like, "I would like to drop..." or, "I was thinking about dropping..." or, "I was wondering if I should drop..." will <u>not</u> be considered a drop request. (Just like saying, "I would like to get married," does not mean anyone is going to automatically marry you.) If the email does not come from your student account, or if the request is verbal, we cannot drop you. Alternatively, there is a form you can fill out and have me sign before 5 pm on the last day for student-initiated drops (make an appointment to ensure we am on campus to provide the signature).

After submitting your request, you must verify the drop was processed, notifying me in writing within 48 hours of your original request if it was not. Otherwise, you will stay on the roster for the rest of the semester and be awarded the grade earned. Drops past the drop date are only done in documented, extreme, life-crisis circumstances, which usually involve withdrawing from school entirely.

#### **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 this educational opportunity.

#### \* 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: Mozilla Firefox, Chrome, Microsoft Edge 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 www.mclennan.edu/disability.

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

disabilities@mclennan.edu 254-299-8122 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.

#### **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.

#### 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.

#### 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.