

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

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

Math 107 Precalculus, 4 credits

### **Course Description:**

Trigonometry functions, solving triangles, analytic geometry, exponential and logarithmic functions, theory of equations, sequences, series and induction.

### **Course Objectives:**

The student will be introduced to the topics listed above which require certain techniques for solutions. We will develop the ideas and methods for applying these techniques leading to a solution or resolution of the question. During the course the application of the graphic calculator will be emphasized.

### **Instructor:**

Scott Johnson

### **Office:**

Nelson Science Center 110

### **Office Hours:**

MWF 9:00-10:00

### **Phone:**

(701)-228-5474

### **Email:**

scott.johnson@dakotacollege.edu

### **Lecture:**

MTWF 10:00-10:50  
Nelson Science Center 103

### **Textbook/Calculator:**

Precalculus by Faires and DeFranza, 4th edition Brooks/Cole Publishing,  
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 and selected homework assignments using the following scale.

A = 90-100%

B = 80-89%

C = 70-79%

D = 60-69%

F= 59-0%

**Tentative Course Outline:**

1. Functions
2. Algebraic Functions
3. Trigonometric Functions
4. Exponential and Logarithmic Functions
5. Conic Sections, Polar Coordinates, and Parametric Equations

**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 107 emphasizes technology through the use of graphic calculators and nature through 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 or assignment.

**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.