Fall 2022 MAT 101 College Algebra Syllabus (F2F)

Math Zone Open Lab with Tutors	Mathematics Center One-on-One Tutoring
Hours: Mondays and Tuesdays 8 AM – 5 PM Wednesdays and Thursdays 8 AM – 7 PM Fridays 9:30 AM – 1 PM Closed on Saturdays and Sundays	Mathematics Center in Cook Lib 139, 1st floor Sign up at https://usm.mywconline.com Hours: Mondays 9:30 AM – 5:15 PM Tuesdays and Wednesdays 9:30 AM – 7 PM Thursdays 9:30 AM – 5:15 PM Closed Fridays, Saturdays, Sundays

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 ≥ 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-36X Pro is recommended. An online scientific calculator is available for FREE within each Lumen/Canvas assignment.
- Access to a computer and internet
- Pencil or erasable pen, paper, and binder to keep handouts and guided notes
- Lumen OHM Code: Included in the course with Eagle Direct* or available in bookstore if opted out
- There is NO textbook required for this course. The textbook fee pays for access to Lumen through Canvas. All other educational materials will be provided.

*Eagle Direct – the course content online access code is automatically activated within the course in Canvas for each student. Do not purchase the code from the bookstore or any other resource. Students have the option to opt out in the first SIX days of the semester. If you chose to opt out, you **must** purchase the Lumen OHM Access Code from the USM bookstore, or you will not have access to the course content after the two-week trial period. The ISBN for the access code is 9781640870260.

Course Grades		Grading Scale:
Percent:	**Category:**	
5%	APP – Attendance, Participation, & Professionalism	A 90% - 100%
5%	Quizzes *Two lowest scores will be dropped.	B 80% - 89%
20%	Homework *Two lowest scores will be dropped.	C 70% - 79%
50%	5 Unit Tests *The lowest Unit Test score will be dropped.	D 60% - 69%
20%	Comprehensive Final Exam: Exam Date	F < 60%

Course Format:
- **Each week students must attend every lecture/computer lab meeting in-person.**
- **Each week students will complete homework and quiz assignments for EACH unit in Canvas.**
- **Students will also need to complete Practice Tests and Tests throughout the course in Canvas.**

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) – 5% of Grade

This grade will be based on:

1. **Attending and participating in class.** Lectures covering the unit content will be presented during the class sessions. Guided Notes will be provided to use to take notes during the class. The instructor will use active learning techniques and expects students to participate if called upon. If a student must miss class, it is that student's responsibility to consult a **classmate** for notes, assignments, and announcements prior to the next class meeting. Students should email the instructor with documentation of the absence for an excused APP grade to be considered.

2. **Working diligently and on-task during the duration of the computer lab class meetings.**
   A portion of the class meetings will be in a computer lab setting to allow time for students to ask the instructor and tutors questions. Students should remain in class until released and should be working on MAT 101 assignments the whole time.

3. Displaying **professionalism** in the class meetings and course discussions. This includes behaving with honesty and integrity, showing accountability, showing respect for the instructor and others in the class and discussions, and being responsible. These guidelines should also be followed for all email communication with the instructor and/or other students. Please use proper email language and formatting when emailing. Stay professional!

Academic Integrity on Quizzes, Homework, and Practice Tests

Instructors expect students to complete all problems on their own without the use problem solving websites/apps, search engines, other people, or YouTube videos provided by outside sources.

Students can ask for assistance from the instructor, tutors in the computer lab in the Math Zone, and tutors in the Mathematics Center in the Cook Library; however, none of these resources will work the problems for the student. These resources will only assist students in understanding the concepts so they can work the problems themselves.

Students are required to use the methods taught in the course to solve all homework, quiz, practice test, and test problems. 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 and/or a possible XF for the course. This applies to all assignments in this course.

Quizzes – 5% of Grade

Quizzes are content quizzes to review the material for each unit. Quizzes often DIRECTLY correlate to success on tests so understanding and doing well on a quiz is important to success in the course.

There are two quiz assignments in Canvas for each quiz.

Practice Quizzes: The first quiz assignment is NOT password protected. It can be taken anywhere, and students are given two attempts with the highest score kept. If this quiz attempt is not taken by the due date, it can be completed after the due date for 50% credit by using a LatePass.

Quiz Final Attempt: The second quiz assignment in Canvas IS password protected and **must be taken in the Math Zone**. A tutor or the instructor will need to put in the password in order for the quiz to be taken. Raise the green flag on the computer when ready to take the quiz. No use of cell phones, websites, or outside assistance (including tutors) is allowed while taking the quiz. Only notes are allowed to be used as a reference when taking this quiz. Only ONE attempt is allowed. No LatePass is allowed for the final attempt. This quiz cannot be taken on a personal laptop.

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 <u>quiz</u> grade, and the highest score is kept.**

Homework – 20% of Grade

Homework is due for each unit. Each problem may be attempted three times before Lumen marks it incorrect. Students may select "Get a Similar Question" to generate a new problem to try again. Students may attempt each problem an unlimited number of times. Therefore, students should aim for a 100% on each Homework assignment in the course. Problems not completed by the posted due date can be completed after the due date for 50% credit by using a LatePass. Problems can also be worked after the due date in Practice Mode to review the problems without improving or changing the HW grade.

*If Practice Mode is enabled, LatePasses are disabled. This means that students should not select Practice Mode unless they are happy with their homework score. Once in Practice Mode, scores are not able to be improved on that assignment.

Late Assignments: See the Tentative Schedule for a full list of due dates. Homework, Quizzes, 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 have 5 LatePasses to use throughout the semester.

LatePasses

Students are given FIVE LatePasses in total to use throughout the semester to work on an assignment after the due date has passed to improve their score. Once a LatePass is used, the assignment will reopen for the rest of the semester. Problems worked using a LatePass are only awarded 50% credit. Any problems worked correctly and awarded full credit before the due date for that assignment will remain full credit. Only problems worked after the due date will receive the penalty.

To use a LatePass, click on the assignment in Canvas after the due date and click "Redeem LatePass."

Practice Mode

Students may review problems after the due date without improving their score by clicking "Practice" after clicking on the assignment in Canvas. Please note that any work done in Practice Mode will NOT improve the score on the assignment. Students must use a LatePass after the due date in order to improve their score.

Clicking Practice Mode will keep students from using a LatePass and, therefore, keep a student from improving their grade. Students should ONLY click Practice Mode if they are satisfied with their current score.

Unit Tests – 50% of Grade

There are five Unit Tests in this course. Students will be testing in-person for this class.

On test days, students check in with the instructor at the beginning of the testing period, take the exam, and then follow the instructor's directions whether to leave or return after the test. All tests are administered through Canvas, are password protected, and must be taken in the Math Zone **during the regular class time** as posted on the course schedule unless you receive prior approval from your instructor to take your test at a later date.

Students arriving more than 10 minutes late will receive a zero on the test. No assistance is provided in Canvas, and no use of outside materials, websites, notes, cell phones, etc., are allowed on the test. Review your test after submitting. If you want to review your test after leaving the Zone, contact your instructor to arrange a meeting.

*See policies below and testing procedures on the last page of the syllabus.

Note: While homework, quizzes, and practice tests due dates in Canvas show the date and time deadline for the assignment to be submitted, this is NOT the case for the Unit Tests and the Final Exam. Students should refer to the course assignment calendar given to them at the start of the course in order to determine the test date.

The time of the test is the start of that class period. Tests may show a Canvas deadline of midnight or even the next day; this is to allow for special circumstances, NOT to notate the time the test must be submitted. In addition, students who "work fast" cannot come into class late and express that they can finish the test in the time that is left. Students who come late will receive a zero.

Students are expected to use the methods taught in this course on tests. If there is any question or concern about academic integrity on any test, the instructor reserves the right to contact the student about the problem(s) in question for an explanation of the work shown. Failure to attend a meeting with the instructor on this issue could result in a zero on the test in question or an XF for the course.

Testing Academic Integrity Policies (applies to all tests and the final exam):

The only acceptable items to have during testing are a student ID, a writing utensil, and a non-graphing calculator with no cover/back. Testing paper will be provided.

Your hands must be visible at all times during the test.

You cannot visit any website or use any app outside the test page. Going to other Canvas pages is also prohibited. Use of any mathematics solving website or app is strictly prohibited.

You cannot use or have in your possession cellphones, smart watches, graphing calculators, or tablets for any reason during the test.

You cannot use any resources, books, handouts, or notes during the test.

You cannot upload any part of any question in the course to any online site or phone app.

You cannot use assistance from any other person. Test work must be your own work.

You cannot share any part of this test with anyone at any time, even after you have taken the test.

You cannot share answers to problems or the test password with anyone at any time.

You cannot work problems differently than what is being taught in the course unless it has been approved by the instructor in advance.

You agree that all work shown, and answers stated on the test are your own work and answers.

Violating any of these policies or any university policies on academic integrity and misconduct may result in a grade of 0 on this test or a grade of XF in this course.

> ***A score of zero or an XF for the course will be given when a testing policy has been violated.**
> ***There will be no retake opportunities for any test or the final exam.**

"Excused" Absences: USM does not have a policy of excused absences; however, your instructor will try to work with you specifically for missed test days provided it is for a justifiable reason. If you are unable to take the test on the day it is assigned, you will need to contact your instructor BEFORE the absence or as soon as possible on the day of the test and explain why you were unable to take the test. You must present documentation of the absence for a makeup test to be considered. Student with school related event absences should arrange with their instructor to take their test BEFORE the test deadline.

Rescheduling a Test: In the event of documentable absences, please contact your instructor. The instructor may require you to submit documentation to the Office of Student Outreach and Support (R.C. Cook University Union - Room 210), indicating that the absence is documented and excused. These steps should be completed within two school days of the absence and can be completed online through OSOS. Makeup tests must be taken within **SEVEN** business days of the absence and must be scheduled with your instructor. Failure to appear to a scheduled makeup test will result in a zero on the test.

Comprehensive Final Exam – 20% of Grade

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 unit test. The Final Exam will look like the tests you have taken throughout the semester but will be longer with 2.5 hours allowed for completion.

The Final will be given at the scheduled time and date following the published [USM Final Exam Schedule.](#) Failure to come at the correct time and date of the exam will result in a zero on the exam. Students unable to take the exam at the published time and date due to extreme circumstances should contact the Math Zone Director by email for prior approval. No exams will be given after final exam week.

Drop Date: Tuesday, November 1st, 2022 (last day to withdraw with a grade of W)

Fall Mathematics Tutoring

Mathematics Center Tutoring Hours
Location: Cook Library (LIB) 139, 1st Floor Phone: 601.266.5370
Appointment Website: https://usm.mywconline.com
By Appointment Only.
Monday: 9:30 AM - 5:15 PM
Tuesday and Wednesday: 9:30 AM - 7 PM
Thursday: 9:30 AM - 5:15 PM
Closed on Fridays, Saturdays, and Sundays.
Fall Dates: Appointments can be booked from Monday, August 29th to Thursday, December 1st.

Students have access to free individualized assistance for most MAT courses ranging from MAT 101 through MAT 340 through the University's Mathematics Center at the Hattiesburg campus. Students can choose in-person or online individual or group appointments. Students should make an appointment at least two hours in advance and should cancel at least an hour in advance of their appointment if they are unable to attend. Failure to cancel or arriving more than 10 minutes late will result in the appointment being classified as a "no show." Two or more no-shows for a student during one semester will result in deactivation of the WCOnline account and a required meeting with the Mathematics Center Director before services will be reinstated. Students should email emileigh.mccardle@usm.edu to arrange a meeting if their account has been deactivated due to appointment no-shows.

Mathematics tutoring appointments are 75 minutes long, and students can book up to two appointments per week. Students should upload documents when making their appointment regarding specific information in which they need assistance and come prepared with specific problems or concepts that need to be discussed in the appointments with the tutors. Tutors assist to clarify understanding of concepts, give guidance in test preparation, and work through common sources of conceptual misunderstandings. Tutors are not allowed to complete any academic work for any student.

Finding Support/Staying Well

Staying physically and mentally healthy is important. The university has resources to help with stress management and mental health, including online support resources and in-person counseling through Student Counseling Services. EagleCARES provides a platform for all students to connect with a 24/7 emotional support network online (click here for more details). Moffitt Health Center is also available to address your health care needs, with both appointments and online resources. If you have concerns about your well-being, reach out and let us know so that we can help.

University 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.

Any instance of academic dishonesty on any assignment in this course will result in a zero and possible XF. The instructor reserves the right to assign an XF for any student who has been academically dishonest.

Student Classroom Behavior Code of Conduct Policy

Even in an online setting, students should follow the code of conduct policy. At USM this is the policy: USM students, regardless of the many perspectives they may bring to a given class, are expected to be courteous while in the classroom. Some unacceptable behaviors are: continuing to talk after being asked by the instructor to stop; conducting side conversations during instruction; nonverbally showing disrespect for others; using vulgar, obscene or other inappropriate classroom language; making disparaging remarks or slurs based on age, religion, race, ethnicity, gender, nationality, disability, or sexual orientation; tardiness and disturbing classroom entrances; getting up during class, leaving, and then returning; packing up books and/or belongings before class is dismissed; using cell phones, allowing them to ring, or texting during class; inappropriately using computer or other technology in a disruptive way; verbally indicating dissatisfaction with an activity, assignment, or grade; and/or sleeping in class and other inattentive behavior.

More serious classroom transgressions include but are not limited to: coming to class under the influence of alcohol or drugs; student-to-student anger; student-to-faculty anger; verbal assault; physical assault; and/or sexual harassment.

Student Accessibility Services (SAS)

SAS is Southern Miss's designated office to assist the University in its commitment to protect the civil rights of students with disabilities. SAS protects students from discrimination and offers reasonable accommodations to give them equitable access to university courses and resources. Disabilities covered under the ADA may include but are not limited to ADHD, learning disabilities, psychiatric disabilities, physical disabilities, chronic health disorders, temporary injuries, and pregnancies. If a student feels that they need classroom or housing accommodations based on a disability they should contact SAS by phone at 601-266-5024, by email at sas@usm.edu , in person by visiting the SAS office located in Bond Hall Room 114, or online at www.usm.edu/sas .

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, online homework questions, videos, written examples, lecture notes, tests, outlines, syllabus, handouts, recordings of lectures, and similar materials, are protected by copyright. This means that I am the owner of those materials I create, and only I 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 have 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. This misconduct will be subject to the penalties outlined in the University's Academic Integrity Policy.

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.

COVID-19 Protocol, Fall 2022

As we move into the 2022-2023 academic year, we are finding new ways to work and live with the evolving COVID-19 pandemic. We are looking forward to a year marked by more in-person gatherings and events as we learn to navigate the health challenges around us.

At this time, Southern Miss is operating under normal procedures on all campuses, teaching, and research sites. Face masks are no longer required in public spaces unless you have COVID-19 symptoms, a positive COVID-19 test, or close contact exposure to someone with COVID-19. You may choose to wear a mask at any time, based on your personal health circumstances, and healthcare settings may require face masks during times of high community transmission. The CDC recommendation for mask use is fluid, depending on the level of community transmission and a person's risk for serious illness. Please refer to our COVID health protocols site for the most up-to-date information.

All eligible students, faculty, and staff are strongly urged to get a COVID-19 vaccination and all applicable boosters, which are now widely available:

- Schedule an Appointment – Hattiesburg Campus
- Schedule an Appointment – Gulf Park Campus
- Schedule an Appointment in Your Current Area

For everyone in the Southern Miss community, staying physically and mentally healthy is important. Moffitt Health Center provides health care services through online resources and appointments with care providers. Students who become ill with fever or other symptoms should contact Moffitt for

information or to see a care provider. If a student is required to isolate during the semester due to a diagnosed illness, we ask that faculty give that student consideration for make-up work.

In addition to physical health care, students may also access a variety of resources to support mental well-being, from online resources to in-person counseling for students through Student Counseling Services. If you have concerns about your well-being, please contact one of these resources for support.

*Note: This syllabus is subject to change during the term, if needed. Students will be notified via email, Microsoft Teams message, and/or Canvas Announcement if changes are made.

MAT 101 Course Outline

Math Zone Testing Procedures
Testing days in the Math Zone are a little different than a regular computer lab class meeting.

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 (excl. Radicals w/ Factoring)
	Solving Quadratics using Square Root Property
	Solving Absolute Value Equations
	Test 1: Units 1, 2, & 3
4	Quadratic Equations (factors, zeros) using Factoring
5	Polynomial Division, Remainder Theorem, Factor Theorem
6	Solving Rational Equations
	Theorems about Zeros of Polynomials
	Test 2: Units 4, 5, & 6
7	Leading Term Test, End Behavior, & Polynomial Functions
	Graphing Quadratic Functions
8	Graphing Polynomial Functions; Solving Quadratics using the Quadratic Formula
	Test 3: Units 7 & 8
9	Linear Inequalities; Domain and Range of Sets and Graphs
	Functions - Relation, VLT; Circles, Distance, Midpoint
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 and Basic Exponential Equations
	Test 5: Units 11, 12, & 13
	Comprehensive Final Exam (Units 1-13)

On Test Day at the Testing Time:

*Go to the bathroom and make any calls you need to make BEFORE lining up for check-in!

1. Store your backpack and belongings in the lockers located in the lobby of the building. Place any restricted items in the locker:
   - Cellphones / Smart Watches / Tablets / Laptops
   - Graphing Calculators
   - Headphones / Earbuds / Airpods
   - Scratch Paper / Notecards / Notes
   - Calculator Lids/Backs
   - Hats
2. Grab the following items to bring with you to check-in:
   - Student ID
   - Non-graphing Calculator with NO LID/back
   - Pencil or other erasable writing utensil
3. Line up at the entrance to the computer lab and wait for your instructor to check you in.

After Check-In:

4. Follow the test proctor and sit where they ask you to sit. Do not choose a seat yourself.
5. Fill out the testing form with the appropriate information. Be sure to fill in ALL information.
   - Your class & section number can be found at the top of the screen once you click your class in Canvas.
6. Be sure to **initial** next to the Math Zone Testing Policies.
7. The form will be your testing paper for the test, and you may write on the front AND the back.
8. After filling out the form, login to Canvas, navigate to your course, and then to the Test.
9. Raise the green flag on your computer to alert the proctors you are ready for the password to be entered. Wait patiently as they will be entering many passwords. They will typically go down a row at a time.
10. Once the password is entered, begin your test.
    - Read the first question of the test, the Academic Integrity Agreement, and agree to it.
    - If you need more scratch paper, raise your hand and the proctors will provide you with more.
    - Your instructor will need to look at your scratch paper to award partial credit later. Please keep it organized and the problems numbered so they can easily find your work.

Submitting the Test:

11. <u>Do NOT submit the test on your own!</u> You must raise your hand and let the proctor come to you to help you submit the test. They will take your scratch paper from you, and then ask you to submit the test. Improper test submission without a proctor can result in loss of partial credit points.
12. <u>Do NOT click out of the test!</u> After submitting the test, you will want to review the test. Click questions. This is your ONLY chance to look at what you missed.
13. The proctor may give you an Exam Wrapper to fill out. You will need to look at the test and mark what you missed on the Exam Wrapper. This will alert your instructor to review those problems. The other questions are for you reflect on how you could prepare more effectively for the next test.
14. When you are finished, completely log out of Canvas, close the browser, and give the Exam Wrapper to a proctor. You are then free to leave.

Your instructor will review your incorrect problems and give partial credit where they can.