Fall 2020 MAT 101 College Algebra Syllabus (Chat)

Math Zone Information	USM Updates: http://usm.edu/covid-19
Director Email: emileigh.mccardle@usm.edu	Math Zone Hours: CLOSED
Free Online Tutoring Appointment Website: https://usm.mywconline.com	

Course Description: This course teaches functions, graphs of linear equations and inequalities, and nonlinear equations including exponential and logarithmic equations. This course is an introduction to the functions most commonly used to model mathematical behavior as well as the fundamental concepts necessary to use these functions. 3 credit hours.

Prerequisite(s): Math ACT $\geq$ 20 or a grade of C or better in MAT 099
OR Corequisite: MAT 101S - Required for MAT 101 students with Math ACT $<$ 20 and no grade of C or better in MAT 099 but available for all students to take if the student needs additional assistance.

Materials Required:

- Non-graphing calculator: TI-30XS Multiview or TI-30X Pro is recommended.
- Lumen OHM Access Code: ISBN: 9781640870260 (Can be purchased from USM Bookstore.)
- Access to a computer and internet
- Access to a device that scans multiple documents into one PDF file (Suggested app: AdobeScan)

Course Grades	
Percent:	**Category:**
5%	**Attendance, Participation, and Professionalism**
5%	**Quizzes** *Two lowest scores will be dropped.
20%	**Homework** *Two lowest scores will be dropped.
50%	**5 Unit Tests** *Lowest test score will be dropped.
20%	**Comprehensive Final Exam**

Grading Scale:
A 90% - 100%
B 80% - 89%
C 70% - 79%
D 60% - 69%

Course Format:

- **Each week students will attend a conference lecture held by their instructor.**
- **Each week students will complete homework and a quiz assignment for EACH unit.**
- **Each week students will watch and complete the video quiz for the upcoming unit.**
- **Students will also need to complete Test Reviews, Practice Tests, and Tests throughout the course.**

GEC Learning Objective: Students will demonstrate the ability to work with real world situations involving fundamental math concepts.

Learning Outcomes:

- Students will model and solve problems involving linear equations, construct linear function graphs, and then apply their knowledge to interpret data for real world applications.
- Students will model and solve problems involving quadratic functions, construct quadratic function graphs, and then apply their knowledge to interpret data for real world applications.
- Students will model and solve problems involving exponential functions, construct exponential function graphs, and then apply the knowledge to interpret data for real world applications.
- Students will model and solve problems involving linear inequalities and apply the knowledge to solve real world applications problems involving inequalities.
- Students will be able to find zeros and their multiplicities of polynomial functions and use the information to construct graphs of polynomial functions.
- Students will be able to manipulate logarithmic expressions, as well as solve logarithmic and exponential equations by using properties of logarithms.
- Students will be able to identify if a graph is that of a function, if the graph is that of a one-to-one function, and, if it is a one-to-one function, be able to determine a formula for its inverse. Students

should also be able to determine the domain and range of any graph or function including those with function transformations.

Attendance, Participation, and Professionalism Grade (APP)

This grade will be based on:

1. **Attending and participating in the online conferences**. Lectures covering the unit content will be held online either through Canvas Conferences or through Microsoft Teams. Conferences can be found on the left side navigation of the course in Canvas. Any Canvas conferences will be recorded and available by clicking the conference name and then Presentation to view the recording. Canvas only saves conference recordings for two weeks. Please be sure to watch soon after the conference date in order to review in a timely manner. If using Teams, the conference will be saved within the chat for that session and can be viewed later by going back to that chat.
2. Displaying **professionalism** in the conferences and discussions. This includes behaving with honesty and integrity, showing accountability, showing respect for the instructor and others in the conference and discussions, and being responsible.
3. Completing weekly **video quizzes** based on the videos posted in the course.

"Excused" Absences: USM does not have a policy of excused absences; however, your instructor will work with you specifically for missed test days provided it is for a justifiable reason. If you are unable to take the exam on the day it is assigned, you will need to contact your instructor and explain why you were unable to take the test. You must present documentation of the absence.

Quizzes

Quizzes are content quizzes to review the material for each unit. They are not password protected. No use of cell phones, websites, or outside assistance is allowed. You may use your notes only. You are allowed three attempts and the highest score is kept. Quizzes not taken by the due date can be completed after the due date for 50% credit using a LatePass. Students are given **FIVE** LatePasses for the semester.

Practice Tests: Practice Tests are available to help assist with preparing for the Unit Tests and can be taken an unlimited number of times. They count for a quiz grade, and the highest score is kept.

***Students using any problem-solving website on the computer or a cell phone to assist with solving course content will be given a zero for the assignment. This applies to all assignments in this course.**

Homework

HW is due for each unit. Problems not completed by the posted due date can be completed after the due date for 50% credit by using a LatePass.

Test Reviews: Test reviews are counted as homework assignments and are required. They are created to assist you with preparing for the Unit Tests. Problems not completed by the posted due date can be completed after the due date for 50% credit by using a LatePass.

Late Assignments

See the Tentative Schedule for a full list of due dates. Homework, Unit Quizzes, Test Reviews, and Practice Tests can be submitted late. If you attempt to complete one of these assignments after the due date, you will be prompted to use "Redeem LatePass". You only have 5 LatePasses to use throughout the semester, so use them wisely.

Video Quizzes may never be taken late.

No test may be taken on any other day other than the date stated on the Tentative Schedule unless you receive prior approval to take your test on another day.

Testing Information

Students are expected to abide by the testing rules for this course as outlined below. All tests will be completely online. Students will be required to agree to and write an Academic Integrity Statement for each test. Students will be given the password to the test before the test begins to prevent students from starting the test accidentally.

Students will have ONE day to take the test for online testing situations; the Final Exam is an exception and students will be allowed three days to take the Final. Students may take the online delivered test at any time during the day from 6 AM to 10 PM, but tests must be finished and will automatically submit at 10 PM. Please do not wait until late in the day to take the test in case there are any technical difficulties.

Students will need to write their work for each problem on blank pieces of paper with their name and student ID number at the top of each page. Students should write the Academic Integrity Statement and signature on the page and then scan and upload the scratch work for the test into the Canvas assignment. Students should scan their work using a scanner app (AdobeScan or iPhone notes feature works well), and then upload the file.

Online Test Policies

You may not visit any website other than Canvas.
You may not use any resources or your notes during the test.
You may not use assistance from any other person. Test work must be your own work.
You may not use any electronic devices such as cellular phones or smart watches.
You may not use a graphing calculator.

Academic Integrity Policy for Testing in this course (applies to all tests and the final exam):
"The only items that students may use to complete this test are a scientific calculator, paper, a pen or pencil, the textbook for this course, and any notes that the student has taken for this course. Students may neither give nor receive any help on this test from other students. The use of websites other than Canvas or receiving help from any person on this test is an academic integrity violation. Providing answers to questions on this exam to other students is an academic integrity violation, as is taking or receiving answers to questions on this test from other students. Violating any of these policies or any other university policies on academic integrity and academic misconduct may result in a grade of 0 on this test or a grade of XF in this course. It is important to be a person of integrity and that means that ALL WORK SHOWN AND ANSWERS STATED on this test are the work of the individual submitting that work."

After the test is complete, you will have to submit your scratch work separately in CANVAS.

You must submit this within **twenty minutes** of finishing the test. Failure to submit it in a timely manner will result in a test grade of zero.
You must submit as a **single PDF**. Failure to do so will result in a test grade of zero.
You will be given a statement to write out on your scratch paper and to sign. Failure to do so will result in a test grade of zero.

Students are expected to use the methods taught in this course on tests. If there is any question about academic integrity on a test, I reserve the right to contact the student in question about the problem(s) in question for an explanation of the work shown.

***A score of zero is given when a testing policy has been violated.**
***There will be no retake opportunities for any test or the final exam.**
***Use of any mathematics solving website or app is strictly prohibited and will result in a zero on the assignment and a possible XF in the course.**

Comprehensive Final Exam

The final exam will be comprehensive and will cover all units in the course. Students are expected to follow the same guidelines as required for a regular unit test.

The final exam will look like the tests you have taken throughout the semester but will be longer.
The dates of the final exam can be found on the Assignment Calendar.
More details about the final exam will be provided via Canvas.

Drop Date: Friday, October 23, 2020 (last day to withdraw with a grade of W)

Special Health Protocol, Fall 2020

The global COVID-19 pandemic has prompted new health and safety protocols for face-to-face situations. If this class meets in person, all students will be required to follow several guidelines to reduce the risks of being in the same space:

- *All students must wear face coverings that cover their nose and mouth completely.*
- *Students will sit a minimum of six feet from one another.*
- *Students will exit the classroom space as guided by the professor; in most cases, students will be dismissed by row or table to avoid crowding.*
- *Please avoid clustering near one another or the professor at the end of class for questions.*
- *Students should maintain good health behaviors: avoid touching their face; wash hands often with soap and water for at least 20 seconds (or use hand sanitizer); wear a face covering when not alone; and keep distance from others.*
- *All students must self-monitor their health and should not come to class if they have the following symptoms:*
    - *Fever of 100.4 degrees or higher*
    - *Cough*
    - *Shortness of breath*
    - *Sudden loss of taste or smell*
- *Students with the above symptoms should call Moffit Health Center: 601-266-5390*

Academic Integrity Policy

Academic misconduct involves deception to improve a grade, earn course credit, complete a degree or create an unfair academic advantage for oneself or disadvantage to another in the academic community. It includes but is not limited to cheating, plagiarism, inappropriate acquisition or provision of information, conspiracy to cheat or plagiarize, lying about academic work, stealing academic materials physically or electronically, and unapproved multiple submissions of assignments. Engaging in any of these behaviors or supporting others who do so will result in academic penalties and/or other sanctions. If a faculty member determines that a student has violated our Academic Integrity Policy, sanctions ranging from resubmission of work to course failure may occur, including the possibility of receiving a grade of "XF" for the course, which will be on the student's transcript with the notation "Failure due to academic misconduct." For more details, please see the USM website. Note that repeated acts of academic misconduct will lead to expulsion from the University.

Important

<u>Any instance of cheating on a unit test or exam in this course will result in a zero. The instructor reserves the right to assign an XF for any student who has been academically dishonest.</u>

Student Online Classroom Behavior Code of Conduct Policy

Students should follow the institutional code of conduct policy even in an online setting.

Office of Disability Accommodations Policy

If a student believes that they have a disability which is covered by the Americans with Disabilities Act (ADA) and makes them eligible to receive classroom or housing accommodations, they should contact the Office for Disability Accommodations (ODA) for information regarding the registration process. Disabilities covered by the ADA may include but are not limited to ADHD, learning disabilities, psychiatric disabilities, physical disabilities, chronic health disorders, temporary illnesses or injuries and pregnancies. Students should contact ODA if they are not certain whether their documented medical condition qualifies for ODA services. Students are only required to disclose their disability to the Office for Disability Accommodations. All information submitted to ODA by the student is held with strict confidentiality.

Address: The University of Southern Mississippi, Office for Disability Accommodations, 118 College Drive # 8586, Hattiesburg, MS 39406-0001. Voice Telephone: 601.266.5024 or 228.214.3302 Fax: 601.266.6035. Individuals with hearing impairments can contact ODA using the Mississippi Relay Service at 1.800.582.2233 (TTY) or email ODA at oda@usm.edu.

Confidentiality and Mandatory Reporting

As an instructor, one of my responsibilities is to help create and maintain a safe learning environment on our campus. I also have a mandatory reporting responsibility related to my role as a faculty member. I am required to share information regarding sexual misconduct or information about a crime that may have occurred on USM's campus with certain University officials responsible for the investigation and remediation of sexual misconduct. The information will remain private and will only be shared with those officials necessary to resolve the matter. If you would like to speak in confidence, resources available to students include Confidential Advisors with the Shafer Center for Crisis Intervention, the Counseling Center, Student Health Services, and Clergy. More information on these resources and University Policies is available at https://www.usm.edu/sexual-misconduct.

Copyright statement

Lectures and course materials, including PowerPoint presentations, tests, outlines, syllabus, handouts, recordings of lectures, and similar materials, are protected by copyright. This means that owner of those materials I create, and no one but me can edit them, give them to others, post them anywhere online, or copy them to distribute in any way. You may take notes and make copies of course materials for your own personal use, and you and other students in the class may share notes and materials when studying. Any other sharing of lecture notes or any course materials cannot be done unless you have my permission in writing, whether you are paid for the materials or not. Similarly, I will not share anything you submit to me unless I have your written permission. If you upload your notes or any materials from this class to any website or give them to anyone, this act is a violation of copyright and is considered academic misconduct. If you do that, you will be subject to the penalties outlined in the University's Academic Integrity Policy. If you have any questions at all about copyright or academic integrity, please let me know.

Nondiscrimination Statement

The University of Southern Mississippi offers to all persons equal access to educational, programmatic and employment opportunities without regard to age, sex, sexual orientation, disability, pregnancy, gender identity, genetic information, religion, race, color, national origin, and/or veteran status pursuant to applicable state and federal law.

MAT 101 Course Outline

Unit	Topic
1	Solving Linear Equations and Applications
	Introduction of Function Notation
2	Graphing Linear Functions; Equations of Lines
	Linear Modeling and Applications
	Parallel and Perpendicular Lines
3	Solving Radical Equations excluding Radicals with Factoring
	Solving Quadratics using Square Root Property
	Solving Systems of Linear Equations
	Solving Absolute Value Equations
	Test 1: Units 1-3
4	Quadratic Equations (factors, zeros); Quadratic Formula
5	Polynomial Division, Remainder Theorem, Factor Theorem
6	Solving Rational Equations
	Theorems about Zeros of Polynomials
	Test 2: Units 4-6
7	Leading Term Test, End Behavior, and Polynomial Functions
	Graphing Quadratic Functions
8	Graphing Polynomial Functions
	Test 3: Units 7 & 8
9	Linear Inequalities
	Domain and Range of Sets and Graphs
	Functions - Relation, VLT; Circles, Distance, Midpoint
	Graphing Piecewise Functions
10	Graphs of Parent Function; Symmetry
	Graphing Parent Function Transformations
	Test 4: Units 9 & 10
11	Domain and Range of Rational and Radical Functions
	Algebra of Functions; Difference Quotient
	Function Composition
12	One-to-One Functions & Inverse Functions
	Exponential Functions and Graphs
13	Properties of Logarithmic Functions
	Logarithmic Functions and Graphs
	Compound Interest and Compounded Continuously
	Solving Logarithmic Equations
	Solving Basic Exponential Equations
	Test 5: Units 11, 12, & 13
	Comprehensive Final Exam (Units 1-13)

***Note: This syllabus is subject to change during the semester, if needed. Students will be notified via email if changes are made.**