

Syllabus

Intermediate Algebra with Geometry

Math 99 ABC - Spring 2009

Course Title	Intermediate Algebra with Geometry
Credit Hours	5
Prerequisites	Grade of C or better in Mathematics 110 or Mathematics 98, or placement test, or consent of department chair.
Section Classes	99 ABC (section number:87297)
Instructor	Monday, Wednesday, 9:00 AM - 11:25 AM in Room 3979 Marta Hidegkuti e-mail: mhidegkuti@ccc.edu Office: Room 3812
Office Hours	Walk-in (conference hours) Monday 4:30 - 5:30 Monday, Wednesday 11:30 - 12:00 and 1:15 - 1:45 Tuesday, Thursday 10:15 - 10:45 By appointment (advisement hours) Thursday 2:00 - 3:00 Friday 10:00 - 12:00
Web Sites	http://faculty.ccc.edu/mhidegkuti/Math99/math99_sp09/math99.html and www.mathzone.com (section code F97-67-6CF)
Textbook	Beginning and Intermediate Algebra; second edition; Julie Miller, Molly O'Neil, and Nancy Hyde; McGraw Hill, 2008; ISBN Number: 978-0-07-305281-6.
MathZone	If you have used MathZone last semester with Math 98, your account is valid for this course. If you buy the textbook at Beck's Bookstore, it will automatically include access to MathZone. Books purchased at a different location may not have MathZone access. MathZone can be purchased separately at www.mathzone.com and it costs approximately \$15.
Calculator	The use of a scientific calculator is strongly recommended. Students are expected to bring the calculator to class. The optimal calculator is TI-30X II S . The price of this model is between \$15 and \$20. Do NOT purchase a different calculator if it is significantly more expensive. It is not true that more expensive calculators are easier to use. During quizzes and exams, students are not allowed to use a graphing calculator. Students are not allowed to use a cell phone as a calculator any time during class.
Tutoring Center	The Tutoring Center is located in room L129. Students are encouraged to seek help and guidance during the course. Students have already paid for this service as part of tuition fees. Please note: in order to receive tutoring, students need to sign up in advance.
SSLI	The Student Success and Leadership Institute (SSLI) is located in room 1435. SSLI offers free services to students, including tutoring, orientation, help with e-mail account or registration.

Important Dates First class: Wednesday, January 21
Exam 1: Wednesday, February 11
Holiday, no class: Monday, February 16
Exam 2 (same as Midterm Exam): Wednesday, March 11
Spring Break: April 6-12
Exam 3: Wednesday, April 15
Last day to withdraw from classes: Monday, April 20
Exam 4 (same as Final Exam): Wednesday, May 13
End of Semester: Saturday, May 16

Attendance Policy Attendance is an essential part of the course. Regular attendance is expected of all students in the course. Attendance will be taken each class period. Students are expected to be on time and to attend the entire session. Please make every effort to arrive to class on time. If you arrive after attendance has been taken, check at the end of class that your attendance record has been corrected. If you are absent, you are responsible for all work and assignments covered in lecture that day.

Administrative Withdrawal If a student misses two of the first three classes, he or she will be dropped. Students will be administratively withdrawn at midterm (October 15) if at least two of the following apply:

1. Less than 70% of assignments up to the midterm have been completed.
2. Less than 70% of quizzes and tests up to the midterm have been attempted.
3. Less than 50% of class sessions up to the midterm have been attended.
4. Student missed 4 consecutive classes.

Student Initiated Withdrawal Not attending classes does not constitute withdrawal from the course. After the midterm date, instructors can no longer drop students from the course based on attendance. If students stop attending classes after the midterm, the instructor can only assign a grade of F. **If you no longer attend classes, it is essential that you stop by at the registrar's office and officially withdraw from the course** to protect your average. The last day for student initiated withdrawal is April 20, 2009. Before withdrawing from the course, students are encouraged to consult the instructor.

Grading Scale Grading of all assignments, quizzes, and exams will be based on the following scale.

90-100	A
80-89	B
70-79	C
60-69	D
0-59	F

Midterm Grade **If the Midterm Exam (same as Exam 2) is below 70%, a D or F will be given as midterm grade.** In other words, students must earn a passing grade on the exam to receive a passing midterm grade for the course. If the midterm exam is at least 70%, the midterm grade will be the weighted average of the grades shown below with their weights.

Exam 1: 25%
Exam 2 (Midterm Exam): 35%
Quizzes: 30%
Homework: 10%
Extra Credit Assignments: 5%

Before determining the grade given for quizzes, the lowest quiz score will be dropped.

End of term testing: at the end of semester, **all students MUST take the COMPASS diagnostic skill test.** If a student does not take the COMPASS test, he or she will receive an incomplete for final grade. The COMPASS test will count as 5% of the final exam grade.

Final Grade **If the Final Exam (same as Exam 4) is below 70%, a D or F will be given as final grade.** In other words, students must earn a passing grade on the exam to receive a passing final grade for the course. If the final is at least 70%, the midterm grade will be the weighted average of the grades shown below with their weights.

Exam 1: 15%
Exam 2 (Midterm Exam): 15%
Exam 3: 20%
Exam 4 (Final Exam): 20%
Quizzes: 20%
Homework: 10%
Extra Credit Assignments: 5%

Before determining the grade given for quizzes, the two lowest quiz scores will be dropped.

Successful Completion: If a student receives a final grade of C or better, he or she may take the next mathematics course, regardless of the end of term COMPASS test results. If the COMPASS test results place a student into the next mathematics course, he or she may take that next course, even if the final grade is a D or F. In short, the final grade and the end of term COMPASS test results are two different options for students to proceed to the next course.

Makeup Policy **Without exception, there will be no making up quizzes.** If a student missed a quiz, a score of zero will be assigned. Exams can be made up only if it was missed due to a documented emergency. If possible, students should notify the instructor in advance. All make-up will take place on Saturday, May 2, 10 AM - 2PM.

Homework **Homework is an essential part of the learning process; do not expect to do well in this course without keeping up with the homework.** Homework is expected to be turned in at the beginning of class, stapled, written neatly and legibly, on graph paper. Please do not ask the instructor for a stapler. To earn full credit, always show all work. A solution turned in without work shown will receive a maximum of 20% credit. Homework assignments will consist of problem sets. If the assignment to be turned in consists of more than one problem set, they should be stapled separately. Within a problem set please present the problems in the order they were assigned and circle your final answers. After homework assignments have been graded and returned to students, they may re-submit them with corrections, for full credit.

Late Homework Homework assignments turned in late will receive up to 50% credit. If an assignment is more than one week late, no credit will be given.

Academic Integrity Any incident of academic dishonesty may result in actions from assigning a grade of F given for the entire course to expulsion from the college. For further information, please refer to the Student Policy Manual.

General Information

At all times, please treat the instructor, other students, and their opinions with respect. Before arriving to class, please turn off all cell phones, pagers, and other loud devices. Please make every effort to arrive on time for class. Please refrain from talking while the instructor is lecturing. If you need an extensive review (for example, due to absence) of material presented in class, please see the instructor during office hours. Valuable class time can not be spent on assisting one or a few students to the detriment of the entire class. Office hours are designated to address these problems. Arrive to office hours prepared. If you have missed a class, be sure to obtain and read all class-related material (handouts, text book section, and class notes). Have a list of specific questions. Please retain all class-related material until you receive your final grade for the course. At all times, email is the fastest and most efficient method to contact the instructor. If you wish to contact the instructor about grades or attendance or other administrative issues please use email. **When e-mailing, please use your CCC student account.**

Course Information

Catalogue Description: Algebraic topics include: rational exponents; scientific notation; radical and rational expressions; linear, quadratic, quadratic in form, rational, radical, and absolute value equations; compound linear inequalities; literal equations; systems of linear equations in two and three variables; systems of linear inequalities; and introduction to functions. Geometric topics include: perimeter; area; volume; Pythagorean Theorem; and similarity and proportions. Students should be exposed to graphing calculator technology and/or computer algebra systems. Writing assignments, as appropriate to the discipline, are part of the course.

Course Objectives:

- Develop the algebraic skills necessary for problem solving.
- Develop the ability to model linear, quadratic, and other nonlinear relations, including the use of the graphing techniques and geometrical principles as tools, for the purpose of solving contextual (real-world) problems.
- Manipulate and apply literal equations for the purposes of solving contextual (real-world) problems.
- Writing and communicating the results of problem solving appropriately.
- Use technology as one aide for the purposes of solving contextual (real-world) problems.

Truman College General Education Goal(s): Upon successful completion of this course, students will demonstrate the ability to think critically, abstractly, and logically.

Student Learning Outcomes: Upon satisfactory completion of the course, students will be able to:

- Simplify expressions containing rational exponents.
- Perform operations on and simplify radicals.
- Perform operations on and simplify rational expressions.
- Solve quadratic equations with real solutions, including the use of the quadratic formula.
- Solve rational equations.
- Solve absolute value equations of the form $|ax + b| = c$.
- Solve radical equations of the form: $\text{square root}(ax + b) = c$.
- Solve compound linear inequalities.
- Solve systems of linear inequalities in two variables.
- Solve systems of linear equations in two and three variables.
- Formulate and apply an equation, inequality or system of linear equations to a contextual situation.
- Solve and evaluate literal equations, including nonlinear equations.
- Formulate and apply nonlinear literal equations to a contextual (real-world) situation.
- Graph linear and quadratic equations.
- Determine equations of lines, including parallel and perpendicular lines.
- Determine whether given relationships represented in multiple forms are functions.
- Determine domain and range from the graph of a function.
- Formulate and apply the concept of a function to a contextual (real-world) situation.
- Interpret slope in a linear model as a rate of change.
- Apply formulas of perimeter, area, and volume to basic 2- and 3-dimensional figures in a contextual (real-world) situation.
- Apply the Pythagorean Theorem to various contextual (real-world) situations.
- Apply the concepts of similarity and congruency of triangles to a contextual (real-world) situation.