College Algebra Course Outline MAT 104 Section F401[16619], Spring 2013 Tuesdays and Thursdays 4:00PM - 5:40PM, Room: Gillet 203 CUNY Lehman College

Instructor: Byung Do Park

Email: bpark@gc.cuny.edu

Office Hours: Tuesdays 3:00 - 4:00 PM or by appointment. Set up an appointment by email for the location.

Course Syllabus: The departmental course syllabus and the course calendar is available at: http://lehman.edu/academics/mathematics-computer-science/calculus.php

Section webpage: Announcements, homework, exam schedules and other relevant information will be posted on the following webpage(case sensitive!):

http://wfs.gc.cuny.edu/bpark/www/teaching/s2013_mat104.html

Textbook: Aufmann and Lockwood, *Algebra: Beginning and Intermediate*, 2nd ed., Houghton Mifflin, 2005. Custom ISBN: 0-618-96446-0

There is a **prerequisite** to take this course. A grade of C or better in MAT 090 or placement by the department is required. Students who do not have a solid grasp of elementary algebra should not be in this course.

Course Description: We shall study various algebraic techniques which are consisting the very bottom of underpinnings of mathematics. Assuming that everyone understands the basic operations $+, -, \times$ and \div , and is able to solve a first-order equation over the rationals, we shall study topics including the following:

- First-order inequalities in one variable, First-order functions and their graphs, Solving a system of first-order equations with 2 and 3 variables.
- Basic operations of polynomials, Integral exponents, Scientific notations, Factorizations.
- Radical expressions, Rational exponents, Basic operations with radicals, Complex numbers, Quadratic equations, Quadratic functions and their graphs, Conic sections.
- Exponential and logarithmic functions and their graphs, Trigonometry.

As we proceed, we shall put emphasis on carrying out calculations rapidly and precisely.

Exams: There will be *three* midterm exams and a final exam. Location, date and time will be announced as soon as determined. The smallest score of these three midterm exams will be dropped, and hence there will be no make-up exam for any reason. The final exam for this course will be a uniform departmental final exam.

Policies on the Final Exam: There will be a *uniform departmental final exam* for each section of MAT 104 courses, and to receive a passing grade from MAT 104, a student must be passed from the *uniform portion* of the final exam. A sample uniform final exam is available either at the webpage of this section or at the department office. Passing score is 9 out of 15 problems answered without any errors. There is no partial credits for the uniform final exam, and calculators are not permitted for this exam.

Homework and Quizzes: There will be homework for each lesson. Homework and its due dates will be posted on the section webpage. There will be a quiz on each due date, and quiz problems will be taken from the corresponding homework. There will be no make-up for quizzes.

Assessment Quiz: An Assessment Quiz will be given in the first lesson. This quiz will not be reflected to the total score. Students who did poorly in this quiz may be advised about possible risks on not dropping this course.

Grading Policies: For those who passed the uniform final exam, the total score will be calculated by applying the following weights:

2 Midterms 40%(20% each), Final 35%, Quizzes 20% and Homework 5%.

The least score among three midterm scores will be dropped. A letter grade will be assigned based on a student's total score. A failure grade will be assigned if a student did not pass the final exam.

Academic Integrity: It is expected that you will complete all quizzes and exams without giving or receiving help from anyone. You may talk to other students about the homework but you must then complete the homework yourself. The minimum penalty for giving or receiving help on a quiz or an exam is a grade of 0 on that test.

Instructor's policies: Cell phones are not allowed to use in class. Electronic devices should not be shown in any quiz or exam.