SUFFOLK COUNTY COMMUNITY COLLEGE  
Spring 2010 Course Outline

Name of Course: Intermediate Algebra  
Catalog Number: MAT111  
Section: 22738/303  
Prerequisite: MAT007 – Algebra I or equivalent  
Course Instructor: Associate Professor C. Kulis  
Telephone: 548-3582 or 548-2628 (secretary)  
E-mail Address: kulisc@sunysuffolk.edu  
Office Hours: Monday: 9:00 -9:30am & 12:15 -1:30pm  
Tuesday: 1:15 - 2:00 pm  
Wednesday: 9:00-9:30am & 12:30-1:30pm  
Thursday: 1:15 - 2:15 pm  
Shinnecock Building room 221  

Course Philosophy: MAT111 is a skills-oriented course in Algebra which serves as a prerequisite for most mathematics sequences. As such, the course is intended for students who have not successfully completed Intermediate Algebra (or equivalent), who are in need of it in subsequent mathematics courses or who are intending to eventually pursue a Bachelor’s program where exit proficiency exists.  

College-wide attendance policy: Each student is expected to attend every class session for which he or she is registered. The student is responsible for all that transpires in class whether he or she is in attendance or not. The College defines excessive absence or lateness as more than equivalent of one week of class meetings during the semester.  

Attendance Policy: Three unexcused absences will lead to withdrawal from the course. Students who wish to withdraw must do so officially (via the registrar) by the official withdrawal date (Monday, March 22nd) set in the academic calendar. A student who wishes to withdraw after midterm will receive a W if he or she is passing and an F if failing.  

Classroom Civility: The classroom experience is a shared one. Class sizes are relatively large and the potential for distraction is significant for both your peers and me. In order to reduce this from occurring, the following guidelines are given:  

a) Arrive on time and do not prepare to leave until the class is dismissed.  
b) You are not to work (read, write, text message, collaborate, etc.) on material that is not directly relevant to the ongoing class activity. If you are caught texting, you will be asked to leave the class for the day. It will be counted as an absence.  
c) Cell phones are to be turned off prior to entering class. I consider a ringing phone a distraction. Should your cell phone go off during a class, you will be asked to leave the class for the day. It will be counted as an absence. Misuse of cell phones, such as calls or texting during a test, will be considered
academic dishonesty. It may carry serious penalties including but not limited to course failure or dismissal from the college.

d) Leaving class prior to dismissal will count as an absence unless you are attending to personal hygiene or you have spoken with me prior to class starting.

e) Sleeping in class is unacceptable.

f) Conversations with your peers are not to occur unless they are part of the designated discussion activity. Respect what I and your fellow students have to say. All questions are important.

**Student requirements:** During each class session I will introduce new topics and review previous topics. I expect a great deal of participation on the part of all students. Homework will be given for every class and is the best way for the student to determine if he or she understands the work. The homework will cover the new topics covered in class. You must plan adequate time outside of class to work on homework and go to the Academic Skills Center (O234) for extra help.

**Grading policy:** There will be five exams and a final. There will be no makeup exams. Arrangements must be made in advance for unusual circumstances. I will drop the lowest grade of the five tests. The last test will be included in your average if you have earned an A up to that point. An absence from a test will be considered the lowest grade. An absence from a second test will require me to give a zero as one of your grades. Other factors affecting your final grade will be absences, lateness, participation, and disruptive behavior. I may give unannounced quizzes if I believe you are not doing the homework. Students who are doing the homework will have no problem passing the quiz.

4 tests..........................85%
Final...............................15%

**Calculator policy:** You may use a calculator for this course, although no calculator is required. You will not be permitted to use your cell phone as your calculator for exams. I will check your calculator before each exam.

**Required Textbook:** Intermediate Algebra, 8th edition
Charles McKeague
Thomson; Brooks/Cole

**Topic Outline**

**Chapter 1: Real Numbers:**

a) Fundamental definitions and notations
b) The real numbers
c) Properties of real numbers
d) Arithmetic with real numbers

**Chapter 2: Equations and Inequalities in One Variable:**

a) Linear equations in one variable
b) Formulas and applications  
c) Linear inequalities in one variable  
d) Equations and inequalities with absolute value

**Test 1**

**Chapter 3: Equations and Inequalities in Two Variables:**  
a) Rectangular coordinate system  
b) Slope of a line  
c) Equation of a line  
d) Linear inequalities in two variables  
e) Introduction to functions  
f) Variation

**Chapter 4: Systems of Linear Equations and Inequalities**  
a) Systems of linear equations in two variables  
b) Systems of linear equations in three variables  
c) Applications  
d) Solving systems of linear inequalities

**Test 2**

**Chapter 5: Polynomials and Exponents**  
a) Properties of exponents  
b) Polynomials, sums, and differences  
c) Multiplication of polynomials  
d) Greatest common factor and factoring by grouping  
e) Factoring polynomials  
f) Special factoring  
g) Solving equations by factoring

**Test 3**

**Chapter 6: Rational Expressions and Rational Functions:**  
a) Basic properties and reducing to lowest terms  
b) Division of polynomials  
c) Multiplication and division of rational expressions  
d) Addition and subtraction of rational expressions  
e) Complex fractions  
f) Equations involving rational expressions  
g) Applications

**Test 4**

**Chapter 7: Rational Exponents and Roots:**  
a) Rational exponents and simplified form for radicals
b) Addition and subtraction of radical expressions

c) Multiplication and division of radical expressions

d) Equations with radicals

e) Complex numbers

Test 5

Chapter 8: Quadratic Functions:

a) Solving quadratic equations by factoring or by taking square roots

b) Solving quadratic equations by completing the square

c) Solving quadratic equation by using the quadratic formula

d) Graphing Parabolas

Final