# Welcome to College Algebra Online! 

## MATH 103 Syllabus—Fall 2014



Instructor: Connie Blair
Office: Online! Or on the Minot Campus—Admin 159
Contact: connie.blair@minotstateu.edu or (701) 858-4339
Office Hours: use the email tool within MyMathLab. Email messages will be checked daily, Monday through Friday. (NOTE: It is much easier to contact me via e-mail than by Moodle Mail!)

Technical Problems: If you have a technical program, contact the Distance Education office by calling (701) 228-5479 or 1-888-918-5623 or the ND University System Moodle help desk at 1-866-940-0065

Class Schedule: Online; homework and tests must be completed on or before the due date listed on the course calendar. You may, however, work ahead!

Pre-requisites: MATH 102: Intermediate Algebra with a "C" or better, or a designated math placement test score.

## Welcome to College Algebra online! This intensive four credit course will span

 sixteen weeks. Throughout this course you will be asked to complete daily homework assignments (Monday-Thursday), chapter tests, as well as a mid-term and final exam. Topics covered will include linear and quadratic equations, radicals, exponents and logarithms, rational expressions, system of linear equations, functional notation, graphing sequences, and series. This course will utilize the MyMathLab system for homework and quizzes. Tests will be taken in MyMathLab via Tegrity Test Proctoring. 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 e-mail me when you are finding a section or chapter particularly difficult. You are not in this alone!
## Course Objectives/Student Outcomes

Students will learn techniques for solving problems related to the topics listed above. Students will develop ideas and methods for applying techniques to find solutions or resolutions to questions requiring algebraic reasoning. A graphing calculator (TI-83 or TI-84) may be utilized when appropriate.


## Learning Environment

This course utilizes an online learning system called MyMathLab. Through MyMathLab, students will have access to worked out explanations, textbook lessons, and video demonstrations. Students may also utilize the e-mail tool to ask classmates and the instructor questions about assignments.


## Textbook

MyMathLab access code with access to College Algebra: Graphs and Models. $5^{\text {th }}$ edition by Bittinger, Beecher, Ellenbogen, and Penna.

Order by e-mail 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 at 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 practice tests) in MyMathLab provides opportunities for you to get to that point. Passing grades on chapter tests demonstrate that you have indeed mastered the skills taught.

## Evaluation

## Homework-40\%

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 must be completed by the due date listed. 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.
Homework Tests are to be completed at the end of each chapter and each question has a maximum of two attempts. While you may work ahead, you must complete a homework test by the due date listed. You will receive a $30 \%$ penalty for any homework test that is not completed by midnight on the due date.

## Tests-60\%



Two proctored tests are administered over the eightweek term, a mid-term and a final exam. Students are allowed one attempt on each test and will be using Tegrity Test Proctoring for each of these exams. Check the course calendar in Moodle for the dates of these exams. There will be no make-ups.

> NOTE: If you fail to use Tegrity Test Proctoring during either your mid-term or final exam your score will be changed to a zero as you must take these exams in a proctored setting. If you have any questions about the Tegrity system, please ask me at least one week prior to taking the mid-term.

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

## Relationship to Campus Theme

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.

## 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
- Skill 1: Solves equations and problems using the appropriate method
- Objective 2: Applies practical application of mathematics to everyday life
- Skill 3: Solves word problems


## 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. Therefore, you MUST use your school e-mail address to create your MyMathLab account!


## Class Policies

- Regular participation is expected.
- Learning activities and evaluation will occur in the MyMathLab learning system and requires Internet connectivity.
- Students must use Tegrity Test Proctoring to take their mid-term and final exam. The exams must be taken on the dates stated in the course calendar.

NOTE: If you fail to use Tegrity Test Proctoring during either your mid-term or final exam your score will be changed to a zero as you must take these exams in a proctored setting. If you have any questions about the Tegrity system, please ask me at least one week prior to taking the mid-term.

- Tests will be available for a limited period of time. The maximum time for the midterm is 1 hour and the maximum time for the final exam is 2 hours.


## Academic Integrity

The academic community is operated on the basis of honesty, integrity and fair play. It is the expectation that all students, as members of the college community, adhere to the highest levels of academic integrity. This means that

- Students are responsible for submitting their own work. Student work must not be plagiarized.
- Students must not work together on graded assignments without authorization from the instructor or get help from people, technological resources, textbooks, notes, etc. on examinations.
Violations of academic principles such as cheating, plagiarism or other academic improprieties will be handled using the guidelines outlined in the Student Handbook.


## Disabilities and Special Needs

If you have a disability for which you need accommodation, contact the Learning Center to request disability support services.

Phone: (701) 228-5477
Toll Free: 1-888-918-5623

## 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.


Smarthinking is an online tutoring service that includes tutorials and live chat twenty-four hours a day, seven days a week! To access Smarthinking, login to Moodle and click on the DCB Learning Center link. Then locate Resources and Technology, and click on the Smarthinking link. If you have questions about Smarthinking, please contact the distance education office at 1-888-918-5623.
The Khan Academy has an extensive library of content, including interactive challenges, assessments, and videos that students can access from any computer with access to the internet. If you're stuck on a topic, visit www.khanacademy.org and find a video and an exercise to help you out!

MATH 103 Due Dates

| August 2014 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 | 29 | 30 |
| 31 | MyMathLab Overview, Tegrity Practice Assignment, and Syllabus Quiz | HW R1: The Real Number System | HW R2: Exponents and Order of Operations | HW R3: Add, Subtract, and Multiply Polynomials |  |  |
| September 2014 |  |  |  |  |  |  |
|  | $1$ | $2$ <br> HW R4: Factoring | 3 <br> HW R5: The Basis of Equation Solving *last day to add a class and drop a class with $100 \%$ refund* | 4 <br> HW R6: Rational Expressions | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|  | HW R7: Radical Notation and Rational Exponents | Chapter R Homework Test | HW 1.1: Introduction to Graphing | HW 1.2: Functions and Graphs |  |  |
| 14 | 15 <br> HW 1.3: Linear Functions, Slope, and Applications | 16 <br> HW 1.4: Equations of Lines and Modeling | 17 <br> HW 1.5: Linear Equations, Functions, Zeros \& Applications | 18 <br> 1.6: Solving Linear Equations | 19 | 20 |
| 21 | 22 <br> HW 6.1: Systems of Equations in Two Variables | 23 <br> HW 6.7: Graphs of Linear Inequalities | 24 *Study for Test* | 25 <br> Chapter 1\&6 Homework Test | 26 | 27 |
| 28 | 29 <br> HW 2.1: <br> Increasing, Decreasing, \& Piecewise Functions | 30 <br> HW 2.2: The Algebra of Functions |  |  |  |  |
| Jul-Aug 2014 | Printfree.com Printable Calendars |  |  |  |  | Sep-Oct 2014 |


| October 2014 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|  |  |  | HW 2.3: The Composition of Functions | $2$ <br> HW 2.4: Symmetry | 3 | 4 |
| 5 | $6$ <br> HW 2.5: <br> Transformations | $7$ <br> 2.6: Variation and Applications | $8$ <br> *Study for Test* | 9 <br> Chapter 2 Homework Test | 10 | 11 |
| 12 | $13$ <br> *Mid-Term Review* | $14$ <br> Mid-Term Exam Window | $15$ <br> Mid-Term Exam Window | $16$ <br> Mid-Term Exam Window | $17$ <br> Mid-Terms due by 3:00 PM <br> *Mid-Term grades due* | 18 |
| 19 | $20$ <br> HW 3.1: The Complex Numbers | 21 <br> HW 3.2: Quadratic Equation, Functions, Zeros \& Models | 22 <br> HW 3.3: Analyzing Graphs of Quadratic Functions | 23 <br> HW 3.4: Solving Rational \& Radical Equations | 24 | 25 |
| 26 | 27 <br> HW 3.5: Solving Equations \& Inequalities with Absolute Value | $28$ <br> *Study for Test* | $29$ <br> Chapter 3 Homework Test | 30 <br> HW 4.1: Polynomial Functions and Modeling | 31 |  |
| November 2014 |  |  |  |  |  |  |
|  |  |  |  |  |  | 1 |
| 2 | 3 <br> HW 4.2: Graphing Polynomial Functions | 4 <br> HW 4.3: Polynomial Division | 5 <br> HW 4.4: <br> Theorems about Zeros of Polynomial Functions | 6 <br> HW 4.5: Rational Functions | 7 | 8 |
| 9 | 10 <br> HW 4.6: <br> Polynomial and Rational Inequalities | $11$ | $12$ <br> *Study for Test* | 13 <br> Chapter 4 Homework Test | 14 | 15 |
| 16 | $17$ <br> HW 5.1: Inverse Functions | 18 <br> HW 5.2: Exponential Functions and Graphs | 19 <br> HW 5.3: Logarithmic Functions and Graphs | 20 <br> HW 5.4: Properties of Logarithmic Functions | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 | HW 5.5: Solving Exponential and Logarithmic Equations | HW 5.6: Applications and ModelsGrowth and Decay; Compound Interest | *Study for Test* |  | Thanksgiving break-no classes! |  |
| Sep-Oct 2014 | Printfree.com Printable Calendars |  |  |  |  | Nov-Dec 2014 |

MINOT CAMPUS

| December 2014 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|  | $1$ <br> *Study for Test* | $2$ <br> Chapter 5 Homework Test | $3$ <br> *Study for Final Exam* | 4 *Study for Final Exam* | 5 | 6 |
| 7 | $8$ <br> *Study for Final Exam* | $9$ <br> *Study for Final Exam* | $10$ <br> *Study for Final Exam* | $11$ <br> *Study for Final Exam* | 12 | 13 |
| 14 | $15$ <br> Final Exam Window | $16$ <br> Final Exam Window | $17$ <br> Final Exam Window | $18$ <br> Final Exam due by 5:00 pm | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 | 31 |  |  |  |
| January 2015 |  |  |  |  |  |  |
|  |  |  |  | $1$ | 2 | 3 |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | $12$ <br> *Classes begin after 4:00 pm* | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| Nov-Dec 2014 | Printfree.com Printable Calendars |  |  |  |  | Jan-Feb 2015 |

