Syllabus for Basic Algebra

MTH 102 Section 038  

Fall 2012  
T/R 5:00 – 6:50  
Room A131

Instructor: Byron Hunter  
Phone: (847) 543-2910  
Email: bhunter@clcillinois.edu  
Web Address: http://home.clcillinois.edu/eng504/  
Office: L137

Hours:

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<thead>
<tr>
<th>Time</th>
<th>Mon.</th>
<th>Tue.</th>
<th>Wed.</th>
<th>Thu.</th>
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<tbody>
<tr>
<td>12:00-1:00</td>
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<td>1:00-2:00</td>
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<td>5:00-6:00</td>
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<td>8:00-9:00</td>
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Required Material: The TI-83 or TI-84 graphing calculator is required and the text is required (electronic version is acceptable).

Prerequisite: Completion of MTH 101 with a grade of “C” or Basic Algebra Readiness.

Course Description: This developmental course is the first course in the algebra sequence. Basic algebra topics include, but are not limited to: expressions, linear equations and functions with graphing, exponents, basic polynomial operations, and factoring. Modeling and problem solving will be introduced throughout the course.

Instruction: Lecture, discussion and group work will be utilized. It is the responsibility of every student to assist in facilitating effective discussion by being prepared for class. It is expected that every student will assist in developing a class setting that is free of distraction for all students.
Course Objectives: Upon completion of this course the student should be able to:

1. Evaluate and simplify algebraic expressions using the correct order of operations.
2. Simplify expressions by using the distributive property and combining like terms.
3. Solve linear equations in one variable algebraically and by utilizing technology.
4. Solve linear inequalities in one variable algebraically and by utilizing technology.
5. Solve formulas and equations for a specified variable.
6. Translate word phrases into mathematical expressions.
7. Translate word sentences into equations and solve.
8. Model and solve application problems.
9. Determine the domain and range of relations and functions.
10. Determine if a relation is a function.
11. Use function notation.
12. Determine the slope of a line.
13. Analyze and compare the slopes of horizontal, vertical, parallel, and perpendicular lines.
15. Write the equation of a line given data.
16. Solve systems of linear equations algebraically and by utilizing technology.
17. Simplify expressions involving exponents.
18. Simplify polynomial expressions using the operations of addition, subtraction, multiplication, and division.
19. Determine the greatest common factor of a polynomial.
20. Determine factors of polynomial by factoring the greatest common factor.
21. Determine factors of polynomials with three or four terms.
22. Determine factors of polynomials using special factoring formulas.
23. Solve equations by factoring.

Grading policy: There will be four tests throughout the semester, at least five quizzes, hand-in assignments, and a comprehensive final exam. The lowest of the four test scores may be replaced by the final exam grade. Your final grade will be based on your level of achievement on the quizzes, assignments, tests, and final exam as well as attitude and participation. A portion of the attitude/participation grade will be determined by effort on homework. Homework will be assigned daily and collected frequently.

Quizzes: At least five 15-minute quizzes will be given during the semester. The best five of these scores will count toward your final grade. Most of the quizzes will be unannounced. Also, under no circumstances will make-up quizzes be given.

Make-Up Test Policy: You are expected to take tests at the scheduled time. Since the lowest test score may be replaced, a missed test will go as a 0, and then be replaced by the final exam score. However, if you do miss an exam please make the reason that the exam was missed known.

Grades/scale: Tests: 12% each * 4 = 48%
Quizzes: 12% total 80-89.9% B
Assignments: 10% 70-79.9% C
Other: 5% 60-69.9% D
Final: 25% Below 60% F

Assignments: Daily homework will be collected and graded frequently. Also, several group or calculator assignments will be assigned and collected. Late assignments will not be accepted without prior approval of the instructor.
How to succeed:  
1. Come to every class.  
2. Do all assigned homework and reading assignments.  
3. Study and do assignments within 24 hours of every class period.  
4. Get extra help from me or from the Math Center located in the library.  
5. Find a classmate to work together with and to get notes from if you miss class.  
6. Ask questions.  
7. If you begin to fall behind be sure to seek help!

Student Responsibility: Attendance is required. It is the responsibility of the student to acquire any material missed as a result of an absence. It is recommended that every student seek to find a partner or group to study with and use as a resource when an absence occurs. A common standard used to figure out how much time per week to set aside for class preparation is to multiply the number of credit hours enrolled in by 2. A student enrolled in one 4 credit hour class should set aside 8 hours a week for class preparation, 4*2=8. Students enrolled in 15 credit hours need to set aside 45 hours each week, 15 hours for class meetings and 30 hours to study and prepare. Being a full-time student is a full-time job. When a student has difficulties in a mathematics course, the most common reason for their performance is a lack of time committed to the class.

Technology: The use of technology in the classroom should be restricted to the required calculator and any required computer work. If a phone must be left on, it should be inaudible to those around and any emergency phone calls/texts should be received outside of the classroom.

Students with Special Needs: If you are a student with a documented disability and may need academic accommodations such as extended time for exams and/or an in-class note taker, please present documentation to the Office for Students with Disabilities in L112 at the Grayslake campus. To schedule an appointment, please call: voice (847) 543-2055, TTY 223-0134. If you have already contacted the Office for Students with Disabilities and have completed the Instructor Notification Form, please schedule a time to meet with me and discuss your needs.

Academic Honesty: The College of Lake County has adopted the Student Rights and Responsibilities Policy (#403) and a Statement of Student Academic Integrity. These may be found in the Student Handbook. Among the violations of academic integrity listed and defined are: cheating, plagiarism, falsification and fabrication, unauthorized complicity, abuse of academic materials, complicity in academic dishonesty, falsification of records and official documents, personal misrepresentation and proxy, and bribes, favors, and threats. It is the student’s responsibility to be aware of behaviors that constitute academic dishonesty. Pursuant to the due process guarantees contained in the Student Rights and Responsibilities Policy and Procedures on Student Academic Integrity, the minimum punishment for the first offense for a student found in violation of the standards of academic integrity is failure in the assignment. In addition, a disciplinary record will be established and kept on file in the office of the Vice President for Student Development.

Important Dates: Monday, September 3rd – Tuesday, September 4th – Labor Day Holiday – No classes  
Thursday, September 6th – Last date to withdraw without a “W” on transcript  
**Wednesday, November 7th** – **Last day to withdraw**  
Wednesday, November 21st – Friday, November 23rd – Thanksgiving Break – No classes

Note: If you plan to discontinue attending your class anytime during the semester, it is strongly recommended that you take responsibility for dropping the class. Grades of W will only be assigned to students who drop themselves.
# Content Schedule

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<tr>
<th>Week</th>
<th>Topic</th>
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<tr>
<td>1 – 2</td>
<td>Introduction to Algebraic Expressions – Chapter 1</td>
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<td>2 – 5</td>
<td>Equations, Inequalities, and Problem Solving – Chapter 2</td>
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<tr>
<td>5 – 9</td>
<td>Introduction to Graphing and Functions – Chapter 3</td>
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<tr>
<td>9 – 11</td>
<td>Systems of Equations in Two Variables – Chapter 4</td>
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<td>11 – 15</td>
<td>Polynomials – Chapter 5</td>
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<tr>
<td>15 – 16</td>
<td>Polynomial Factorizations and Equations – Chapter 6</td>
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