Welcome to BASIC ALGEBRA (part 2). I'm looking forward to taking you to the next level in the exciting world of Algebra! I hope my experience as an aerospace engineer and engineering manager will help make this material more "real" for you. Our future depends on engineers, scientists and problem solvers of all sorts. The study of mathematics provides you with the foundation you need to take on these challenges. I am proud to help lay that foundation.

Course ID	Room	Units	Days	Start Time	End Time
MAT 152B-04	A251	4	T $\theta$	1:00 PM	2:50 PM

**INSTRUCTOR**: Bruce Brant

**PHONE**: 5<u>1</u>0-936-3211

E-MAIL: bbrant@mail.ltcc.edu

OFFICE HOUR: TBD

LTCC MATH PAGE: <a href="http://www.ltcc.edu/web/academics/mathematics">http://www.ltcc.edu/web/academics/mathematics</a>

### **REQUIRED SOFTWARE LICENSE:**

- You must obtain a software license to use the software <u>MyMathLab</u> in this class. You will do most of your homework in this software. Your progress in the class (including your scores and overall grade) is maintained by, and can be accessed at any time in MyMathLab.
- Course website: www.mymathlab.com
- There are three ways to obtain your license from *Peasron*:
  - The license is available for an additional fee when you purchase a new textbook
  - The license can be purchased separately at the bookstore
  - You can purchase the license on-line at the course website

If you are having trouble getting the license in a timely manner, I recommend that you take advantage of the temporary license that Pearson offers so that you do not get behind in your work

- Course id is: brant91822
- For technical support call 1-800-677-6337, Mon Fri 12:00 PM to 8:00 PM EDT
- Online technical support is available 24 hours every day at: http://247pearsoned.custhelp.com

#### **REQUIRED TEXTBOOK:**

Beginning & Intermediate Algebra, by Elayn, Martin-Gay, 5<sup>th</sup> Edition.

Note that the online textbook available with your MyMatLab software license satisfies this requirement.

#### **CAMPUS COMPUTER RESOURCES:**

- Learning Assistance Center (A201)
- Math Success Center (A201).
- Open Labs in the D-wing
- Library

To succeed in BASIC ALGEBRA II you must take responsibility for your learning:

- Carnegie Units: To earn units of college credit you are expected to perform two hours of individual work/study for every one hour of class time.
- Attendance: You must be here to participate in in-class assignments and take advantage of problem solving tips and tricks, pre-test review material and other class discussions.
- Attention: Make the best use of your class time. Pay attention, participate/ask questions and take notes. Cellphones are distracting and should be turned off during class.
- **Practice**: Homework provides <u>one</u> opportunity for you to practice problem solving skills. Most of you will need additional practice use the book as a resource for trouble areas.
- **Study**: Testing is your opportunity to prove you can solve problems using the concepts learned in this class. Be sure to prepare yourself for these <u>scheduled events</u>.

**GRADING POLICY:** Your overall score in this class is computed from your work as follows.

Homework 20% Quizzes 30% Exams 30%

Final 20% Note: you must pass the final to pass the course

Your letter grade will be based on your overall score as follows.

A 90-100%

B 80-89%

C 70-79%

D 60-69%

F less than 60%

**COURSEWORK**: Coursework includes homework and in-class assignments

**Homework** is done online using MyMathLab. Homework is generally due by the next class after it is assigned. Specific due dates are listed below and posted on MyMathLab. You are encouraged to work on homework even if you miss the due date. But there is a 10% per day penalty for late work.

**In-class Assignments** are assigned as necessary to insure comprehensive understanding of the subject matter. These assignments are normally completed during class time.

**TESTING**: All testing is done in class and graded by the instructor by hand. Electronic devices of any kind are prohibited during testing and their use will result in a score of 0.

**NOTES:** You are allowed to use one 3x5 card of notes (front and back) during exams. <u>No notes are allowed on quizzes.</u>

**MAKE-UPS:** 

- <u>Exams</u> can be made up for <u>excused absences</u> if I am <u>notified in advance</u> of the absence. Exams are made up in the TLC it is your responsibility to make an appointment at least 24 hours in advance by visiting the TLC, calling (530)541-4660 x 740, or e-mailing: <u>TLCProctors@ltcc.edu</u>.
- Quizzes cannot be made up. However, you may opt to replace one (and only one) quiz score with your score on a special project. Coordinate with me for projects and details if you wish to exercise this option.

## MAT 152B-04 Class Schedule

Date	Sections	Topics	Homework Due
T 1/5 θ 1/7	5.3, 6.1 6.1, 6.2	Multiplying polynomials; Greatest common factor (GCF) Factoring by grouping; Factoring simple trinomials ( $a = 1$ )	θ 1/7, 1PM T 1/12, 1PM
T 1/12	****	Quiz 1 (5.3, 6.1 - 6.2) ****	
$\theta$ 1/14	6.3, 6.4 6.5, 6.6	Factoring trinomials when $a \neq 1$ Factoring with special patterns; Solving equations by factoring	θ 1/14, 1PM T 1/19, 1PM
T 1/19	****	Quiz 2 (6.3 – 6.6) ****	
θ 1/21	6.7 7.1, 7.2	Quadratic applications Rational expressions (simplify, multiply, divide)	θ 1/21, 1PM T 1/26, 1PM
T 1/26 θ 1/28	7.3, 7.4 7.5	Rational expressions (add/subtract) Solving equations containing rational expressions Exam 1 review	θ 1/28, 1PM θ 2/4, 1PM
T 2/2		Exam 1 (5.3, 6.1 – 6.7, 7.1 - 7.4)	
θ 2/4	7.6, 7.7	Rational expression applications (proportions,), Simplifying complex rational expressions	T 2/9, 1PM
T 2/9	****	Quiz 3 (7.5 - 7.7) ****	
θ 2/11	4.1 4.2, 4.3	Solve systems of linear equations by graphing Solve systems of linear equations by substitution/elimination	θ 2/11, 1PM Τ 2/16, 1PM
T 2/16	****	Quiz 4 (4.1 – 4.3) ****	
θ 2/18	9.1, 9.2 9.3, 8.4	Review inequalities; Review absolute value Absolute value inequalities; Variation	θ 2/18, 1PM T 2/23, 1PM
T 2/23 θ 2/25	10.1, 10.2 10.3	Radicals and radical functions; Rational exponents Simplifying radical expressions, distance and midpoint formulas Exam 2 review	$\theta$ 2/25, 1PM $\theta$ 3/3, 1PM
T 3/1		Exam 2 (4.1 – 4.3, 7.5 - 7.7, 9.1 - 9.3, 8.4, 10.1 - 10.2)	
θ 3/3	10.4, 10.5,	Add, subtract and multiply radical expressions; Rationalize denominators	T 3/8, 1PM
T 3/8	10.6, 10.7	Solve problems with radicals; Complex numbers	$\theta$ 3/10, 1PM
<i>θ</i> 3/10	**** 11.1	Quiz 5 (10.3 – 10.7) ****  Square root property, completing the square	T 3/15, 1PM
T 3/15 θ 3/17	11.2, 11.3	Quadratic formula, Quadratic methods Final Review	θ 3/17, 1PM
θ 3/24		Final exam (covers entire course)	1PM

**COURSE DESCRIPTION**: Basic Algebra (part 2) completes your foundational understanding of Algebra and prepares you for Intermediate Algebra (MAT 154A).

# STUDENT LEARNING OUTCOMES:

- 1. Factor polynomials
- 2. Apply the four basic mathematical operations to rational and radical expressions.
- 3. Solve equations with rational and radical expressions.
- 4. Solve a 2x2 system of linear equations
- 5. Solve quadratic equations.
- 6. Apply course topics to real-world situations

**PREREQUISITE**: C or better in MAT 152A or MAT 152AA, or satisfactory score on assessment test.

**LEARNING DISABILITIES:** If you have a certifiable learning disability that may affect your performance in this class, be sure to discuss your special needs with your instructor and the Disability Resource Center (DRC) during the first week of class. Learning disabilities <u>will</u> be accommodated and all information will remain confidential.

The DRC is located in room A205. Or call 530-541-4660 ext. 249. TTY for hearing impaired – call 530-542-1870

**FINANCIAL ASSISTANCE:** If you need help paying for your books or other expenses, call our Financial Aid Officer, America Ramirez, at 541-4660 x236, email her at <a href="mailto:Ramirez@ltcc.edu">Ramirez@ltcc.edu</a>, or drop by A100.

**ACADEMIC DISHONESTY (CHEATING):** Academic dishonesty of any form will not be tolerated. Students caught cheating on exams or quizzes will receive a **zero** on the assignment for the first offense and a course grade of F for the second offense.

Cheating will be defined as but not limited to: (1) using any method to copy another's work on an exam, quiz, or final (2) directly copying another student's homework assignment (3) using any method other than your own honest efforts to complete homework, quizzes and exams.

The following activities are NOT cheating: (1) collaborating with other students to complete homework assignments (2) working with math tutors or academic coaches to complete homework assignments (3) studying with other students for quizzes and exams.