

Welcome to **INTERMEDIATE ALGEBRA**. 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 the foundation you need to take on these challenges and I am proud to help lay that foundation.

| Course ID   | Room | Units | Days        | Start Time | End Time |
|-------------|------|-------|-------------|------------|----------|
| MAT 154A-05 | A250 | 4     | T, $\theta$ | 6:00 PM    | 7:20 PM  |

**INSTRUCTOR:** Bruce Brant

**PHONE:** 510-936-3211

**E-MAIL:** [bbrant@mail.ltcc.edu](mailto:bbrant@mail.ltcc.edu)

**OFFICE HOURS:** TBD

**LTCC MATH PAGE:** <http://www.ltcc.edu/web/academics/mathematics>

#### **REQUIRED SOFTWARE LICENSE:**

- You must obtain a software license to use the software MyMathLab 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](http://www.mymathlab.com)
  - There are three ways to obtain your license:
    - 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: **brant93125**
  - 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.

**REQUIRED EQUIPMENT:** Scientific Calculator. Note that graphing calculators are NOT allowed,

**CAMPUS COMPUTER RESOURCES:**

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

**INTERMEDIATE ALGEBRA** is a college level math class. To succeed in this course you must take responsibility for your own learning. The following behaviors have proven to be very effective for students who want to do well.

- **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.
- **Class Preparation:** Read the chapter and do the homework before class so you can get your questions answered before we move on.
- **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 one 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 scheduled events.

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

|          |     |
|----------|-----|
| Homework | 10% |
| Quizzes  | 30% |
| Exams    | 30% |
| Final    | 30% |

**Note: you must pass the final to pass the class**

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% |

**HOMEWORK:** Most 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.  
Additional Homework Projects may be assigned in class throughout the term.

**TESTING:** All testing is done in class and graded by the instructor by hand. Electronic devices other than scientific calculators 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. No notes are allowed on quizzes.

**MAKE-UPS:** - **Exams** can be made up for excused absences if I am notified in advance 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: [TLCProctors@ltcc.edu](mailto:TLCProctors@ltcc.edu).  
- **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 want to exercise this option.

### MAT 154A Class Schedule

| Date   | Sections   | Topics   | Homework Due           |
|--------|------------|--|------------------------|
| T 1/6  | 4.4        | Systems of linear equations in three variables                     | <b>θ 1/8, 6:00 PM</b>  |
| θ 1/8  | 8.2, 8.3   | Functional notation; Graphing functions                            | <b>T 1/13, 6:00 PM</b> |
| <hr/>  |            |  |                        |
| T 1/13 | ****       | <b>Quiz 1 (4.4, 8.2, 8.3) ****</b>                                 |                        |
|        | 11.3       | Solving quadratic equations  | <b>θ 1/15, 6:00 PM</b> |
| θ 1/15 | 11.4       | Nonlinear inequalities in one variable                             | <b>T 1/20, 6:00 PM</b> |
| <hr/>  |            |  |                        |
| T 1/20 | ****       | <b>Quiz 2 (11.3, 11.4) ****</b>                                    |                        |
|        | 11.5       | Quadratic functions  | <b>θ 1/22, 6:00 PM</b> |
| θ 1/22 | 11.6       | Completing the square  | <b>T 1/27, 6:00 PM</b> |
| <hr/>  |            |  |                        |
| T 1/27 | 12.1       | Composite functions; <b>Exam 1 review</b>                          | <b>T 2/3, 6:00 PM</b>  |
| θ 1/29 | ****       | <b>Exam 1 (4.4, 8.2, 8.3, 11.3 – 11.6) ****</b>                    |                        |
|        | 12.2       | Inverse functions  | <b>T 2/3, 6:00 PM</b>  |
| <hr/>  |            |  |                        |
| T 2/3  | 12.3, 12.4 | Exponential functions (incl. growth & decay)                       | <b>θ 2/5, 6:00 PM</b>  |
| θ 2/5  | 12.5       | Logarithmic functions  | <b>T 2/10, 6:00 PM</b> |
| <hr/>  |            |  |                        |
| T 2/10 | ****       | <b>Quiz 3 (12.1 – 12.5) ****</b>                                   |                        |
|        | 12.6       | Properties of logarithms   | <b>θ 2/12, 6:00 PM</b> |
| θ 2/12 | 12.7       | Standard logarithm bases; Changing bases                           | <b>T 2/17, 6:00 PM</b> |
| <hr/>  |            |  |                        |
| T 2/17 | ****       | <b>Quiz 4 (12.6, 12.7) ****</b>                                    |                        |
|        | 12.8       | Solving exponential and logarithmic equations                      | <b>θ 2/19, 6:00 PM</b> |
| θ 2/19 | 13.1       | Introduction to conic sections (parabolas and circles)             | <b>T 2/24, 6:00 PM</b> |
| <hr/>  |            |  |                        |
| T 2/24 | 13.2       | More conic section (ellipses and hyperbolas); <b>Exam 2 review</b> | <b>T 3/3, 6:00 PM</b>  |
| θ 2/26 | ****       | <b>Exam 2 (12.1 – 12.8, 13.1) ****</b>                             |                        |
|        | 13.3       | Solving non-linear systems of equations                            | <b>T 3/3, 6:00 PM</b>  |
| <hr/>  |            |  |                        |
| T 3/3  | 14.1       | Introduction to sequences  | <b>θ 3/5, 6:00 PM</b>  |
| θ 3/5  | 14.2       | Arithmetic and geometric sequences                                 | <b>T 3/10, 6:00 PM</b> |
| <hr/>  |            |  |                        |
| T 3/10 | ****       | <b>Quiz 5 (13.2 - 13.3, 14.1 – 14.2) ****</b>                      |                        |
|        | 14.3       | Series   | <b>θ 3/12, 6:00 PM</b> |
| θ 3/12 | 14.4       | Partial sums   | <b>T 3/17, 6:00 PM</b> |
| <hr/>  |            |  |                        |
| T 3/17 | 14.5       | Binomial theorem   | <b>θ 3/19, 6:00 PM</b> |
| θ 3/19 |            | <b>Review for final exam</b>                                       |                        |
| <hr/>  |            |  |                        |
| T 3/24 |            | <b>Final exam (covers entire course)</b>                           | <b>6:00 PM</b>         |

**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

**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 will 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**

**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.

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