



## **Dual Credit MATH 103 – College Algebra**

Spring 2022

4 credits

Instructor: Patsy Schlosser, Edgeley High School

### **Course Description:**

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

**Pre-/Co-requisites:** appropriate ACT or Acuplacer score

### **Course Objectives:**

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

**Instructor:** Patsy Schlosser

**Office:** Edgeley High School Room 48

**Office Hours:** 8:15-3:45 M-F

**Phone:** 701-493-2292

**Email:** patsy.schlosser@k12.nd.us

**Lecture/Lab Schedule:** M-F at 2:20-3:08

**Textbook(s):** College Algebra: A Concise Approach by Sisson through Hawkes Learning System

**Course Requirements:** Math is learned best by practice, reflect, and practice some more. Understanding the examples provided by the instructor, ebook, and online resources is a good first step. However, to truly know the material, you should be able to look at a problem, know how to proceed, and carry out the steps WITHOUT ASSISTANCE. The independent practice problem provides opportunities for you to get to that point. Passing grades on tests demonstrate that you have learned the skills taught.

**Tentative Course Outline:**

Number Systems and Fundamental Concepts of Algebra  
Equations and Inequalities of One Variable  
Linear Equations and Inequalities of Two Variables  
Relations, Functions, and Their Graphs  
Polynomial Functions  
Exponential and Logarithmic Functions  
Systems of Equations and Matrices

**General Education Competency/Learning Outcome(s) OR CTE Competency/Department Learning Outcome(s)**

Learning Outcome 1: Utilizes mathematical skills to solve problems  
Learning Outcome 2: Employs critical thinking skills to solve problems

**Relationship to Campus Theme:**

Mathematics 103 emphasizes technology through the use of graphing calculators through modeling.

**Classroom Policies:**

Same as classroom policies for Edgeley High School classes. Please refrain from any behavior that would disrupt the class. The academic environment is an open and harassment free environment. Participation is encouraged.

**Grading:**

30% of the grade will be taken from the online lessons through the Hawkes Learning System. Each lesson that the student certifies on will count as 100% on that lesson. Students have unlimited attempts to certify on a particular lesson. If certification is not done by the due date, 20% will be taken off for each additional day late. 70% of the course grade will come from paper pencil chapter tests taken in class.

**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.

**Academic Integrity:**

According to the DCB Student Handbook, students are responsible for submitting their own work. Students who cooperate on oral or written examinations or work without authorization share the responsibility for violation of academic principles, and the students are subject to disciplinary action even when one of the students is not enrolled in the course where the violation occurred. The Code detailed in the Academic Honesty/Dishonesty section of the Student Handbook will serve as the guideline for cases where cheating, plagiarism or other academic improprieties have occurred.

**Disabilities and Special Needs:**

Students with designated disabilities and special needs will receive any modifications mentioned in their documentation.

**Title IX:**

Dakota College at Bottineau (DCB) faculty are committed to helping create a safe learning environment for all students and for the College as a whole. Please be aware that all DCB employees (other than those designated as confidential resources such as advocates, counselors, clergy and healthcare providers) are required to report information about such discrimination and harassment to the College Title IX Coordinator. This means that if a student tells a faculty member about a situation of sexual harassment or sexual violence, or other related misconduct, the faculty member must share that information with the College's Title IX Coordinator. Students wishing to speak to a confidential employee who does not have this reporting responsibility can find a list of resources on the DCB Title IX webpage.