Spring 2014

| Course ID | Room | Unit | Days | Start Time | End Time |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MAT 154AA-1 | A206 | 5 | M,W,F | $11: 00$ AM | $12: 40$ PM |

## INSTRUCTOR: Helen Shen

PHONE:
530-541-4660, Extension 364
E-MAIL: shen@ltcc.edu
OFFICE HOURS: Room A204
Mon. \& Wed. $\quad$ 10:40 - 11:00 AM \& 12:40-1:30 PM
Tue. \& Thurs. $\quad 12: 30-1: 30$ PM
Fri. $\quad 10: 40-11: 00$ AM \& 12:40-1:00 PM
TEXTBOOK (OPTIONAL): Beginning and Intermediate Algebra, by Martin-Gay, $5^{\text {th }}$ Edition
REQUIRED SOFTWARE LICENSE: It is required to have a software license to use the software MyMathLab in this class. Students have two choices. The first choice is to purchase the textbook from the bookstore. The textbook comes with the software license for an additional cost of approximately $\$ 5$. The second choice is to purchase the license alone either from the bookstore or online at coursecompass.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 purchase a used textbook, you will also need to purchase the software license. The software license is valid as long as the student uses the same textbook; the student may need to call the tech support to obtain another access code if the student takes the same class again later.

Course website: www.mymathlab.com
Our Course Id is shen92223
For assistance call 1-800-677-6337, Mon - Fri 12:00 PM to 8:00 PM EDT Online assistance is available 24 hours every day at:
http://247pearsoned.custhelp.com
COUSE DESCRIPTION: This course is a continuation of MAT 152B or MAT 152BB. We will continue our study of functions and quadratic equations. New topics will include inverses of functions, exponential and logarithm functions, conic sections, and sequences and series.

PREREQUISITE: A grade of C or better in Math 152B, Math 152BB, or equivalent; or a satisfactory score on Mathematics Assessment Test.

You will need a scientific calculator for this course. It should have an ln key, a log key and an exponent key. Graphing calculators will not be allowed on quizzes and exams.

## STUDENT LEARNING OUTCOMES:

## GRADING POLICY:

## CHECKING YOUR

 GRADE ONLINE:
## HOMEWORK:

## EXAM POLICY:

Students will earn 0.5 point toward the total grade for every 10 hours in MSC, DRC, or study groups. However, if any student misses three or more classes, no lab credit will be granted. Students can also earn additional credit for working with me if he/she cannot get help from MSC, other tutors, or study groups (the student must have more than 60 hours in MSC).

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.
$\begin{array}{ll}\text { Method of Student Evaluation } & \\ \text { Homework (Online, } 22 \text { sections) } & 176 \text { points } \\ \text { Quizzes (Five, In Class) } & 120 \text { points } \\ \text { Exams (Three, In Class) } & 300 \text { points } \\ \text { Final (Covers entire course content) } & 200 \text { points } \\ \text { And, your final needs to be above } \mathbf{1 0 0} \text { points to pass the class. }\end{array}$
Your letter grade will be based on your percentage.
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. I will drop a student from the class if the student misses six classes or more and is unable to keep up with the learning.

Homework will be done online using MyMathLab. Due dates are listed for you when you go on line to do the assignments. Feel free to consult a fellow classmate, a tutor, your instructor, or anyone else for assistance on the homework. In addition, the computer will give you help with any problem, show you an example of a similar problem, and in some cases show you a video of someone teaching how to do that type of problem. You can work on homework after the due date but there are penalties for being late (see the make-up policy below). If you don't have the internet connection at home, you can print them out in school at Math Lab, TLC, or D-wing Lab, work the problem on the papers, and enter the answers in school.

Grading will be based on progress towards the final answer, and the demonstration of understanding of the concept that is being tested. The more you show me with steps and detail, the better your chances for partial credit. You provide me the communication and detail in your answers; and I will give you the best grade I can based on that communication and answer. You can use one page of notes, front and back, for quizzes, exams and the final. 0 points will be given if the cell phone is used during the exam time. 0 points will be given if the calculator is shared during the exam time.

## COMMUNICATION POLICY:

## LEARNING <br> DISABILITIES:

HOW TO SUCCEED IN A MATH CLASS:

For Quizzes, Exams and the Final, make-up is possible if the instructor is contacted in advance and the absence is excuse; there is a $10 \%$ penalty if the absence is not excused. The make-up test needs to be taken before the next class. Homework will be accepted late up to one week after it is assigned for half credit; the online homework will be closed after the due date, and I will reopen it next day morning for another week for the late homework. You have 3 tries for the online quiz\#6, the highest score will be used, and there is no make-up for the online quiz. If you take the make-up test at TLC, you need to make an appointment at TLC 24 hours ahead by going to TLC, call (530)541-4660 x 740, or e-mail TLCProctors@ltcc.edu.

You can communicate with me either by coming to class or office hours, sending an e-mail, or calling on the phone. I will respond to your e-mails in a timely manner, and I will do my best to return your calls (you need to make sure to leave your number clearly). If you miss the class, it is your responsibility to pick up the class handouts or obtain the information either from your classmates or from me during the office hours.

- I have students work together to help each other. Please feel free to ask me directly if you like to work with me one-on-one.
- Please come see me if you do not understand my policies.
- Since English is my secondary language, please be sure to ask me if you have any difficulty to understand math due to my accent. I will be happy to clarify.

If you have a learning disability, be sure to discuss your special needs with me during the first week of class. Learning disabilities will be accommodated.

1) Read your textbook before class.
2) Choose to attend all class periods and be on time.
3) Exchange names and phone number with classmates.
4) Learn from your mistakes and be patient with yourself.
5) Don't be afraid of asking questions.
6) Know how to get help if you need it.
7) Organize your class materials.
8) Do your homework.
9) Check your work.
10) Hand in assignments on time.

ACADEMIC DISHONESTY (CHEATING): Academic dishonesty of any form will not be tolerated. Students caught cheating on exams or quizzes will receive a score of 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 exams, quizzes, the final, or homework assignments.
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) working with other students to study for exams, quizzes or the final.

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.

WHERE TO FIND A COMPUTER ON CAMPUS: Computers are available for your use in the following locations on campus:

- Tutoring \& Learning Center (TLC)* open Mon - Thurs 10 - 6, Fri 10 - 2 .
- Math Success Center (MSC) * open Mon - Thurs 9-6, Fri 10-2
- Open Labs in the D-wing which have available times posted by the door of each lab.
* Both the TLC and the MSC are in room A201.


## Tentative Lecture Schedule for Math 154AA

Be sure to use class time, office hours, and the MSC to get all of your questions answered.

| Date | Section | Topic | Homework |
| :---: | :---: | :---: | :---: |
| M 4/7 | 4.4 | Introductions, Discussion of Syllabus Solving Systems of Linear Equations in Three Variables |  |
| W 4/9 | $\begin{aligned} & 3.6 \\ & 8.2 \end{aligned}$ | (Review Quickly) Functions Reviewing Function Notation \& Graphing Nonlinear Functions |  |
| F 4/11 | 8.3 | Shifting and Reflecting Graphs of Functions | Homework on sections $4.4,3.6, \& 8.2-8.3$ is due Sunday, 4/13 |
| M 4/14 | 11.3 | Quiz \#1 (Sections 3.6, 4.4 \& 8.2-8.3) (40 min) <br> Solving Equations by Using Quadratic Methods |  |
| W 4/16 | 11.3 | Finished Section 11.3 |  |
| F 4/18 | 11.4 | Nonlinear Inequalities in One Variable | Homework on sections 11.3-11.4 is due Sunday, 4/20 |
| M 4/21 | 11.5 | Quadratic Functions and Their Graphs | Homework on sections 11.5 is due Thursday, 4/24 |
| W 4/23 | 11.6 | Further Graphing of Quadratic Functions | Homework on sections 11.6 is due Sunday, 4/27 |
| F 4/25 | 12.1 | Quiz \#2 (Sections 11.3 - 11.5) ( 40 min ) <br> Composite Functions |  |
| M 4/28 |  | Review for Exam \#1 |  |
| W 4/30 |  | Exam \#1 (Sections 3.6, 4.4, 8.2-8.3 \& 11.3-11.6) |  |
| F 5/2 | 12.2 | Inverse Functions | Homework on sections 12.1-12.2 is due Sunday, 5/4 |


| M 5/5 | 12.3 | Exponential Functions | Do Your HW Right Away. |
| :---: | :---: | :---: | :---: |
| W 5/7 | 12.5 | Logarithmic Functions | Do Your HW Right Away. |
| F 5/9 | 12.6 | Properties of Logarithms | Homework on sections 12.3 \& 12.5-12.6 is due Sunday, 5/11 |
| M 5/12 |  | Quiz \#3 (Sections 12.1-12.3 \& 12.5) (40 min) |  |
| W 5/14 | 12.7 | Common Logarithms, Natural Logarithms, and Change of Base |  |
| F 5/16 | $\begin{aligned} & \text { (12.4) } \\ & 12.8 \\ & \hline \end{aligned}$ | Exponential and Logarithmic Equations and Applications | Homework on sections 12.7-12.8 is due Sunday, 5/18 |
| M 5/19 |  | Review for Exam 2 |  |
| W 5/21 |  | Exam \#2 (Chapter 12) |  |
| F 5/23 | 13.1 | The Parabola and the Circle | Homework on sections 13.1 is due Tuesday, 5/27 |
| M 5/26 |  | MEMORIAL DAY HOLIDAY |  |
| W 5/28 | 13.2 | The Ellipse and the Hyperbola |  |
| F 5/30 | 13.3 | Solving Nonlinear Systems of Equalities | Homework on sections 13.2-13.3 is due Sunday, 6/1 |
| M 6/2 | 14.1 | Sequences |  |
| W 6/4 | 14.2 | Quiz \#4 (Sections 13.1-13.3) (50min) Arithmetic and Geometric Sequences |  |
| F 6/6 | 14.3 | Series | Homework on sections 14.1-14.3 is due Sunday, 6/8 |
| M 6/9 | 14.4 | Partial Sums of Arithmetic and Geometric Sequences | Homework on sections 14.4 is due Thursday, 6/12 |
| W 6/11 | 14.5 | Review 14.1-14.4 <br> The Binomial Theorem (Intro only) |  |
| F 6/13 |  | Quiz \#5 (Sections 14.1-14.4) (1 hr) |  |
| M 6/16 |  | Review for Exam \#3 |  |
| W 6/18 |  | Exam \#3 (Sections 13.1-13.3 \& 14.1 14.4) |  |
| F 6/20 |  | Review for Final Exam |  |
| M 6/21 |  | Cumulative Final Exam (10:00-11:50am) Noted time |  |


| Hw 4.4 | Hw 3.6 | Hw 8.2 | Hw 8.3 | Hw 11.3 | Hw 11.4 | Hw 11.5 | Hw 11.6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4.4.1 | 3.6 .1 | 8.2 .3 | 8.3.1 | 11.3.1 | 11.4.1 | 11.5.1 | 11.6 .11 |
| 4.4.5 | 3.6 .3 | 8.2 .7 | 8.3 .5 | 11.3 .3 | 11.4 .5 | 11.5.9 | 11.6 .13 |
| 4.4.9 | 3.6 .5 | 8.2.11 | 8.3.9 | 11.3 .5 | 11.4 .7 | 11.5.13 | 11.6 .15 |
| 4.4.11 | 3.6 .7 | 8.2.13 | 8.3.11 | 11.3.7 | 11.4.15 | 11.5.19 | 11.6 .23 |
| 4.4.19 | 3.6 .9 | 8.2 .15 | 8.3 .17 | 11.3.9 | 11.4.19 | 11.5.23 | 11.6 .25 |
| 4.4.21 | 3.6.11 | 8.2 .19 | 8.3.19 | 11.3.11 | 11.4.21 | 11.5.27 | 11.6 .27 |
|  | 3.6.13 | 8.2 .21 | 8.3.21 | 11.3.13 | 11.4.23 | 11.5.31 | 11.6 .35 |
|  | 3.6.15 | 8.2 .27 | 8.3.23 | 11.3.15 | 11.4.29 | 11.5.33 | 11.6 .39 |
|  | 3.6 .45 | 8.2.29 | 8.3.25 | 11.3.17 | 11.4.41 | 11.5.35 | 11.6 .43 |
|  | 3.6 .55 | 8.2.31 | 8.3.27 | 11.3.19 | 11.4.43 | 11.5.37 | 11.6 .65 |
|  | 3.6.57 | 8.2.37 | 8.3.29 | 11.3.23 | 11.4.47 | 11.5.53 | 11.6 .57 |
|  | 3.6 .63 | 8.2 .39 | 8.3.31 | 11.3.29 | 11.4.49 | 11.5.55 | 11.6 .69 |
|  | 3.6 .65 | 8.2 .41 | 8.3.37 | 11.3.35 | 11.4.55 | 11.5.57 |  |
|  | 3.6 .69 | 8.2.51 | 8.3.43 | 11.3.43 | 11.4.59 | 11.5.67 |  |
|  | 3.6.71 |  | 8.3 .45 | 11.3.47 | 11.4.67 | 11.5.69 |  |
|  | 3.6 .73 |  | 8.3.49 | 11.3.59 |  | 11.5.79 |  |
|  | 3.6 .99 |  | 8.3.51 | 11.3.61 |  |  |  |
|  |  |  | 8.3.61 | 11.3.77 |  |  |  |
|  |  |  | 8.3.65 | 11.3.79 |  |  |  |


| Hw 12.1 | Hw 12.2 | Hw 12.3 | Hw 12.5 | Hw 12.6 | Hw 12.7 | Hw 12.8 | Hw 13.1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12.1.9 | 12.2.1 | 12.3.1 | 12.5.1 | 12.6 .1 | 12.7.1 | 12.8.1 | 13.1.1 |
| 12.1.11 | 12.2 .5 | 12.3 .3 | 12.5 .3 | 12.6 .5 | 12.7.5 | 12.8 .3 | 13.1 .5 |
| 12.1.15 | 12.2.7 | 12.3.5 | 12.5.11 | 12.6 .9 | 12.7.7 | 12.8.5 | 13.1.13 |
| 12.1.19 | 12.2.11 | 12.3.7 | 12.5.15 | 12.6.15 | 12.7.17 | 12.8.11 | 13.1.19 |
| 12.1.23 | 12.2.15 | 12.3.21 | 12.5.17 | 12.6.17 | 12.7.19 | 12.8.13 | 13.1.23 |
| 12.1.25 | 12.2.17 | 12.3.23 | 12.5.21 | 12.6.19 | 12.7.21 | 12.8.15 | 13.1.29 |
| 12.1.27 | 12.2.19 | 12.3.27 | 12.5.23 | 12.6.21 | 12.7.31 | 12.8.19 | 13.1.31 |
| 12.1.29 | 12.2.21 | 12.3.31 | 12.5.27 | 12.6.25 | 12.7.35 | 12.8.21 | 13.1.43 |
| 12.1.31 | 12.2.23 | 12.3.33 | 12.5.29 | 12.6.29 | 12.7.39 | 12.8.25 | 13.1.47 |
| 12.1.33 | 12.2.25 | 12.3.37 | 12.5.31 | 12.6.33 | 12.7.43 | 12.8.29 | 13.1.51 |
| 12.1.35 | 12.2.27 | 12.3.39 | 12.5.33 | 12.6.35 | 12.7.49 | 12.8.35 | 13.1.53 |
| 12.1.41 | 12.2.29 | 12.3.47 | 12.5.35 | 12.6.39 | 12.7.55 | 12.8.38 | 13.1.57 |
|  | 12.2.33 | 12.3.49 | 12.5.37 | 12.6 .41 | 12.7.63 | 12.8 .41 | 13.1.61 |
|  | 12.2.35 |  | 12.5.47 | 12.6 .43 | 12.7.71 | 12.8.43 | 13.1.65 |
|  | 12.2.37 |  | 12.5.49 | 12.6 .45 | 12.7.79 | 12.8.45 | 13.1.73 |
|  | 12.2.39 |  | 12.5.51 | 12.6.51 | 12.7.89 | 12.8.47 | 13.1.81 |
|  | 12.2.41 |  | 12.5.63 | 12.6.68 |  | 12.8.51 |  |
|  | 12.2.43 |  | 12.5.69 | 12.6.70 |  | 12.8.55 |  |
|  | 12.2.47 |  | 12.5.71 | 12.6.74 |  | 12.8.67 |  |
|  | 12.2.51 |  | 12.5.73 | 12.3.37 |  | 12.1.7 |  |
|  | 12.2.53 |  | 12.5.77 |  |  | 12.1.9 |  |
|  | 12.2.59 |  | 12.5.101 |  |  | 12.1.13 |  |
|  |  |  |  |  |  | 12.1.13 |  |


| Hw 13.2 | Hw 13.3 | Hw 13.4 | Hw 14.1 | Hw 14.2 | Hw 14.3 | Hw 14.4 | Hw 14.5 (not used) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13.2 .7 | 13.3.1 | 13.4 .3 | 14.1.1 | 14.2.1 | 14.3.1 | 14.4.3 |  |
| 13.2.8 | 13.3.3 | 13.4.5 | 14.1.3 | 14.2 .3 | 14.3.7 | 14.4.5 | 14.5.1 |
| 13.2 .11 | 13.3.7 | 13.4.11 | 14.1.7 | 14.2 .5 | 14.3.9 | 14.4.7 | 14.5 .3 |
| 13.2.13 | 13.3 .9 | 13.4.13 | 14.1.9 | 14.2.7 | 14.3.13 | 14.4.13 | 14.5.5 |
| 13.2.19 | 13.3.17 | 13.4.21 | 14.1.13 | 14.2 .9 | 14.3.19 | 14.4.17 | 14.5.9 |
| 13.2.21 | 13.3.19 | 13.4.27 | 14.1.19 | 14.2.11 | 14.3.21 | 14.4.21 | 14.5.13 |
| 13.2.23 | 13.3.23 | 13.4.29 | 14.1.23 | 14.2.15 | 14.3.23 | 14.4.23 | 14.5.19 |
| 13.2.25 | 13.3.29 |  | 14.1.27 | 14.2.17 | 14.3.51 | 14.4.25 | 14.5.23 |
| 13.2.37 |  |  | 14.1.31 | 14.2.19 | 14.3.53 | 14.4.29 | 14.5.25 |
| 13.2.41 |  |  | 14.1.33 | 14.2.21 |  | 14.4.31 | 14.5.31 |
| 13.2.45 |  |  | 14.1.35 | 14.2.29 |  | 14.4.33 | 14.5.33 |
| 13.2.49 |  |  | 14.1.37 | 14.2.31 |  | 14.4.35 | 14.5.35 |
| 13.2.61 |  |  | 14.1.39 | 14.2.33 |  | 14.4.39 |  |
|  |  |  | 14.1.41 | 14.2.39 |  | 14.4.45 |  |
|  |  |  | 14.1.43 | 14.2.41 |  | 14.4.47 |  |
|  |  |  |  | 14.2.49 |  |  |  |
|  |  |  |  | 14.2.51 |  |  |  |
|  |  |  |  | 14.2.53 |  |  |  |
|  |  |  |  | 14.2.65 |  |  |  |
|  |  |  |  | 14.2.23 |  |  |  |
|  |  |  |  | 14.2.25 |  |  |  |

