Course Prefix/Number/Title
MATH 103: College Algebra Online

Number of Credits:
4 credits

Course Description:
Throughout this intensive four credit course you will be asked to complete daily homework assignments, chapter quizzes, as well as a mid-term and final exam. Topics covered will include relations and functions, equations and inequalities, complex numbers; polynomial, rational, exponential and logarithmic functions and systems of equations. This course will utilize the MyMathLab system for homework and quizzes. Tests will be taking in MyMathLab with the aid of a proctor. While we will have no direct contact, I am here to help! Utilize the "help me solve this!" feature in MyMathLab when you are stuck on a question—or email me when you are finding a section or chapter particularly difficult. You are not in this alone!

Pre-/Co-requisites:
Math 093 or placement test.

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

Instructor:
Mrs. Connie Blair

Office:
Online!

Office Hours:
Please email and/or send me a message in Blackboard with any and all questions. I check these messages periodically throughout the week, but please allow up to 48 hours for a response (although I try to respond much more quickly than this!).

Phone:
If you are having technical difficulties, please contact the Distance Education Office at (701) 228-2479 or 1-888-918-5623. If you have questions about the material, please call me during reasonable hours at (512) 608-2842.

Email:
connie.blair@ndus.edu

Lecture/Lab Schedule:
You will be asked to complete an average of eight assignments per week, preferably two a day for four days. You must make an 80% or better on an assignment to move onto the next assignment.

Textbook(s):
MyMathLab access code with access to *College Algebra: Graphs and Models*. 6th edition by Bittinger, Beecher, Ellenbogen, and Penna.
Order by email at bookstore@dakotacollege.edu or by calling (701) 228-5458

Course Requirements:
Learning algebra is an ***investment of time***. Algebra is learned best by practicing, reflecting, and practicing some more. While understanding the steps in the topic explanations and video presentations is a good first step, to truly master the material you should be able to look a problem, know how to proceed and be able to carry out the steps **WITHOUT ASSISTANCE**. The multiple attempts allowed during independent practice (including homework and chapter quizzes) in MyMathLab provides opportunities for you to get to that point. Passing grades on the mid-term and final exam demonstrate that you have indeed mastered the skills taught.

A graphing calculator will be needed for the course. You may purchase a graphing calculator or use www.desmos.com for the graphing portions of this course.

Tentative Course Outline:
Chapter 1: Graphs, Functions, and Models
Chapter 2: More on Functions
Chapter 3: Quadratic Functions and Equations; Inequalities
Mid-Term Exam
Chapter 4: Polynomial Functions and Rational Functions
Chapter 5: Exponential Functions and Logarithmic Functions
Chapter 6: Systems of Equations and Matrices
Final Exam

General Education Competency/Learning Outcome(s) OR CTE Competency/Department Learning Outcome(s):
Competency/Goal 3: Demonstrates the ability to solve a variety of mathematical problems
Learning Outcome 1: Utilizes mathematical skills to solve problems
Learning Outcome 2: Employs critical thinking skills to solve problems

Relationship to Campus Focus:
The student will use algebra to solve application problems in nature, economics, science,

psychology, etc. The graphing calculator will be used to represent solutions visually and to find answers to complex problems.

Classroom Policies:

- Regular participation is expected. This includes participation in MyMathLab, Blackboard discussions, and responding to emails from the instructor in a timely manner.
- Learning activities and evaluation will occur in the MyMathLab learning system and requires internet connectivity.
- Students must use ProctorU to take their mid-term and final exam. The cost is $25 per two hour exam. The exams must be taken during the exam window stated in the course calendar.
- There will be untimed quizzes at the end of each chapter. The mid-term and final exam each have a two-hour time limit.

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 or Special Needs:
Students with disabilities or special needs (academic or otherwise) are encouraged to contact the instructor and Disability Support Services.

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.

Key Considerations for Academic Success

- Be an active participant in class every day. Use the e-mail tool to ask your classmates questions and don't forget to utilize your instructor!
- Balance school with the rest of your life. Plan enough study time to do well in this class. You can expect to spend 2-3 hours on each homework assignment.
- Use good study habits and get academic assistance at the first warning sign! If you are struggling with a topic or homework assignment don't hesitate to *ask someone*!
- Understand the impact of dropping classes both academically and financially.
- Don't put off for tomorrow what you can do today.

Evaluation

Homework: 10%

Section Homework will be submitted after each section in MyMathLab and can be found under the homework tab in MyMathLab. You may work ahead, but each homework assignment should be completed by the due date listed in order to stay on track in the course. Grades of 80% or higher are required to proceed to the subsequent homework assignment. There is no limit to the number of times you can complete a homework assignment and homework assignments have a final due date of midnight the night before the final exam.

Discussion Boards: 10%

There will be one discussion required per chapter. You must post twice and comment at least once.

Chapter Quizzes: 20%

Chapter quizzes are to be completed at the end of each chapter. You will get two chances per problem on each chapter quiz.

Mid-Term and Final Exam: 60%

Two proctored tests are administered over the sixteen-week term (eight weeks if this is a summer course). Students are allowed one attempt on each test and will need to unilitze ProctorU to take the test. Scheduling tests with ProctorU should be taken at least ONE WEEK prior to the proctored exam. You can find information on ProctorU in Blackboard. **There will be no make ups on the mid-term and final exam**.

Letter Grades

Letter grades are assigned using the following scale:

A 89.50%-100%
B 79.50%-89.49%
C 69.50%-79.49%
D 59.50%-69.49%
F 59.49% or lower

DAKOTA COLLEGE AT BOTTINEAU

COURSE SYLLABUS

August 2021

Calendarpedia
Your source for calendars

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
	First day of classes! Complete Blackboard Discussion, MML Orientation and Syllabus Quiz		Chapter 1.1: Inrdocution to Graphing	Chapter 1.2: Functions and Graphs		
29	30	31	1	2	3	4
	Chapter 1.3: Linear Functions, Slope, and Applications	Chapter 1.4: Equations of Lines and Modeling				

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COURSE SYLLABUS

September 2021

Calendarpedia
Your source for calendars

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
29	30	31	1	2	3	4
			Chapter 1.5: Linear Equations, Functions, Zeros, and Applications	Chapter 1.6: Solving Linear Inequalitites	**Syllabus Quiz and BlackBoard introduction due for full credit**	
5	6	7	8	9	10	11
	Labor Day	Study for Chapter 1 Quiz **Chapter 1 discussion due at midnight**	Chapter 1 Quiz due at midnight for full credit	Chpater 2.1: Increasing, Decreasing, and Piecewise Functions; Applications		
12	13	14	15	16	17	18
	Chapter 2.2: The Algebra of Functions	Chapter 2.3: The Composition of Funcions	Chapter 2.4: Symmetry	Chapter 2.5: Transformation s		
19	20	21	22	23	24	25
	Chapter 2.6: Variation and Applications	Study for Chapter 2 Quiz; **Chapter 2 Discussion due at midnight**	Chapter 2 Quiz due at midnight for full credit	Chapter 3.1: The Complex Numbers		
26	27	28	29	30	1	2
	Chapter 3.2: Quadratic Equations, Functions, Zeros, and Models	Chapter 3.3: Analyzing Graphs of Quadratic Functions	Chapter 3.4: Solving Rational Equations and Radical Equations	Chapter 3.5: Solving Equations and Inequalities with Absolute Value		

DAKOTA COLLEGE AT BOTTINEAU

COURSE SYLLABUS

October 2021

Calendarpedia
Your source for calendars

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26	27	28	29	30	1	2
3	4	5	6	7	8	9
	Study for Chapter 3 Quiz; **Chapter 3 Discussion due at midnnight**	Chapter 3 Quiz due at Midnight for Full Credit	Study for mid-term	Study for mid-term	Study for mid-term	
10	11	12	13	14	15	16
	Columbus Day	Mid-term Exam window	Mid-term Exam window	Mid-Term Exam due at 5:00 PM CST	Mid-Term Grades Due	
17	18	19	20	21	22	23
24	25	26	27	28	29	30
	Chapter 4.1: Polynomial Functions and Modeling	Chapter 4.2: Graphing Polynomial Functions	Chapter 4.3: Polynomial Division, The Remainder Theorem, and the Factor Theorem	Chapter 4.4: Theorems about Zeros of Polynomial Functions		
31	1	2	3	4	5	6

November 2021

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
31	1	2	3	4	5	6
	Chapter 4.5: Rational Functions	Chapter 4.6: Polynomial Inequatliies and Rational Inequalities	Study for Chapter 4 Quiz; **Chapter 4 disucssion due at midnight**	Chapter 4 Quiz due at midnight for full credit		
7	8	9	10	11	12	13
	Chapter 5.1: Inverse Functions	Chapter 5.2: Exponential Funcions and Graphs	Chapter 5.3: Logarithmic Functions and Graphs	Veterans Day		
14	15	16	17	18	19	20
	Chapter 5.4: Properties of Logarithmic Functions	Chapter 5.5: Solving Exponential Equations and Logarithmic Equations	Chapter 5.6: Applications and Models; Growth and Decay; Compound Interest	Study for Chapter 5 Quiz; **Chapter 5 Discussion due at Midnight**		
21	22	23	24	25	26	27
	Chapter 5 Quiz due at midnight for full credit			Thanksgiving Day		
28	29	30	1	2	3	4
	Chapter 6.1: Systems of Equations in Two Variables	Chapter 6.2: Systems of Equations in Three Variables				

December 2021

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
28	29	30	1	2	3	4
			Chapter 6.3: Matrices and Systems of Equations	Chapter 6.4: Matrix Operations		
5	6	7	8	9	10	11
	Chapter 6.5: Inverse of Matrices	Chapter 6.6: Determinants and Cramer's Rule	Study for Chapter 6 Quiz; Chapter 6 Discussion due at midnight	Chapter 6 Quiz due at midnight for full credit	Study for Final Exam	Study for Final Exam
12	13	14	15	16	17	18
Study for Final Exam	Final Exam Window	Final Exam Window	Final Exam Window	Final Exam due at 5:00 PM CST		
19	20	21	22	23	24	25
					Christmas Day (observed)	Christmas Day
26	27	28	29	30	31	1
					New Year's Day (observed)	New Year's Day