

MAT 103B College Algebra Part I

Winter 2016

Course Outline and Syllabus

Instructor: Caren LeVine
Meeting Venue: Monday/Wednesday 6pm – 7:50pm, E106
Email: celevine@mail.ltcc.edu

Office Hours (Outside The Learning Center)
Thursday
5pm – 6pm

MAT 103B College Algebra (Part 2) Lecture 4, Lab 0, Units 4

This course covers the properties of logarithms and exponentials, conic sections, systems of equations and their solution with Gaussian Elimination, a brief introduction into linear programming, sequences, series, permutations, and combinations. Transfers to CSU, UC (unit limit)

PREREQUISITE: MAT 153 and either 154A or 154AA with a grade of “C” or better or equivalent

Optional Textbook: Precalculus Enhanced with Graphing Utilities, Fifth Edition, Sullivan and Sullivan

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 new 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. ***This software license will also be good for Math 103B, and MAT104 (If your instructor uses it) at no extra cost.*** 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.

Our COURSE ID is **levine20166**

Required Calculator: A graphing calculator is required, preferably a Texas Instruments 89 or equivalent.

Course Overview:

The course covers the properties of logarithms and exponentials, conic sections, systems of equations and their solution with Gaussian Elimination, a brief introduction to linear programming, sequences, series, permutations and combinations..

Student Learning Outcomes:

1. Prove and derive mathematical statements using various methods including induction.
2. Employ matrices and their properties to solve systems of equations.
3. Construct and interpret graphs of conic sections and transcendental functions.
4. Apply the topics of the course to real world situations.

Suggestions, Tips and Advice:

- Class time is valuable. Arrive on time, be prepared having read the assigned reading and having completed any due assignments.
- Bring your notebook and your textbook to each class
- Take notes in class
- The textbook has been carefully selected. **Read it!**
- Practice. You must practice in order to succeed at math. Do some math every day.
- Use me and the tutors available to ask questions and get help.

Exams:

There will be two midterm exams given in the quarter. We will have a comprehensive final examination. No make-up exams will be given. If you can not take the exam or test on the day of the exam, you **MUST** give prior notice and arrange for a test appointment with The Learning Center. Ne exceptions unless emergency doctor's note it provided.

Online Quizzes:

There are 5 online quizzes. See the MyMathLab website for due dates and times.

Homework Assignments:

There are 25 online homework assignments. See the MyMathLab website for due dates and times.

One homework assignment will be submitted offline (i.e. paper and pencil). This is the assignment for section 12.4 which covers Mathematical Induction.

Carnegie Unit Statement:

Students earn credits (or units) based upon the Carnegie unit standard which equates 1 unit of course credit to 3 hours of coursework per week (Title 5 § 55002.5). Thus, to earn 4 quarter units for a lecture course, you must attend and participate in 4 hours per week of “in-class” lecture and complete 8 hours per week of outside work (studying, reading, completing homework assignments, preparing for quizzes and examinations, etc.) for a total course workload of 12 hours per week.

Evaluation Criteria:

Grading will be based on your total scores from:

2 Midterm exams	200 points	40 %
1 Comprehensive Final	150 points	30 %
Online Quizzes	75 points	15%
Homework assignments	75 points	15 %
Total	500 points	100%

90 % - 100 %	A
80 % - 90 %	B
70 % - 80 %	C
60 % - 70 %	D
< 60 %	F

No extra credit work will be assigned or accepted.

Help:

I want you to succeed and feel confident in this math course and future math coursework. I will help you along the way but it is up to you to ask for help. I will be available before class in the Library or outside the Math Success Center. You can make arrangements for help with math work by appointment as well. Please let me know if you have **any** difficulties or special needs. We have **tutoring** and a **Learning Assistance Center** available. We have the **Math Success Center** with tutors, computers and help available. We have a **Learning Disabilities Lab** available and I will accommodate any learning disability you may have to the best of my and the College's ability. If you find that you are lost or behind please do not hesitate to email me or talk to me before class.

Accommodations for Students with Disabilities: In compliance with accessibility laws, I am available at any time to discuss any accommodations any student requires for this class. Students are encouraged to contact LTCC DRC (<http://www.ltcc.edu/web/current-students/disability-resource-center>) for information and assistance. 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 in room A205 or by phone at (530) 541-4660 extension 249.

Online tutoring: The link to the Tutoring & Learning Center (TLR) is: http://www.ltcc.edu/web/new-students/tutoring_learning_center. For general questions, please contact us at TLCProctor@ltcc.edu, posada@ltcc.edu or call (530) 541- 4660 x740 or x744. The link to the Library is: <http://library.ltcc.edu/>

A Word on Honesty:

Cheating or copying will not be tolerated. People who cheat dilute the honest effort of the rest of us. **If you cheat on an exam you will receive an F.** Other college disciplinary action including expulsion might occur. Please don't cheat in this class. If you are having difficulty with the course, please see me.

Academic Dishonesty and Plagiarism Statement:

All submitted work for this course must be in your own words. Do not copy from the Internet or other sources nor allow someone else to do assignments for you. Papers that are plagiarized will receive a grade of zero. Papers and other submitted assignments that are similar in content will result in both students receiving a grade of zero. Academic dishonesty is a serious offense and will not be tolerated. Please do your own work at all times. If you have any questions please refer to the LTCC college catalog: Student Rights & Responsibilities - Academic Dishonesty and Plagiarism Policy; Disciplinary Actions, current catalog. The use of any electronic devices during quizzes/exams will be considered academic dishonesty and dealt with in accordance with the LTCC Student Catalogue-Academic Dishonesty policy.

Classroom Behavior and Etiquette

You have enrolled in this college class voluntarily and I commend you for your efforts at further educating yourself, an admirable thing to do. I therefore assume that you are attending class to learn. My responsibilities include maintaining an effective learning environment in the classroom so that you may learn in this class.

I expect you to respect our class meetings as a time and place for learning. As such, disruptive behavior in the classroom will not be tolerated. If you elect to disrupt your classmates while they are trying to learn I will eject you from the class. (I may eject you for any inappropriate behavior.) You may not return to class for two class meetings. Before returning to class you must come see me.

Cell phones and other technology: All personal devices other than a graphing calculator must be put away during class time. Failure to do so may result in point deductions on exams. Any interruptions in class due to personal devices will also result in point deductions. There are scheduled class breaks in which you are free to use your cell phone.

Class Schedule and Assignments (subject to revision):

mtg	date	topic covered	Reading Assignment
1	1/4	Composite Functions	5.1
2	1/6	One-to-One Functions; Inverse Functions; Exponential Functions	5.2, 5.3
3	1/11	Logarithmic Functions	5.4
4	1/13	Properties of Logarithms; Logarithmic and Exponential Equations	5.5, 5.6
	1/15	Last day to drop with no record!	
5	1/20	Financial Models	5.7
6	1/20	Exponential Growth and Decay Models; Newton's Law; Logistic Growth and Decay Models	5.8, 5.9
7	1/25	The Circle; The Parabola	1.5, 10.2
8	1/27	Exam 1: Chapter 5 sections 1 - 9	
9	2/1	The Ellipse	10.3
10	2/3	The Hyperbola; Systems of Linear Equations	10.4, 11.1
11	2/8	Systems of Linear Equations: Matrices	11.2
12	2/10	Systems of Linear Equations: Determinants; Matrix Algebra	11.3, 11.4
13	2/17	Systems of Inequalities	11.7
14	2/17	Linear Programming	11.8
	2/19	Last day to withdraw from the course with a W!	
15	2/22	Review for midterm	
16	2/24	Exam 2: 1.5; 10.2 - 10.4; 11.1 - 11.4, 11.7, 11.8	
17	2/29	Sequences	12.1
18	3/2	Arithmetic Sequences; Geometric Sequences; Geometric Series	12.2, 12.3
19	3/7	Mathematical Induction	12.4
20	3/9	Mathematical Induction; The Binomial Theorem	12.4, 12.5
21	3/14	Permutations and Combinations	13.2
22	3/16	Review for final exam	
	3/23	Final exam Wednesday 6:00 - 7:50 pm	