

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

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

Math 103 College Algebra, 4 credits

### **Course Description:**

Relations and functions, equations and inequalities, complex numbers; polynomial, rational, exponential and logarithmic functions and systems of equations.

### **Course Objectives:**

- 1.Students will demonstrate an understanding of relations and functions.
- 2.Students will be able to work with equations and inequalities.
- 3.Students will be able to work with complex numbers.
- 4.Students will be able to work with rational and polynomial expressions.
- 5.Students will be successful in working with exponential and logarithmic functions.
- 6.Students will be able to solve systems of linear equations.
- 7.Students will create and use matrices to solve systems of equations.

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 graphing calculator in the appropriate areas.

### **Instructor:**

Scott Johnson

### **Office:**

Nelson Science Center 110

### **Office Hours:**

MWF 2:00-3:00

### **Phone:**

(701)-228-5474

### **Email:**

scott.johnson@dakotacollege.edu

**Lecture:**

MTWF 10:00, NSC 103

**Textbook/Calculator:**

College Algebra 5e by James Stewart, Lothar Redlin, Saleem Watson, Brooks/Cole, 2009.  
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 exams using the following scale. Exams cannot be made up without special permission from the professor. FINAL EXAM WILL BE GIVEN DURING THE SCHEDULED TIME.

A = 90-100%

B = 80-89%

C = 70-79%

D = 60-69%

F = 59-0%

**General Education Goals/Objectives:****Competency/Goal 3: Demonstrates the ability to solve a variety of mathematical problems****Learning Outcome 1: Utilizes mathematical skills to solve problems**

- Performance Indicator 1: Solves problems using an appropriate method
- Performance Indicator 2: Produces graphs

**Learning Outcome 2: Employs Critical thinking skills to solve problems**

- Performance Indicator 1: Interprets research information
- Performance Indicator 2: Writes conclusions from information collected
- Performance indicator 3: Utilizes pertinent information to provide reasonable answers to word problems

**Relationship to Campus Theme:**

Mathematics 103 emphasizes technology through the use of graphic calculators and graphing applications.

**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:**

If you have a disability for which you will need accommodation, contact the Learning Center to request disability support services.  
Thatcher Hall 1104; phone 701-228-5477 or toll free 1-888-918-5623.

**Student Email Policy:**

Dakota College at Bottineau is increasingly dependent upon email as an official form of communication. A student's campus-assigned email address will be the only one recognized by the campus for official mailings. The liability for missing or not acting upon important information conveyed via campus email rests with the student.