Dakota College at Bottineau Course Syllabus

Course Prefix/Number/Title: 102 Intermediate Algebra, 4 Credits

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

Course Objectives:

- 1. To understand how to analyze and solve various types of math problems.
- 2. To understand the use and application of a hand-held calculator on algebra problems.
- 3. To introduce the students to a tutoring program on the computer.
- 4. To prepare the student for college algebra.

Instructor: Betty Rehfuss

Office: Nelson Science Center 112

Office Hours: 11:00-12:00 and 3:00-4:00 MTWRF

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Lecture/Lab Schedule: 1:00-150 MWF and 2:00-2:50 MWF

Textbook(s): Beginning and Intermediate Algebra by Tobey, Slater, Blair, and Crawford

Course Requirements: Evaluation Homework, quizzes, and tests to measure retention of problem solving and theory.

Grading Procedure

A = 90-100% B = 80-89% C = 70-79% D = 60-69% F=below 60%

Tentative Course Outline:

- 1. Graphing and Functions (10 days)
- 2. Systems of Linear Equations and Inequalities (10 days)
- 3. Factoring (10 days)
- 4. Rational Expressions and Equations(10 days)
- 5. Rational Exponents and Radicals (10 days)
- 6. Quadratic Equations and Inequalities (10 days)

General Education Goals/Objectives:

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

Objective 1: Utilizes mathematical equations to solve problems

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: Solves word problems

Relationship to Campus Theme: The student will begin to see applications of algebra in nature, business, health, construction, etc. As they use the calculator, they can solve real life problems with large numbers. These problems will require critical thinking and interaction with other students.

Classroom Policies: The sequential nature of mathematics deems it necessary for students to attend class on a regular basis. Therefore one of the course requirements is regular attendance.

Academic Integrity: Each student will be required to do his or her own work on tests.

Disabilities and Special Needs: Accommodations will be provided on an individual basis.