MATH 101: COLLEGE ALGEBRA

Section: 002   **Fall Quarter, 2022**   **Classroom: BOGH 305**

INSTRUCTOR: Dr. Charles Patterson   **Office: BOGH 217A**

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Office Hours: **2:00-5:00 MW / 12:30-5:00 TR / Friday by appointment only**

COURSE PREREQUISITES: Math ACT score greater than or equal to 22, Math SAT score greater than or equal to 550 (520 prior to March 2016), or Placement by Exam

COURSE GOALS: The instructor will present and test a subset of these topics: rational exponents; rational expressions; radical expressions; complex numbers; miscellaneous equations; inequalities; functions; conics; graphs; inverse, exponential, logarithmic functions; applications; systems of equations and inequalities.

TEXTBOOK AND RESOURCE MATERIALS: College Algebra (6th ed.) by Dugopolski packaged with MyMathLab. **The use of MyMathLab is mandatory.** The TI-30X IIS is the required calculator. Graphing calculators are prohibited. Calculators may not be allowed on some tests. Students will need to purchase a 2" binder, dividers, and loose-leaf paper. A portion of the course may be delivered via zoom, and thus a webcam is required. If you do not have a webcam, one may be checked out from Prescott Memorial Library. A scanner or an app with scanning capabilities will also be required to upload exams in the event that exam must be administered electronically.

ATTENDANCE REGULATIONS: The Tech Bulletin says in part that "Class attendance is . . . an obligation . . . and all students are expected to attend regularly and PUNCTUALLY." A student receiving his/her 4th unexcused absence in Math 102 may have his/her final average dropped one letter grade. A student receiving his/her 5th unexcused absence in Math 102 may receive an F in the course regardless of his/her final average. Attendance will be taken each day. Excuses for absences must be submitted within three class days after return to class. Respectfully pay attention for the entire period. *Please turn off all cellular phones and pagers before entering the classroom. No text messaging during class!! No other electronic devices are to be used during class without the instructor's permission.*

        *If you have tested positive for COVID-19, DO NOT come to class in person. Contact your instructor and Tech Care (318-257-4866). Students who miss face-to-face class for COVID-19 related reasons, **and have followed University protocol**, will have access to course materials and grade opportunities while away from face-to-face class, or makeup opportunities when able to return to class as determined by the instructor. All absences related to COVID-19 will be handled in accordance with the attendance policy listed herein.
        *In the case that the instructor contracts or is exposed to COVID-19, the class will continue with another instructor or via Zoom/Moodle as communicated by the instructor.

HOMEWORK AND TEST POLICY: Homework will be obtained from student's progress with MyMathLab and any graded daily assignments. Assignments on MyMathLab will include homework exercises similar to the textbook problems. **Students are required to complete all homework assignments from the textbook and on MyMathLab.** Quizzes on MyMathLab may also be included as part of the homework grade. The instructor intends for tests to be administered in person in the classroom setting during the regularly scheduled class time. However, it is possible that examinations may have to be administered electronically. For electronic exams requiring the student to submit written work, a webcam, with video turned on, is **required**. If the webcam malfunctions, a makeup exam is required. Written exams will be scanned in via a scanner or an app, and uploaded as instructed. Only material in the original submission will be graded, resubmissions will not be accepted. Smart devices (phones, watches, glasses, etc.) are not to be visible during an exam. If such a device is visible at all during an exam, a student's exam will be taken immediately and will result in a zero test grade. Students will not be permitted to leave a room once a test begins. If you miss an exam, you must notify the instructor *prior* to the exam either in person, email, or by phone. When you return, it is your responsibility to arrange for a makeup exam. In the case of technical difficulties during an exam, the student must contact the instructor as soon as possible and schedule a makeup exam.

GRADE DETERMINATION PROCEDURE: The instructor will schedule 4 tests worth 100 points each and a 150 point comprehensive final. Homework will count at most 50 points. *In the event of a question regarding an exam grade or final grade, it will be the responsibility of the student to retain and present graded materials which have been returned for student possession during the quarter.*

GRADE SCALE: 90-100% A, 80-89% B, 70-79% C, 60-69% D, 0-59% F

LATE HOMEWORK/MISSED EXAMS: No make-ups will be allowed for homework or in-class work. Make-ups will be allowed for exams only in the case of an excused absence (generally a doctor's excuse which I have called and verified or an official university excuse). The student must contact me by the class meeting following a missed exam to discuss the reason for missing the exam and to determine the possibility of a make-up exam. Make-ups will be another exam or the comprehensive final exam as specified by me.

STUDENTS NEEDING SPECIAL ACCOMMODATIONS: Students needing testing accommodations or classroom accommodations based on a disability must discuss the need with me as soon as possible. For more details on the Office of Disability Services, refer to www.latech.edu/ods. Any issues with accessing technology, which are related to a disability, should be reported to the instructor as soon as possible.

HONOR CODE AND ACADEMIC MISCONDUCT POLICY: In accordance with the Academic Honor Code, students pledge the following: Being a student of higher standards, I pledge to embody the principles of academic integrity. If it is determined that academic misconduct has occurred, the penalty may range from dismissal from the University to a failing grade in the course. For more details on the honor code, refer to http://www.latech.edu/current-students/student-advancement-affairs/student-conduct-integrity.

HAZING: In compliance with Acts 635, 637, and 640 of the 2018 Regular Session and Act 382 of the 2019 Regular Session of the Louisiana Legislature and the 2019 Board of Regents Uniform Policy on Hazing, the System reaffirms its policy that any form of hazing of any student enrolled at any institution of the System is prohibited. Violation of this Policy can result in both disciplinary action imposed by the organization and/or institution as well as criminal charges.

EMERGENCY NOTIFICATION SYSTEM (ENS): All Louisiana Tech students are strongly encouraged to enroll and update their contact information in the Emergency Notification System. It takes just a few seconds to ensure you're able to receive important text and voice alerts in the event of a campus emergency. For more information on the Emergency Notification System, please visit http://www.latech.edu/current-studnets/student-advancement-affairs/university-police. For emergency notifications, please visit http://ert.latech.edu.

ADDITIONAL COVID-19 INFORMATION:

    a. Students can access COVID-19-related information at Louisiana Tech's website: latech.edu/coronavirus

    b. Students testing positive for COVID-19 report directly to the faculty in order to arrange classroom absence arrangements. Accommodations may not be granted until proper University protocol has been followed. Short-term COVID-19 accommodations are not disability accommodations.

    c. Information and contact numbers and sites for Louisiana Tech Counseling Services are located at: https://www.latech.edu/current-students/student-advancement-affairs/counseling-services/

MATH 101
Course Outline and Suggested Assignments

Section	Topic	Assignment
P.3	Rational Exponents and Radicals	5-99 (odd)
P.4	Polynomials	49-75 (odd)
P.6	Rational Expressions	7-37 (odd), 51-99 (odd)
P.7	Complex Numbers	5-77 (odd), 87-95 (odd)
1.1	Linear, Rational, & Absolute Value Eqns.	9-47 (odd), 63-103 (odd)
1.2	Constructing Models to Solve Problems	5-13 (odd), 29, 41, 47, 49, 54-58 (all), 61, 69-77 (odd), 81-84 (all)
1.3	Equations and Graphs in Two Variables	9-89 (odd)
1.4	Linear Equations in Two Variables	9-87 (odd)
1.5	Quadratic Equations	5-14 (all), 15-27 (odd), 35-59 (odd), 65-73 (odd), 81-97 (odd)
1.7	Linear and Absolute Value Inequalities	7-89 (odd)
1.6	Miscellaneous Equations	1-81 (odd)
2.1	Functions	19-31 (odd), 45-77 (odd), 85-89 (odd)
2.2	Graphs of Relations and Functions	7-17 (odd), 33-36 (all), 53-59 (odd)
2.3	Families of Functions and Transformations	11-21 (odd), 27-34 (all), 45, 47, 55, 57, 59, 81-91 (odd)
2.4	Operations with Functions	7-65 (odd), 85-89 (odd)
2.5	Inverse Functions	7-35 (odd), 43, 45, 53-89 (odd)
3.1	Quadratic Functions	9-53 (odd)
4.1	Exponential Functions and Applications	9-37 (odd), 63-95 (odd)
4.2	Logarithmic Functions and Applications	9-45 (odd), 59-109 (odd)
4.3	Rules of Logarithms	5-61 (odd), 77-83 (odd)
4.4	More Equations and Applications	5-51 (odd), 61
5.1	Systems of Equations in Two Variables	7-13 (odd), 23-53 (odd), 59-71 (odd)
5.2	Systems of Equations in Three Variables	9-17 (odd), 35, 37, 41, 43
5.5	Inequalities and Systems of Inequalities	3-19 (odd), 33-43 (odd)