## MAT 154A <br> Intermediate Algebra

Fall 2014
Instructor: Bruce Armbrust, phone: 541-4660x314, email: bruce.armbrust@hotmail.com
Office Hours: Room A210, Mon., Thurs. 12:00-1:00 PM
Tues. 9:00-10:00 AM
Wed. 11:00 AM - 12:00 PM
Fri. 8:00-9:00 AM
And as always, by appointment.
Class Time and Location: Tues. \& Thurs. 10:00-11:50 AM, E106
Textbook (Optional): Beginning and Intermediate Algebra, $5^{\text {th }}$ Edition, Elayn Martin-Gay
Required Software: It is required to have a software license to use the software MyMathLab in this class. You must have a valid e-mail address to use the on-line curriculum. Students have two choices. The first choice is to purchase the textbook from the bookstore. The textbook comes with the software license. Note: If you purchase a used textbook, it may not have a valid course access code. Be VERY careful when acquiring the text. The second choice is to purchase the license alone either from the bookstore or online at pearsonmylabandmastering.com. The license gives you access to the textbook online. This is a more economical choice, but is only recommended to students who have online access and feel comfortable reading a computer screen instead of a traditional book. If you have already purchased an access code for Math 152A or Math 152B for this textbook, you may also use it for this class at no extra cost.

To access our class page, go to pearsonmylabandmastering.com and register using your student access code and the course ID for this class: armbrust11854

For assistance with MyMathLab: You may get help by calling 1-800-677-6337 during the following hours: Mon - Fri 5:00 AM - 5:00 PM \& Sunday 2:00 PM - 9:00 PM. Online assistance is available 24 hours every day at: 247pearsoned.custhelp.com

Calculator: A scientific calculator is required for this course. Graphing calculators will not be allowed on quizzes and exams.

Course Description: MAT 154A is a continuation of MAT 152B and covers functions and inverses, exponential and logarithmic functions, sequences and series, and conic sections, quadratic equations, and systems of quadratic equations.

Prerequisite: A grade of C or better in MAT 152B, or appropriate skills demonstrated through the Math assessment process.

## Student Learning Objectives:

1. Apply the course topics to real-world situations.
2. Sketch and interpret the graphs of functions and relations introduced in intermediate algebra.
3. Simplify mathematical expressions into forms more amenable to analysis.
4. Provide solutions to equations using methods from intermediate algebra.

Course Grade: Your final letter grade will be based on the usual grading scale:
A 90-100\%, B 80-89\%, C 70-79\%, D 60-69\%, F 0-59\%
The following items will make up the course grade:

| Homework: | $15 \%$ |
| :--- | :--- |
| Quizzes: | $20 \%$ |
| Exam1 (October 14) |  |
| Exam2 (November 4): | $45 \%$ |
| Exam3 (November 25) |  |
| Final Exam (December 9): | $20 \%$ |

Homework: Homework is to be completed online with MyMathLab. Each section covered will have a homework assignment. The homework assignments will be due at midnight the day before the next exam. However, it is NOT RECOMMENDED that you wait until that time to work on the homework. The homework assignments are your chance to practice the material covered in class. It is YOUR responsibility to make sure you are getting the information from each section. At the beginning of class, I will go over homework questions from the previous day's material. Other questions will be addressed outside of class or in office hours. If all homework assignments are completed with a score of $50 \%$ or more, your lowest regular exam score will be dropped.

Quizzes: Each week you will be required to take a quiz on MyMathLab. The quizzes are designed to help you prepare for exams, and will be made up of problems that are very similar to the problems from your homework assignments. The quizzes may be taken as often as you would like before the due date/time. Your lowest quiz score will be dropped. Because of this, there will be no make-up quizzes.

Exams: Students are to bring a pencil and blank scratch paper to each exam. If you cannot make it to an exam (final not included), you may take it up to 2 school days prior to the scheduled date with proper arrangements. Otherwise, the exam may be made up after the scheduled date with a penalty of $10 \%$ per day. The final exam may not be taken after the scheduled exam time.

Registration Information: You may drop the class with no penalty or mark on your record on or before October 3. After October 3, you may drop the class and receive a grade of W until November 7. After November 7, if still enrolled, you will receive a grade of A, B, C, D, F or I.

Learning Disabled Students: Students with disabilities who may need accommodations for this class are encouraged to notify me and contact the Disability Resource Center (DRC) early in the quarter so that reasonable accommodations may be implemented as soon as possible. Students may contact the DRC by visiting the Center (located in room A205) or by phoning 541-4660, ext. 249 (voice) or 542-1870 (TTY for deaf students). All information will remain confidential.

Academic Dishonesty: Academic dishonesty of any form will not be tolerated. Students caught cheating on exams will receive a score of zero on the assignment and the dropping of lowest quiz score will be forfeit. Students may work together on homework assignments (and, in fact, are encouraged to) as long as all students understand the material covered.

Technology in the Classroom: All cell phones, headphones, MP3 players, iPods, etc, must be turned off and put away prior to the start of each class. No electronic devices (other than calculators) may be used during quizzes and exams.

How to Succeed in a Math Class: I am often asked how to successfully pass a math class, and here is my advice:
I) Come to every class session. Be prepared, and plan on participating.
II) Do your homework. Remember that what I assign is what I consider a bare minimum. If you need more practice, do it. MyMathLab has dozens of extra problems for each section as well as sample chapter exams.
III) Read the book. You paid good money for it, so you might as well use it.
IV) Make use of available tutors and my office hours. You will find tutors who know the subject matter in this course at the Math Success Center (MSC).
V) Do math every day. Math is just like everything else: if you don't practice, you become rusty.

## Course Schedule:

The following is a tentative schedule. If things change (and I have money that says they will), I will let you know.

## September

234.4

25 3.6, 8.2
Introductions, Systems of Linear Equations in 3 Variables
$30 \quad 8.3$
October
$2 \quad 11.3$
$7 \quad 11.4$
Using Quadratic Methods to Solve Equations
Quadratic and Rational Inequalities
9 11.5, 11.6
14 Exam I
$16 \quad 12.1$
$21 \quad 12.2$
23 12.3, 12.4
2812.5

30 12.6, 12.7
Graphs of Quadratic Functions
Function Algebra
Inverse Functions
Exponential Functions GO BRONCOS!!!
Logarithmic Functions
Properties and Bases of Logarithms
November
4 Exam II
$6 \quad 12.8$
Exponential and Logarithmic Equations
$11 \quad 13.1$
$13 \quad 13.2$
18 13.3, 13.4
20 14.1,14.2
25 Exam III
27 NO CLASS
Parabolas and Circles
Ellipses and Hyperbolas
Systems of Nonlinear Equations and Nonlinear Inequalities
Sequences (including Arithmetic and Geometric)
Thanksgiving
December
$2 \quad 14.3$
$4 \quad 14.4$
Series
Arithmetic and Geometric Series
$9 \quad$ Final Exam

