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

# **Course Prefix/Number/Title:** Math 165 Calculus I, 4 credits **Course Description:** Limits, continuity, differentiation, Mean Value Theorem, integration, Fundamental Theorem of Calculus, and applications. **Course Objectives:** 1. Students will be able to work with functions, their derivatives, and their applications as evidenced by classroom activities and objective tests 2. Students will be able to work with definite integrals and their applications as evidenced by classroom activities and objective tests 3. Students will be able to work with the notion of limits and their applications as evidenced by classroom activities and objective tests 4. Students will be able to work with continuity as evidenced by classroom activities and objective tests 5. Students will be able to work with the Mean Value Theorem and its applications as evidenced by classroom activities and objective tests 6. Students will demonstrate an understanding of how to solve problems using Fundamental Theorem of Calculus as evidenced by classroom activities and objective tests Instructor: Scott Johnson Office: Nelson Science Center 110 Office Hours: MWF 2:00-3:00 Phone: (701)-228-5474 Email: scott.johnson@dakotacollege.edu

MTWF 9:00

Lecture:

#### Textbook/Calculator:

Calculus 10e by Ron Larson and Bruce Edwards, Cengage, 2014, Graphing calculator 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. 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

<u>Learning Outcome 1: Utilizes mathematical skills to solve problems</u>

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

#### <u>Learning Outcome 2: Employs Critical thinking skills to solve problems</u>

- 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 165 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.