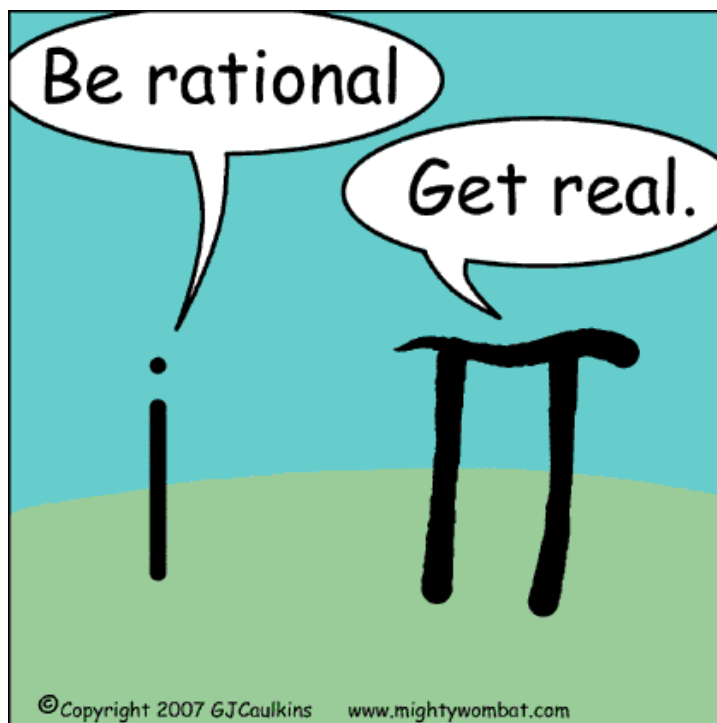


# Welcome to Intermediate Algebra!

## MATH 102 Syllabus—Fall 2014



**Instructor:** Connie Blair

**Office:** Administration 159

**Contact:** [connie.blair@minotstateu.edu](mailto:connie.blair@minotstateu.edu) or (701) 858-4339

**Office Hours:** Drop-In or By Appointment

**Technical Problems:** If you have a technical program with MyMathLab, please visit <http://www.pearsonmylabandmastering.com/northamerica/mymathlab/students/support/>.

**Class Schedule:** MTuWTh 1:00-1:50 in Old Main Room 308

**Prerequisites:** Appropriate placement score or a “C” or better in ASC 094: Beginning Algebra

**Welcome to Intermediate Algebra!** This intensive four credit course will span sixteen weeks. This class does *not* satisfy college graduation requirements for math! Throughout this course you will be asked to complete daily homework assignments (Monday—Thursday), quizzes, chapter tests, and a final exam. Topics covered will include properties of the real number systems, factoring, linear and quadratic functions, polynomial and rational expressions, inequalities, systems of equations, exponents, and radicals. This course will utilize the MyMathLab system for homework, while quizzes and test will be taken on paper in the classroom. If you do not understand something in or out of class, don't forget that ***you are not in this alone!*** Stop me in class when you do not understand, utilize the "help me solve this!" feature in MyMathLab when you are stuck on a question, stop by my office if you would like to go over something in more detail, create a study group with your classmates, and/or ask for a tutor. This class will be challenging, but ***YOU CAN DO IT!***



## Course Objectives

As an active participant in this class, you will learn techniques to analyze and solve various types of intermediate algebra problems and utilize a graphing calculator to solve algebra problems, when necessary. The following graphing calculators are approved for this course: TI-83 or TI-84. These can be purchased on your own or in the MSU bookstore. Calculators haven't changed much in the last twenty years, so don't hesitate to purchase a used one.



## Learning Environment

As an active participant in this class, you will be attending class for four hours each week. These classes will utilize both direct instruction and collaborative learning. 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.

***Note:*** While you do have access to helpful learning tools in MyMathLab, these tools are not a replacement for classroom instruction and participation. **Expect to attend every class!**



## Textbook

Beginning and Intermediate Algebra by Tobey, Slater, Blair, and Crawford; 4th edition; Pearson.

**NOTE:** You have the option of purchasing the online-only text or the textbook with the online component. I suggest you use the free two-week trial of the online textbook before making your final decision. You can purchase your textbook or online access code at the MSU bookstore.



## 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 quizzes and chapter tests demonstrate that you have indeed mastered the skills taught.



## Evaluation

### Homework—15%

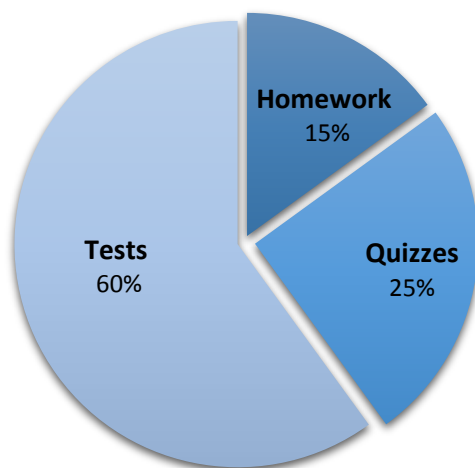
Homework can be found under the homework tab in MyMathLab. You may work ahead, but each homework assignment must be completed by the due date listed otherwise there will be a 30% penalty. Grades of 80% or higher are required to proceed to the subsequent homework assignment. There is no limit to the number of times you can complete a homework assignment.

### Quizzes—25%

Mid-chapter quizzes will be taken on paper in the classroom, unless otherwise stated. Missed quizzes must be made up within three business days.

### Tests—60%

There will be five tests throughout the semester. Your final exam may replace your lowest test score. **There will be no make-ups.**



Based on North Dakota state policy, students must earn a grade of C or higher to be promoted to the next level of college mathematics. 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



## General Education Goals/Objectives

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 2: Defines and demonstrates the use of decimals, percentages, and fractions

Skill 3: Solves word problems



## Relationship to Campus Theme

The student will begin to see applications of algebra in nature, business, health, construction, etc. As they use the graphing calculator, they can solve real life problems with large numbers. These problems will require critical thinking and interaction with other students.



## Class Policies

### Attendance

The sequential nature of mathematics deems it necessary for students to attend class and *participate* on a regular basis, therefore one of the course requirements is ***regular attendance and participation***. If are unable to attend class for whatever reason, please notify the instructor immediately.

### Assignments

Students may work ahead; however, each assignment must be completed on or before the due date to receive full credit.

### Electronic Devices

Turn off or mute (not vibrate) cell phones, pagers, and other electronic devices. Students who text, use snapchat, or do anything else on their cellphone during class will be made fun of. If your cellphone use is disturbing others, you will be asked to leave. ***There will be absolutely no headphones in my classroom.***



## 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!



## 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, please *see me immediately*. If you have already met with Student Developmental personnel, please provide me with the information regarding your needs so that I can make the appropriate accommodations.



## 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.





## Free Online Tutoring!



**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* by going to [www.dakotacollege.edu](http://www.dakotacollege.edu) → online students → go to class. You will login using your CampusConnection username and password. Once logged in, 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](http://www.khanacademy.org) and find a video and an exercise to help you out!

## MATH 102 Fall 2014 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 Evening and Online Classes begin after 4:00pm	26 First day of Intermediate Algebra! Complete the MML overview and review the syllabus for HW	27 The Rectangular Coordinate System & Graphing Linear Equations HW: Chapter 3.1 & 3.2	28 The Slope of a Line  HW: Chapter 3.3	29	30
31						
September 2014						
	1 	2 Quiz 1: Chapter 3.1- 3.3	3 Writing the Equation of a Line HW: Chapter 3.4 <i>*last day to add a class and drop a class with 100% refund*</i>	4 Graphing Linear Inequalities  HW: Chapter 3.5	5	6
7	8 Functions  HW: Chapter 3.6	9 Barbie Bungee Activity  HW: Study for Quiz	10 Complete Barbie Bungee Activity and Quiz 2: Chapter 3.4- 3.6	11 Systems of Linear Equations in Two Variables HW: Chapter 4.1	12	13
14	15 Continue Systems of Linear Equations in Two Variables HW: Chapter 4.1	16 Review for Chapter 3&4 Test	17 <u>Chapter 3&amp;4 Test</u>	18 Removing a Common Factor & Factor by Grouping HW: Chapter 6.1 & 6.2	19	20
21	22 Factoring Trinomials  HW: Chapter 6.3&6.4	23 Quiz 3: Chapter 6.1- 6.4	24 Special Cases of Factoring & Reviewing Factoring HW: Chapter 6.5&6.6	25 Solving Quadratic Equations by Factoring HW: Chapter 6.7	26	27
28	29 Solving Quadratic Equations by Factoring HW: Chapter 6.7	30 Chapter 6 Review				
<a href="#">Jul-Aug 2014</a>	Printfree.com Printable Calendars					<a href="#">Sep-Oct 2014</a>

October 2014						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 <b>Chapter 6 Test</b>	2 Simplifying Rational Expressions HW: Chapter 7.1	3	4
5	6 Multiplying and Dividing Rational Expressions HW: Chapter 7.2	7 Multiplying and Dividing Rational Expressions HW: Chapter 7.2	8 <b>Assessment Day: No Classes</b>	9 Adding and Subtracting Rational Expressions HW: Chapter 7.3	10	11
12	13 Adding and Subtracting Rational Expressions HW: Chapter 7.3	14 <b>Quiz 4: Chapter 7.1-7.3</b>	15 Simplifying Complex Rational Expressions HW: Chapter 7.4	16 Solving Equations Involving Rational Expressions HW: Chapter 7.5	17 <b>*Mid-Term grades due*</b>	18
19	20 Solving Equations Involving Rational Expressions HW: Chapter 7.5	21 Ratio, Proportion, and Other Applied Problems HW: Chapter 7.6	22 Chapter 7 Review	23 <b>Chapter 7 Test</b>	24	25
26	27 Quick Exponent Review and Rational Exponents HW: Chapter 8.1	28 Rational Exponents HW: Chapter 8.1	29 Radical Expressions and Functions HW: Chapter 8.2	30 Radical Expressions and Functions HW: Chapter 8.2	31	
November 2014						
						1
2	3 Simplifying, Adding, and Subtracting Radicals HW: Chapter 8.3	4 <b>Quiz 5: Chapter 8.1-8.3</b>	5 Multiplying and Dividing Radicals HW: Chapter 8.4	6 Multiplying and Dividing Radicals HW: Chapter 8.4	7	8
9	10 Radical Equations and Complex Numbers HW: Chapter 8.5 & 8.6	11 	12 Chapter 8 Review	13 <b>Chapter 8 Test</b>	14	15
16	17 Beginning to solve Quadratic Equations HW: Chapter 9.1	18 The Quadratic Formula and Solutions to Quadratic Equations HW: Chapter 9.2	19 Quadratic Chutes and Ladders	20 Equations That Can Be Transformed Into Quadratic Form HW: Chapter 9.3	21	22
23	24 Equations That Can Be Transformed Into Quadratic Form HW: Chapter 9.3	25 <b>Quiz 6: Chapter 9.1-9.3</b>	26 <b>TBD</b>	27 	28 <b>Thanksgiving break—no classes!</b>	29
Sep-Oct 2014	Printfree.com Printable Calendars					Nov-Dec 2014

December 2014						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	<b>1</b> Quadratic Functions HW: Chapter 9.5	<b>2</b> Quadratic Functions HW: Chapter 9.5	<b>3</b> Compound and Quadratic Inequalities HW: Chapter 9.6	<b>4</b> Compound and Quadratic Inequalities HW: Chapter 9.6	<b>5</b>	<b>6</b>
<b>7</b>	<b>8</b> Absolute Value Equations and Inequalities HW: Chapter 9.7	<b>9</b> Chapter 9 Review	<b>10</b> <u>Chapter 9 Test</u>	<b>11</b> Final Exam Review	<b>12</b>	<b>13</b>
<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b> Final Exam from 12:00-1:50	<b>19</b>	<b>20</b>
<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b> 	<b>26</b>	<b>27</b>
<b>28</b>	<b>29</b>	<b>30</b>	<b>31</b>			
January 2015						
				<b>1</b> 	<b>2</b>	<b>3</b>
<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
<b>11</b>	<b>12</b> *Classes begin after 4:00 pm*	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>
<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>
<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>	<b>31</b>
<a href="#">Nov-Dec 2014</a>	Printfree.com Printable Calendars					<a href="#">Jan-Feb 2015</a>