Welcome to BASIC ARITHMETIC. I'm looking forward to helping you master these basic math skills and introducing you to the rigors of obtaining a college education. I hope my experience as an aerospace engineer and engineering manager will help you understand the value that mathematical knowledge can bring to your life and your career opportunities.

This syllabus covers two consecutive six-week classes (each receiving its own grade):

| Course ID | Room | Unit | Days | Start Time | End Time |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MAT 187A-04 | A213 | 2.5 | M, W | $6: 00 \mathrm{PM}$ | $8: 25 \mathrm{PM}$ |
| MAT 187B-04 | A213 | 2 | M, W | $6: 00 \mathrm{PM}$ | $7: 50 \mathrm{PM}$ |

INSTRUCTOR: Bruce Brant
PHONE:
510-936-3211
E-MAIL:
bbrant@mail.ltcc.edu
OFFICE HOURS:
By appointment
LTCC MATH PAGE: http://www.ltcc.edu/web/academics/mathematics
TEXTBOOK (OPTIONAL): Basic College Mathematics, by Tobey \& Slater, $7^{\text {th }}$ Edition (New Edition)

REQUIRED SOFTWARE LICENSE: It is required to have a software license to use the software MyMathLab in this class. Students have two choices.

1. Purchase the textbook from the bookstore. The textbook comes with the software license for an additional cost of approximately \$5.
2. Purchase the license alone either from the bookstore or online at http://www.pearsonmylabandmastering.com/northamerica/?cc.

- The license gives you access to the online version of the textbook.
- If you purchase a used textbook, you will also need to purchase the software license.
Course website: www.mymathlab.com
Mat187A course id is brant63566
Mat187B course id is brant52023
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
Computers with internet access are available for your use in the following locations on campus. The following hours are subject to change - so be sure to check before making a special trip.
- Learning Assistance Center (201) open Mon - Thurs 9 - 6, Fri 10 - 2, Sat 11 - 3.
- Math Success Center (201) open Mon - Thurs 9 - 6, Fri 10 - 2, Sat 11 - 1.
- Open Labs in the D-wing which have available times posted by the door of each lab.
- The library has a limited number of computers

CLASSROOM EXPECTATIONS: In order to achieve our demanding learning goals, it is imperative that we maintain the proper educational environment in this class at all times:

- Come to class prepared and on time:
- Read the chapter
- Complete the homework
- Keep electronic devices turned off
- Respect your classmates learning opportunities
- Pay attention
- Help each other
- Don’t interrupt
- $100 \%$ focus on math!
- Take notes
- Work math problems
- Help others
- Ask instructor for bonus problems

COURSE DESCRIPTION: Basic Arithmetic encompasses the foundational elements of math upon which so many things in our lives depend. Arithmetic also forms the basic building blocks for all higher mathematical study (required for many professional careers).

In MAT187A you will learn about three types of numbers: whole numbers, fractions and decimals. You will learn how to represent them, make computations with them and use them to solve "real world" problems. In the process you will also learn and apply college level study skills.
In MAT187B you will deepen your understanding of what you learned in MAT 187A. You will learn how percents, fractions and decimals are related - including the use of ratios and proportions. You will learn how to manipulate positive and negative numbers, work with units of measure and compute square roots. And finally, you will be introduced to some of the elementary concepts of Algebra.

STUDENT LEARNING OUTCOMES:

1. Perform arithmetic operations with whole numbers, fractions, and decimals.
2. Translate written language into mathematical statements.
3. Apply basic arithmetic to solve real-life problems.
4. Apply study skills learned in this class to studying for this class.

HOW TO SUCCEED
IN A COLLEGE MATH CLASS:

1. Attend all class sessions (on time)
2. Complete all homework assignments (on time)
3. Attempt to solve problems on your own before seeking help
4. Ask questions and seek help with problems that you can't figure out
5. Practice solving problems on paper - documenting your work
6. Study for all quizzes and exams
7. Check your work
8. Exchange names and phone number with classmates

- Note that tutoring is available in the Math Success Center (MSC) in Room 201. Hours are posted.

GRADING POLICY: Your overall score in this class is computed from your work as follows.
Homework 15\%
Quizzes 25\%
Exams 30\%
Final $\quad 30 \%$ 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 $\quad 70-79 \%$
D 60-69\%
F less than 60\%
You can check your grade at any time in MyMathLab where you will be doing your homework.

HOMEWORK:

## EXAMS:

ATTENDANCE: Students who miss two or more classes will be dropped
Math Homework will be done online using MyMathLab. Homework is generally due by the next class after it is assigned. Specific due dates are 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 homework (e.g., a 10 point assignment submitted 2 days late can earn no more than 8 points).
The following activities may assist you with your homework:

- Review your class notes
- Consult a fellow classmate
- Visit the tutoring center
- Use MyMathLab online help tools
- Contact your instructor


## Study Skills Assignment:

- Make an appointment for one hour to meet with any counselor.
- After your appointment, write a half-page summary (typed) of your meeting of what was most and least helpful about the counseling appointment.

Exams are given in class and graded by the instructor by hand. You must show your work to receive full credit. Partial credit will be given for correct work even if the final answer is not correct. You are allowed to use one $3 x 5$ card of notes (front and back) during exams. Electronic devices of any kind are prohibited during exams and their use will result in a score of $\mathbf{0}$.

Make-up exams are possible for excused absences if the instructor is notified in advance of the absence. There is a $10 \%$ penalty if the absence is not excused. The make-up test needs to be taken before the next class. If you take the makeup test at TLC, you need to make an appointment at TLC 24 hours ahead by visiting TLC, calling (530)541-4660 x 740, or e-mailing TLCProctors@ltcc.edu.

QUIZZES: Quizzes will be taken online in MyMathLab. IT IS CRITICAL THAT YOU FOLLOW QUIZ INSTRUCTIONS CAREFULLY:

- Quizzes must be taken no later than the date listed on line in MyMathLab
- Each quiz can only be taken once
- You must finish each quiz once it is started - in the same on-line session
- You may not access other computer programs during quizzes
- You have a maximum of 60 minutes to complete quizzes once you start them

Quizzes are designed to assess how well you learned the course material. DO NOT START A QUIZ UNTIL YOU ARE SURE YOU ARE READY:

- Make sure that you have done your homework, studied for and understand the material in the sections you are being quizzed on before you begin
- Make sure you have set aside enough time to complete the quiz before you start


## COMMUNICATION:

## LEARNING <br> DISABILITIES:

You can communicate with me outside of class by phone or e-mail. I read e-mail once a day, so use the phone if it's urgent. If you miss a class, it is your responsibility to keep up with the information from that session. I will e-mail all handouts. But you'll need to talk to your classmates to get class notes.

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

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 Ramirez@ltcc.edu, 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.

## MAT 187A Class Schedule

| Date | Section | Topic | Homework | Due |
| :---: | :---: | :---: | :---: | :---: |
| M 9/23 | $\begin{aligned} & 1.1 \\ & 1.2 \\ & 1.3 \end{aligned}$ | Introductions \& Syllabus Understanding Whole Numbers Addition of Whole Numbers Subtraction of Whole Numbers |  | W 9/25, 6PM |
| W 9/25 | $\begin{aligned} & 1.4 \\ & 1.5 \\ & 1.6 \end{aligned}$ | Study Skills 1 <br> Multiplication of Whole Numbers Division of Whole Numbers Exponents \& Order of Operations |  |  |
|  | Quiz \#1 (Sections 1.1-1.6) is due Tuesday, 10/1 at 11:30 pm |  |  |  |
| M 9/30 | $\begin{aligned} & 1.7 \\ & 1.8 \\ & 2.1 \end{aligned}$ | Rounding and Estimation Applied Problems Understanding Fractions |  | W 10/2, 6PM |
| W 10/2 | 2.2 | Study Skills 2 <br> Simplifying Fractions <br> Chapter 1 Review | MyMathLab | M 10/7, 6PM |
| M 10/7 | 2.3 | Exam \#1 (Sections 1.1 -1.8) (1hr) Improper Fractions \& Mixed Numbers | MyMathLab | W 10/9, 6PM |
| W 10/9 | $\begin{aligned} & 2.4 \\ & 2.5 \\ & 2.6 \end{aligned}$ | Multiplication of Fractions \& Mixed \#s Division of Fractions \& Mixed Numbers The Least Common Denominator | MyMathLab $\downarrow$ | M 10/14, 6PM |
|  | Quiz \#2 (Sections 2.1-2.6) is due Tuesday, 10/15 at 11:30 pm |  |  |  |
| M 10/14 | $\begin{aligned} & 2.7 \\ & 2.8 \end{aligned}$ | Addition \& Subtraction of Fractions Mixed Numbers \& Order of Operations | MyMathLab $\downarrow$ | W 10/16, 6PM |
| W 10/16 | 2.9 | Study Skills 3 <br> Applied Problems Involving Fractions Chapter 2 Review | MyMathLab | M 10/21, 6PM |
| M 10/21 | 3.1 | Exam \#2 (Sections 2.1 - 2.9) (1hr) Decimal Notation | Study Skills* MyMathLab | $\begin{gathered} \text { W 10/23, 6PM } \\ \downarrow \end{gathered}$ |
| W 10/23 | $\begin{aligned} & 3.2 \\ & 3.3 \\ & 3.4 \end{aligned}$ | Comparing, Ordering, Rounding Decimals Addition \& Subtraction of Decimals Multiplication of Decimals | MyMathLab | M 10/28, 6PM |

## MAT 187B Class Schedule

| Date | Section | Topic | Homework | Due |
| :--- | :---: | :--- | :--- | :--- |
| M 11/4 | 3.5 | Division of Decimals | MyMathLab | W 11/16, 6PM |
|  | 3.6 | Converting Fractions to Decimals |  |  |
|  | 3.7 | Applied Problem Involving Decimals |  |  |
| W 11/6 | 4.1 | Ratios (read only) |  |  |
|  | 4.2 | Proportions |  |  |
|  | 4.3 | Solving Proportions |  |  |
|  | 5.1 | Understanding Percent |  |  |
|  |  |  |  |  |

Quiz \#1 (Sections 3.5 - 3.7 \& 4.2 - 4.3) due Thursday, 11/14 at 11:30 pm

M 11/11
---- VETERAN’S DAY HOLIDAY ----

| W 11/13 | 5.2 | Converting Decimals, Fractions, \%'s | MyMathLab | M 11/18, 6PM |
| :--- | :---: | :--- | :--- | :--- |
|  | $5.3 B$ | Solving \%'s using a Proportion <br> Solving Percents using an Equation | $\downarrow$ |  |
| M 11/18 | 5.3 A |  |  |  |
|  | 5.5 | Solving Applied Percent Problems <br> Solving Commission, Percent of Increase <br> or Decrease, and Interest Problems |  | MyMatab |

Quiz \#2 (Sections 5.1 - 5.5) is due Thursday, 11/21 at 11:30 pm

W 11/20 $9.1 \quad$ Addition of Signed Numbers MyMathLab M 11/25, 6PM
Review for Exam 1

| M 11/25 | Exam \#1 (Sections 3.5-3.7, Chap 4, \& 5) (1 hr) |
| :--- | :--- | :--- | :--- |
| Sybtraction of Signed Number |  |

Quiz \#3 (Sections 9.1 - 9.4) is due Tuesday, 12/3 at 11:30 pm


M 12/9
Review for Final Exam

W 12/11
Final Exam (Sections 3.5 - 3.7, Chapter 4 \& 5, Sections 6.4, 7.5, Chapter 9, \& Section 10.1 - 10.2)

