Math 103B-2 College Algebra

Winter 2015   **4 Units**
Instructor: Charlie Lincoln
Meeting Times: Monday, Wednesday 6:00 – 7:50 PM
Meeting Place: Room E106
Email: **c.lincoln@sbcglobal.net**
Phone: 545-9411
Office Hours: To Be Announced or By Appointment

The best way to contact me is to call my cell phone, 545-9411. If I am not in my office, please leave me a message with your name and phone number.

Optional Text: *Precalculus* 6th Edition by Sullivan & Sullivan,
Check out the Solutions manual for this course before purchasing it to see if the book meets your needs.

Course Compass Log-In: (for MyMathLab): lincoln90151
Course Compass is optional for this course but if you want to use it for practice or to study, a software license is required. You must have a valid e-mail address to use the on-line curriculum. Students have *two choices*. The *first choice* is to purchase the textbook from the bookstore. The textbook comes with the software license. Note: If you purchase a used textbook, it may not have a valid course access code. Be VERY careful when acquiring the text. 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. To access our class page, go to www.coursecompass.com and register using your student access code and the course ID for this class: lincoln90151

For assistance with MyMathLab: You may get help by calling 1-800-677-6337 during the following hours: Mon – Fri 5:00 AM – 5:00 PM & Sunday 2:00 PM – 9:00 PM. Online assistance is available 24 hours every day at: 247pearsoned.custhelp.com

Course Description: This course covers exponential and logarithmic functions, conic sections including circles, parabolas, ellipses and hyperbolas. We will study linear systems, matrices, linear programming, sequences and series, mathematical induction and the Binomial Theorem. Special emphasis will be placed on application problems and the use of the Texas Instrument 89 (TI89) graphing calculators. This course will connect math with the "real" world.

Prerequisite: A grade of "C" or better in Math 154 or equivalent or appropriate skills demonstrated through the Math Assessment process.

As a courtesy to everyone in class, please turn off all cell phones.

Students with disabilities must identify themselves to me within the first two weeks of class. Accommodations for Students with Disabilities: Students requiring accommodations for a certain disability that may affect class performance are requested to schedule with a staff member at the DRC to discuss this during the first week of the quarter so that appropriate arrangements can be made.
* Course materials available in alternate format.

The Gateway Math Center has free tutoring for all registered students. Please Log In and Out so that the facility gets the funds it needs. I recommend working with a partner or in small groups.

In this class, it is your responsibility to drop the class in order to avoid an unwanted grade.
You must go to Admissions & Records.
Friday, Jan 16, 2015 is the last day for refunds and with no record.
Friday, Feb. 20, 2015 is the last day to withdraw with a "W" grade.

Student Learning Outcomes
Students will be able to:
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.

Grading: Your class letter grade will be based on the usual grading scale:

A: 90% and above, B: 80-89%,   C: 70-79%,   D: 60-69%,   F: 59% and under

Homework	20 %
4 Quizzes	20 %
2 Midterm Exams	40 %
Comprehensive Final Exam:	20 %
Total	100 %

Homework: The homework problems are to be turned in weekly. Their due dates are listed every week. These problems are considered late if they are not turned in by 11:00 PM on the day they are due. If you will be absent, either turn in the homework early or have someone turn in the homework assignment for you. Homework that is turned in late within one week of the due date receives 8 points. Homework turned in after this receives *no credit*. All homework sections are worth 10 points each.

Quizzes: There are no make-up quizzes. I give 5 quizzes but only 4 are counted. The lowest quiz score will be dropped. All quizzes are given at the beginning of class. Please be on time.

Midterm Exams: You must notify me before an exam if you will miss the exam (577-0414). Exams must be made up within 3 school days after the scheduled date. You may take an exam up to 3 school days before the scheduled date without penalty. Arrangements must be made with me one week in advance.

Please talk to me if you do not understand my policies.

Tentative Schedule for Math 103B-2 (Monday, Wednesday)

Date	Subject	Section
Jan 5 M	Introductions, Syllabus, 5.1 Composite Functions	5.1
Jan 7 W	One-to-One Functions; Inverse Functions	5.2
	Exponential Functions	5.3
Jan 12 M	Logarithmic Functions	5.4
Jan 14 W	**Quiz 1** (Sections 5.1 – 5.3)	
	Properties of Logarithms	5.5
Jan 19 M	**Martin Luther King Holiday**	
Jan 21 W	Log and Exp Equations	5.6
Jan 26 M	Financial Models	5.7
	Growth & Decay	5.8
Jan 28 W	**Quiz 2** (Sections 5.4 – 5.6)	
	The Parabola	10.2
Feb 2 M	The Ellipse	10.3
Feb 4 W	The Hyperbola	10.4
Feb 9 M	REVIEW for Exam 1	
Feb 11 W	**Exam 1** (Chapter 5)	
Feb 16 M	**Washington's Birthday Holiday**	
Feb 18 W	Systems of Linear Equations	11.1
	Matrices	11.2
Feb 23 M	Determinants	11.3
	Matrix Algebra	11.4
Feb 25 W	**Quiz 3** (Sections 10.2, 10.3, 10.4)	
	Systems of Inequalities	11.7
	Linear Programming	11.8
Mar 2 M	Sequences	12.1
	Arithmetic Sequences	12.2
	Geometric Sequences	12.3

Mar 4 W   **Quiz 4** (Sections 11.1, 11.2, 11.3, 11.4)
           Mathematical Induction   12.4

Mar 9 M   REVIEW for Exam 2

Mar 11 W   **Exam 2** (Sections 10.2, 10.3, 10.4, Chapter 11.1-11.4, 11.7, 11.8, 12.1-12.3)

Mar 16 M   Binomial Theorem   12.5

Mar 18 W   **Quiz 5** (Sections 12.4 – 12.5)
           Permutations & Combinations   13.2

Mar 23 M   REVIEW for Final Exam

The Comprehensive Final Exam is on Wednesday, March 25 at 6 PM