Math 102: Intermediate Algebra Syllabus

Course Description

Properties of the real number systems, factoring, linear and quadratic functions, polynomial and rational expressions, inequalities,, systems of equations, and radicals.

Credits: 4 Semester Credits **Prerequisite(s)**: Appropriate placement score or C or better in ASC 92 **Delivery Method**: In class

Course Objectives/Student Outcomes

The student will

- Analyze and solve various types of intermediate algebra problems
- Utilize a graphing calculator for solving algebra problems
- Be prepared for College Algebra: Math 103

Instructor: Consuelo Devine Office: TBA Office Hours: One hour before start of class and/or arranged by student Phone: 701-240-1123 Email: consuelo.devine@dakotacollege.edu consuelo.devine@gmail.com Website: https://sites.google.com/site/devineclassroom/

Class Schedule: Tuesdays - 4:30 - 7:50 pm

Textbook: <u>Intermediate Algebra</u>: Dugopolski M., McGraw Hill, Seventh Edition (2012) ISBN: 978-0-07-338457-3

Calculator: TI-83, TI-83 Plus, or TI-84 Graphing Calculator required (no TI-89's allowed)

Course Requirements:

Learning algebra is an *investment of time*. Algebra is learned best by practicing, reflecting, and practicing some more. While understanding examples provided by the instructor and textbook is a good first step, to truly master the material you should be able to carry out the steps without assistance. The independent practice (homework) provides opportunities for you to get to that point. Passing grades on chapter tests demonstrate that you have indeed mastered the skills taught.

Tentative Course outline: This is a tentative plan and is subject to change in class.

Chapter 1 - The Real Numbers - all sections
Chapter 2 - Linear Equations and Inequalities in One Variable - all sections
Chapter 3 - Linear Equations and Inequalities in Two Variables - all sections
Chapter 4 - Systems of Linear Equations - sections 1-2
Chapter 5 - Exponents and Polynomials - all sections
Chapter 6 - Rational Expressions and Functions - sections 1-3, 5-6
Chapter 7 -Radicals and Rational Exponents - all sections
Chapter 8 - Quadratic Equations, Functions, and Inequalities - sections 1-4

There will be an exam after each chapter unless stated otherwise in class.

Grading: Approximately 30% of the grade will be calculated from the homework assignments and 70% from the chapter tests and final exam. A total point system evaluated with percentage grading system of:

100 - 89.5% - A	This is a pass/fail class.
89.4 - 79.5% - B	You will receive a Satisfactory for this
79.5 - 69.5% - C	class if you earn a 70% or higher.
69.4 - 59.5% - D	Under 70% will receive Unsatisfactory.
59.4% or lower- F	

You may use a binder with your notes/homework during the cumulative final exam.

General Education Goals/Objective

Goal 3: Demonstrates the ability to convert, calculate, and analyze a variety of mathematical problems

<u>Objective 1: Utilizes mathematical equations to solve problems</u> Skill 1: Solves equations and problems using the appropriate method

Objective 2: Applies practical application of mathematics to everyday life Skill 2: Defines and demonstrates the use of decimals, percentages, and fractions Skill 3: Solve word problems

Relationship to Campus Theme

The students will begin to see applications of algebra in nature, business, health, construction, etc. As they use the graphing calculator, they can solve real life problems with large numbers. 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. If you cannot attend class for whatever reason, please notify the instructor immediately.

- **ASSIGNMENTS:** Student may work ahead; however, each assignment must be completed on or before the due date to receive full credit.
- **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 cooperate on oral or written examinations or work together on evaluated assignments without authorization.

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 see 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.