**MATH 101: COLLEGE ALGEBRA**

**Fall, 2013**

**INSTRUCTOR:** Cindy Wallace **Room:** A-5

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**COURSE PREREQUISITES:** Math ACT score greater than or equal to 22, or Math SAT score greater

than or equal to 520, 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 (5th ed.) by Dugopolski packaged

with MathXL. The use of MathXL 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 MathXL and

any graded daily assignments. Assignments on MathXL will include homework exercises similar to

the textbook problems. Quizzes on MathXL may also be included as part of the homework grade.

**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 school 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 or classroom

accommodations based on a disability must discuss the need with me during the first week of class. Any

issues with accessing technology, which are related to a disability, should be reported to me as soon as

possible.

**HONOR CODE AND ACADEMIC MISCONDUCT POLICY:** Refer to the “Academic Misconduct”

section of the Louisiana Tech Catalog. 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/tech/students/honor-code.pdf>.

**MATH 101**

**Course Outline and 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 Equations in One Variable 9-47 (odd), 63-103 (odd)
* 1.2 Constructing Models to Solve Problems 5-13 (odd), 29, 39, 43, 45, 50-54 (all),

57, 65-73 (odd), 77-80 (all)

* 1.3 Equations and Graphs in Two Variables 9-89 (odd)
* 1.4 Linear Equations in Two Variables 9-87 (odd)
* 1.6 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)
* 2.1 Functions 17-29 (odd), 43-75 (odd), 83-87 (odd)
* 2.2 Graphs of Relations and Functions 3-13 (odd), 29-32 (all), 49-55 (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 3-61 (odd), 81-85 (odd)
* 2.5 Inverse Functions 5-33 (odd), 41, 43, 51-87 (odd)
* 3.1 Quadratic Functions 9-51 (odd)
* 3.4 Miscellaneous Equations 1-81 (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 1-47 (odd), 57
* 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 7-15 (odd), 33, 35, 39, 41
* 5.5 Inequalities and Systems of Inequalities 1-17 (odd), 31-41 (odd)