ASC 094: Beginning Algebra Syllabus

Course Description

This course is a beginning level algebra course. Topics covered include fundamental operations, factoring, fractions, exponents, radicals and equations. This class does not satisfy college graduation requirements for math.

Credits: 3 Semester Credits
Prerequisit(s): None
Delivery Method: Online

Course Objectives/Student Outcomes

The students will be able to

- Perform basic algebraic operations using positive and negative numbers, fractions and exponents
- Demonstrate an understanding of terms and rules used in algebra
- Utilize problem solving strategies to solve problems
- Simplify expressions and solve equations & inequalities
- Factor using greatest common factor, factor by grouping and factor trinomials of the form $x^2 + bx + c$
- Plot points, graph linear equations and find the slope of a line
- Analyze and solve various types of math problems
- Gain the skills needed to participate in a college algebra course

Instructor: Connie Blair
Office: Admin 159
Office Hours: 8:00-9:00 Monday—Friday
Email: connie.blair@minotstateu.edu

Class Schedule: 11:00-12:15 TuTh (Memorial 228); 10:00-10:50 MWF (Main 106C)
Textbook: *Beginning and Intermediate Algebra by Tobey, Slater, Blair, and Crawford 4th edition* with MyMathLab access code (purchasing the physical book is optional)

Course Requirements

Learning algebra is an **investment of time**. Algebra is learned best by practicing, reflecting, and practicing some more. While understanding the steps in the topic explanations and video presentations is a good first step, to truly master the material you should be able to look at a problem, know how to proceed and be able to carry out the steps **WITHOUT ASSISTANCE**. The multiple attempts allowed during independent practice (including homework and practice tests) in MyMathLab provides opportunities for you to get to that point. Passing grades on chapter tests demonstrate that you have indeed mastered the skills taught.

Evaluation

Homework—10%   Homework will be submitted in MyMathLab and can be found under the homework tab in MyMathLab. You may work ahead, but each homework assignment must be completed by the due date listed. Grades of 80% or higher are required to proceed to

the subsequent homework assignment. There is no limit to the number of times you can complete a homework assignment.

Quizzes—20%   These mid-chapter quizzes will be taken in a proctored setting unless otherwise stated.

Tests—70%   There will be five tests throughout the semester. Your final exam may replace your lowest test score. **There will be no make-ups**.

Based on North Dakota state policy, students must earn a grade of C or higher to be promoted to the next level of college mathematics. Letter grades are assigned using the following scale

A 89.50%-100%

B 79.50%-89.49%

C 69.50%-79.49%

D 59.50%-69.49%

F 59.49% or lower

Course Outline (subject to change)
specific dates for your course can be found in the course calendar in MyMathLab.

Chapter 0: Pre-Algebra Review
    0.1: Simplifying Fractions
    0.2: Adding and Subtracting Fractions
    0.3: Multiplying and Dividing Fractions
    0.4: Using Decimals
    Quiz #1: Sections 0.1-0.4
    0.5: Percents, Rounding, and Estimating
    0.6: Using the Mathematics Blueprint for Problem Solving
    Chapter 0 Test
Chapter 1: Real Numbers and Variables
    1.1: Adding Real Numbers
    1.2: Subtracting Real Numbers
    1.3: Multiplying and Dividing Real Numbers
    1.4: Exponents
    1.5: The Order of Operations
    Quiz #2: Sections 1.1-1.5
    1.6: Using the Distributive Property to Simplify Algebraic Expressions
    1.7: Combining Like Terms
    1.8: Using Substitution to Evaluate Algebraic Expressions and Formulas
    1.9: Grouping Symbols
    Chapter 1 Test
Chapter 2: Equations, Inequalities, and Applications
    2.1: The Addition Principle of Equality
    2.2: The Multiplication Principle of Equality
    2.3: Using the Addition and Multiplication Principles Together
    2.4: Solving Equations with Fractions
    Quiz #3: Sections 2.1-2.4
    2.5: Translating English Phrases into Algebraic Expressions
    2.6: Using Equations to Solve Word Problems
    2.7: Solving Word Problems: The Value of Money and Percents
    2.8: Solving Inequalities in One Variable
    Chapter 2 Test
Chapter 5: Exponents and Polynomials
    5.1: The Rules of Exponents

Relationship to Campus Theme

This course introduces algebra skills that are used to solve problems in science, technology, business and social sciences. These problems will require critical thinking and interaction with other students.

Classroom Policies

- **ATTENDANCE:** The sequential nature of mathematics deems it necessary for students to attend class and *participate* on a regular basis, therefore one of the course requirements is regular attendance.
- **ASSIGNMENTS:** Students may work ahead; however, each assignment must be completed on or before the due date.
- **ELECTRONIC DEVICES:** Turn off or mute (not vibrate) cell phones, pagers, and other electronic devices. There is absolutely no cell phone or iPod use during class.

Academic Integrity

The academic community is operated on the basis of honesty, integrity and fair play. It is the expectation that all students, as members of the college community, adhere to the highest levels of academic integrity. This means that

- Students are responsible for submitting their own work. Student work must not be plagiarized.
- Students must not work together on graded assignments without authorization from the instructor or get help from people, technological resources, textbooks, notes, etc. on examinations.

Violations of academic principles such as cheating, plagiarism or other academic improprieties will be handled using the guidelines outlined in the Student Handbook.

Disabilities and Special Needs

If you have a disability for which you need accommodation, please speak with me immediately. If you have already met with Student Developmental personnel, please provide me with the information regarding your needs so that I can make the appropriate accommodations.