

## **Dakota College at Bottineau Course Syllabus**

### **Course Prefix/Number/Title:**

Math 103 College Algebra, 4 credits

### **Course Description:**

Linear and quadratic equations, radicals, exponents and logarithms, rational expressions, systems of linear equations, functional notation, sequences, and series.

### **Course Objectives:**

The student will be introduced to the topics above which require certain techniques for solutions. We will develop ideas and methods for applying these techniques leading to a solution or resolution of the question. During the course the student will be exposed to the use and application of the graphics calculator in the appropriate areas.

### **Instructor:**

Scott Johnson

### **Office:**

Nelson Science Center 110

### **Office Hours:**

TR 1:00-2:00

### **Phone:**

(701)-228-5474

### **Email:**

scott.johnson@dakotacollege.edu

### **Lecture:**

MTWF 11:00-11:50  
Nelson Science Center 104

### **Textbook/Calculator:**

College Algebra by James Stewart, Lothar Redlin, Saleem Watson, Brooks/Cole, 2004.  
TI-83 or TI-84 Series

**Course Requirements:**

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. Grades will be based on five exams using the following scale.

A = 90-100%

B = 80-89%

C = 70-79%

D = 60-69%

F= 59-0%

**Tentative Course Outline:**

Real Numbers, operations and properties

Linear Equations and Inequalities

Polynomials: 1. Operations 2. Factoring

Rational expressions and Polynomial division

Rational Exponents and Radicals

Quadratics and the Quadratic Formula

Graphing Linear Equations and Inequalities

Functions; linear, quadratic, polynomial, exponential, logarithmic

Linear systems and matrices

Sequences and Series

**General Education Goals/Objectives:**

Goal 2: Demonstrates knowledge and application of technology

Objective 2: Uses electronic resources for course related assignments and information

Skill 1: Selects appropriate program on the graphing calculator to solve problems

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

Objective 1: Utilizes mathematical equations to solve problems

Skill1: Solves equations and problems using the appropriate method

Objective 2: Applies practical application of mathematics to everyday life

Skill3: Solves word problems

**Relationship to Campus Theme:**

Mathematics 103 emphasizes technology through the use of graphic calculators and nature through wildlife population modeling.

**Classroom Policies:**

Please refrain from any behavior that would disrupt the class. Cell phones can only be used in emergency situations and they must be turned to vibrate. The academic environment is an open and harassment free environment. Participation is encouraged.

**Academic Integrity:**

If there is evidence of cheating on an exam the student will receive an F on the respective exam.

**Disabilities and Special Needs:**

Please inform instructor of any special needs during the first week of class