MATH 101: COLLEGE ALGEBRA

Section: 030 **Summer Quarter, 2019** **Classroom: GTMH 305**

INSTRUCTOR: Dr. Charles Patterson **Office: GTMH 332** **Phone: 257-3224**

Office Hours: **1:00-4:00 MTWR / Others by Appointment**

E-mail: charlesp@latech.edu **MyMathLab Course ID: patterson58957**

COURSE PREREQUISITES: Math ACT score greater than or equal to 22, or 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. A scientific calculator may be used in this course, but the use of graphing calculators is prohibited.

ATTENDANCE REGULATIONS: Read the "Class Attendance" section of the Tech Bulletin which says in part that "Class attendance is . . . an obligation . . . and all students are expected to attend regularly and PUNCTUALLY." 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.*

HOMEWORK 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. Quizzes on MyMathLab may also be included as part of the homework grade.

GRADE DETERMINATION PROCEDURE: The instructor will schedule 3 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.

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/documents/honor-code.pdf.

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/administration/ens.html. For emergency notifications, please visit http://ert.latech.edu.

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)