Math 101—Elementary Algebra 2— Spring 2020 (Mar. 30-May 15)

Section 201: MTWR 9:10-10:10 Swart 101

Instructor: Karen Klemm **Office Hours:** MTWR: 8:30-9:00, 10:20-10:50 or by appointment

Office: Swart 234 e-mail: klemm@uwosh.edu

Textbook: *Beginning and Intermediate Algebra* 5th Edition by Miller, O'Neill, and Hyde (This is an e-book with an ALEKS access code. An optional hard copy is also available to purchase.)

The class code for this course is **DNCLF-RCQAG**

Calculator: Calc Pal EAI-90 is required for this class.

Learning Objectives: This course provides an introduction to algebra, focused on critical thinking, problem solving and the communication of ideas to help students prepare for future coursework and future problem solving opportunities. Upon successful completion of the course, students are expected to have the ability to complete the following:

- Students will utilize basic concepts about the real number system, fundamental operations
 of arithmetic, simplifying or evaluating algebraic expressions, solving algebraic equations,
 properties and rules of exponents, adding, subtracting and multiplying polynomials,
 dividing a polynomial by a monomial, factoring polynomials, simplifying and evaluating
 rational expressions and solving rational equations.
- Students will utilize precise language regarding exponents including base, exponent, power, and reciprocal.
- Students will simplify exponential expressions and solve exponential equations utilizing the
 product rule, the quotient rule, the expanded power rule and the negative rule of
 exponents proficiently.
- Students will factor trinomials by grouping, simplify rational expressions and solve rational equations.
- Students will solve application exercises through a logical and sequential process that
 emphasizes preparing a plan of action, creating an equation, solving the equation,
 answering the original question including the correct units, checking that the answer is a
 plausible real number solution and rejecting non-plausible real number solutions such as
 negative distances, and/or extraneous solutions.

Evaluation:

Midterm Exam (30% of your final grade.)— Fri. Apr. 17 or Mon. Apr. 20, 2020 (Testing Center)

Final Exam (50% of your final grade)—Wednesday, May 13, 2020 (During Class)

Quizzes (10% of your final grade)—Quizzes will be scheduled throughout the term. Quizzes are a great way to check your preparedness for the exams. Your lowest quiz score will be dropped.

Online Homework with ALEKS (10% of your final grade)

Homework is administered online using ALEKS software. ALEKS is an adaptive homework system that will customize your homework questions to your specific needs. The homework grade is based on completion of each section's homework by the scheduled due date.

| Grading % Scale: | 92-100 A | 84-87 B | 75-79 C |
|------------------|----------|----------|---------|
| | 90-91 A- | 82-83 B- | 50-74 D |
| | 88-89 R+ | 80-81 C+ | ∩-49 F |

Course Content:

Math 101 covers the following sections in the textbook:

- Sections 4.1- 4.4 Solving Systems of Equations and Applications
- Sections 5.1-5.7 Exponents, Scientific Notation, and Polynomials
- Sections 6.1-6.5 Factoring Polynomials
- Sections 6.7-6.8 Solving Equations by Factoring and Applications

Daily Homework:

Homework assignments should be completed as soon as possible following the lecture for each topic. Organize your work on paper so you can review it later to prepare for quizzes and exams. Ask for help on problems that you are unable to work out. The ALEKS software includes explanations and tutorials to help you. It may be beneficial to read the section in the e-book before the lecture on each topic.

Note: Homework must be done outside of class. Internet enabled devices are not to be used during lectures, quizzes, or exams.

Developmental Math Lab:

Free walk in tutoring for Math 101 students is available in Swart Rm. 301. Students are strongly encouraged to solve all suggested homework exercises and to use the Swart 301 lab as a resource for assistance with any questions while completing homework exercises. A Swart 301 tutor schedule is posted at http://www.uwosh.edu/programs/developmentalmath.