ASC 092: 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: Online

Office Hours: use the email tool within MyMathLab to communicate with the instructor. Course email messages will be checked daily, Monday through Friday.

Technical Problems: If you have a technical problem, contact the Distance Education office by calling 1-701-228-5479 or 1-888-918-5623 (toll-free) or the ND University System Moodle help desk: **1-866-940-0065**

Email: connie.blair@minotstateu.edu

Class Schedule: Online; homework and tests must be completed on or before due dates. Students may work ahead.

Textbook: *Beginning and Intermediate Algebra by Tobey, Slater, Blair, and Crawford 4th edition* with MyMathLab access code.

Order by e-mail: bookcell@dakotacollege.edu or call (701) 228-5458

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—50% 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.

Tests—50% Six tests are administered over the eight-week term. The Pre-assessment test is not calculated into the final grade. Students are allowed one attempt on each test. It is the student's responsibility to take tests on the dates they are available. **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
> 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
> 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
> 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**

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

- Regular participation is expected.
- Learning activities and evaluation will occur in the MyMathLab learning system and requires Internet connectivity.
- Test will be available for a limited period of time and have a 60 minute time-limit. Students should complete the tests without the use of notes or other material.

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, contact the Learning Center to request disability support services.

       Phone: (701) 228-5477
       Toll Free: 1-888-918-5623