

# Clarendon College

Clarendon, Texas

Fall 2009

Math 0303-101

Developmental Math III

Instructor: Christy Cox  
Box 968  
Clarendon, TX 79226

Office: 109  
Phone: 806-874-4824  
e-mail: [christy.cox@clarendoncollege.edu](mailto:christy.cox@clarendoncollege.edu)

---

**Classroom Location:** Clarendon College Room #107      **Time:** Thursdays 6:00 - 8:40 pm

**Office Hours:** M and TH 5:30 -6:00pm

**Course Description:** Pre-College algebra for students who have not passed the THEA, but who have passed the previous level(s) of developmental studies required and need addition reinforcement of skills necessary for entry into Math 1314 or to pass the THEA.

Lecture Hours: 3

Laboratory Hours: 0

Semester Hours: 3

Prerequisites: Consent of instructor

## **Statement of Purpose:**

This course is intended to provide the student with the basic skills and concepts needed to be successful in his/her study of College Algebra and further studies in Mathematics and Science.

## **Required instructional Materials:**

**Textbook:** Lial, Hornsby, McGinnis, Developmental Mathematics: Basic Mathematics and Algebra. Published by Prentice Hall

**Supplies:** Textbook, paper, pencil, MyMathLab and graphing scientific calculator

## **Methods of instruction:**

1. Answer questions and review previous assigned work.
2. Explanation of the concept and skills under consideration
3. Provide examples on the board with step by step explanation of the operations and principles being applied.
4. Comment when appropriate on the history, importance, and application of specific concepts.
5. Overheads and power point when appropriate.

## **Course Objectives**

At the end of the course the student should be able to:

1. Perform operation with Real Numbers and Rational Expressions.
2. Graph, solve, and apply linear equations.
3. Solve and graph linear inequalities.
4. Problem Solve and use formulas.
5. Solve systems of linear equalities and inequalities.

6. Solve, graph, and apply quadratics.
7. Factor Polynomials.
8. Solve equations and inequalities involving absolute values.
9. Define, evaluate and graph functions.
10. Write linear equations given a point and slope.
11. Write linear equations given two points.
12. Find the determinant of a matrix.

**Exemplary Objectives:**

1. To apply arithmetic, algebraic, higher-order thinking methods to modeling and solving real-world situations.
2. To represent and evaluate basic mathematical information verbally, numerically, graphically, and symbolically.
3. To expand mathematical reasoning skills and formal logic to develop convincing mathematical arguments.
4. To use appropriate technology to enhance mathematical thinking and understanding and to solve mathematical problems and determine the reasonableness of the results.
5. To interpret mathematical models such as formulas, graphs, tables and schematics, and draw inferences from them.
6. To recognize the limitations of mathematical models.
7. To develop the view that mathematics is an evolving discipline, interrelated with human culture, and understand its connections to other disciplines.

**Grading Policies: You must go to the lab and do the assignments if you intend on passing this class. Assignments and quizzes on the MathXL will not be re-open after the due date. If you are going to miss class for extra-curricular activities then make arrangements ahead of time to change the dates on the assignments. IMPORTANT: NO GRADES WILL BE ACCEPTED UNTIL YOU HAVE SIGNED THE CLASS CONTRACT---Any grades collected before the class contract is signed will be recorded as a zero.**

Daily work: 20% This will be taken from your MyMathLab or from the assignments listed below. If you choose to do the assignments out of the book; all work must be shown verbally or numerically in order to receive credit.

Quizzes: 20% Quizzes will not be announced. There are no makeups on quizzes. Quizzes for assignments out of the book will be given on the Thursday indicated below.

Lab: 20% This is based on attendance and assignments completed. To get an A in the lab you must complete 80% of the Plato lab assignments.

Tests: 40% Chapter test will be located on your MyMathLab or given in the classroom on Thursday Evenings. The comprehensive final exam will count as two test grades and takes approximately 1.5 hours. No early finals are given unless permission is given by the Dean of Instruction and will be given in the classroom

A simple average of the above will be used to determine the letter grade for the course based on the following:

89.5— 100%	A	79.5 - 89.4%	B
69.5 - 79.4%	C	59.5 – 69.4%	D
59.4 – below	F		

A student's final grade will be made available through Campus Connect at Clarendon College's website.

**Student Academic Integrity:**

Failure to comply with lawful direction of a classroom instructor is a disruption for all students enrolled in the class. Cheating violations include, but are not limited to: (1) obtaining an examination , classroom activity, or laboratory exercise by stealing or collusion; (2) discovering the content of an examination , classroom activity, laboratory exercise, or homework assignment before it is given; (3) using an unauthorized source of information during an examination , classroom activity, laboratory exercise, or homework assignment ; (4) entering an office or building to obtain unfair advantage; (5) taking an examination for another person; (6) completing a classroom activity, laboratory exercise, homework assignment, or research paper for another person; (7) altering grade records; (8) using any unauthorized form of electronic communication device during an examination, classroom activity, or laboratory exercise; (9) Plagiarism. Plagiarism is the using, stating, offering, or reporting as one's own, an idea, expression, or production of another person without proper credit.

Disciplinary actions for cheating in a course are at the discretion of the individual instructor. The instructor of that course will file a report with the Dean of Students when a student is caught cheating in the course, whether it be a workforce or academic course. The report shall include the course, instructor, student's name, and the type of cheating involved. Students who are reported as cheating to the Dean of Students more than once shall be disciplined by the Dean. The Dean will notify all involved parties within fourteen days of any action taken.

### Classroom Conduct:

I will show you the respect you deserve as a student. I, in return, expect respectful behavior from you.

#### **Disrespectful behavior includes...**

- **Arriving late.**
- **Leaving the room during class time.** Plan restroom visits before or after class—not during class. If special needs exist, please make prior arrangements.
- **Using electronic communication devices.** This includes cell phones, pagers, etc. These are not allowed during class time. If special needs exist, please make prior arrangements.
- **Sleeping in class.**
- **Talking in class.** Class time is not the time to visit with your fellow classmates. If you do, I will ask you to leave the classroom.
- **Using headphones.** If you do, I will ask you to leave the classroom.
- **Use of profane or inappropriate gestures and/or language.**

### Class Policies:

1. **Final Exams:** Students must take a final exam for each of their academic courses. The schedule of final exams times is published at the beginning of the semester. Do not make plans to leave school before your scheduled final exam. I will not give any early finals except in extreme emergencies after students have provided documentation of said emergency.
2. **Scholastic Honesty:** I adhere to a strict policy regarding academic honesty. Anyone who is dishonest in any way will receive a zero on that assignment or exam with no opportunity to make up the zero and may be dropped from the course with a grade of F. That student, if allowed to remain in the course, will not be allowed to receive any extra credit points from the time of the infraction through the remainder of the course. Furthermore, that student will not be allowed to drop their lowest quiz grade or exam grade. A second act of dishonesty will result in an F for the course. Students who commit an act of academic dishonesty will not be allowed to withdraw from the course with a "W." Note that dishonest behavior includes both the act of copying someone else's work as well as allowing someone to copy your work. Both students are equally guilty and will be equally punished.
3. **Electronic Communication/Entertainment Devices:** The use of cell phones, iPods, or other electronic communication or entertainment devices is prohibited. A first offense will result in confiscation of the device for one day. A second offense will result in loss of the device for one week. A third offense will result in loss of the device for the remainder of the semester.
4. **Withdrawal:** If you decide that you are unable to complete this course or that it will be impossible to complete the course with a passing grade, you may drop the course and receive a "W" on your transcript instead. Withdrawal from a course is a formal procedure that you must initiate. If you do not go through the formal withdrawal procedure, you will receive a grade of "F" on your transcript.  
A student is permitted to drop a course if he/she obtains an official drop slip from the office and has the instructor sign the slip before the 12<sup>th</sup> class week.  
**Remember, a student is only allowed to drop the same class twice before he/she will be charged up to triple the tuition amount for taking the class a third time or more. Furthermore, beginning with the Fall 2007 semester, students in Texas may only drop a total of 6 courses throughout their entire undergraduate career. After the 6, he/she will no longer be able to withdraw from any classes.** If you think you need to drop this course, please talk with me about it first. It is possible that there is something you can do to still pass the course. Don't hurt your chances for a passing grade in the course by not attending labs or taking exams before we have discussed your situation. **The last day to withdraw from this course with a "W" is (this changes every semester)**
5. **Absences:** Please take class attendance seriously. You are here to learn all you can learn, to build a body of knowledge to help you in your career and/or to give you satisfaction in the future. Students who are motivated come to class. **You are responsible for the material covered in class (lecture or lab) even if you are absent.**

6. **Excused absences:** Make-ups for tests will be allowed *only* if absences are excused. Excused absences can result from...

1. illness on the part of the student : must have a note from the doctor or your coach
2. severe illness or death in your *immediate* (not extended) family: note from Dean of Instruction
3. college sanctioned extracurricular events: your name must be on the list provided by the coach
4. unfavorable weather conditions that prevent students from reaching the college: Dean of instruction will notify teachers

If you wish for your absence to be excused, you should telephone or e-mail me *in advance* of the absence (leave a message if necessary). Even in emergencies, it usually is possible for you to get word to me about an absence. When you return, you must furnish proof of the reason for your absence if you wish for it to be excused.

7. **Make-up work:** Late or unexcused work will not be accepted. Students who have excused absences MUST let me know **before** the test is given that we need to schedule a make-up. In most cases, the tests must be taken PRIOR to the absence in order to receive full credit. **\*\*If you take the test after it has been given to the class, you will receive a 10% penalty per school day that passes until you take the make-up.\*\*** To avoid the penalty, **MAKE SURE YOU TAKE A MAKE-UP TEST BEFORE YOU LEAVE.**

**American with Disabilities Act Statement:** Clarendon College provides reasonable accommodations for persons with temporary or permanent disabilities. Should you require special accommodations, it is your responsibility to notify the Office of Student Services (806-874-3571 or 800-687-9737). We will then work with you to make whatever accommodations we need to make.

#### **Dropping a Course:**

A student who is enrolled in a developmental course for TSI purposes may not drop his/her only developmental course unless the student completely withdraws from the college. If you decide that you are unable to complete this course or any other course or that it will be impossible to complete a course with a passing grade, you may drop the course and receive a "W" on your transcript instead. Withdrawal from a course is a formal procedure that you must initiate. If you do not go through the formal withdrawal procedure, you will receive a grade of "F" on your transcript. A student is permitted to drop a course if he/she obtains an official drop slip from the office and has the instructor sign the slip before the 12th class week.

Remember, a student is only allowed to drop the same class twice before he/she will be charged triple the tuition amount for taking the class a third time or more. Furthermore, beginning with the Fall 2007 semester, students in Texas may only drop a total of 6 courses throughout their entire undergraduate career. After the 6, he/she will no longer be able to withdraw from any classes without receiving an F.

Important dates:	September 7th	Labor Day
	September 8th	Last day to Register and/or Add/drop
	November 13th	Last day to drop with a "W"
	November 25-29th	Thanksgiving Holiday
	December 5-10th	Final Exams

**Tentative Course Schedule/Outline:** Your assignments are posted on MyMathLab and below.

#### **Chapter 12 Exponents and Polynomials**

12.1 Adding and subtracting Polynomials: # 3,13,19,23,29,31,39,41,53,63,67,73,77 due Sept. 3rd

12.2 Product Rule and Power Rules for Exponents: # 5,11,15,25,33,35,45,55,65,75,77 due Sept. 3rd

12.3 Multiplying Polynomials: # 3,9,13,17,21 25,29,33,37 due Sept.3rd

Quiz due on Sept. 10th

12.4 Special Products: # 1,5,9,13,15,19,23,27,29,41,43,45,47,49,51 Due Sept. 10th

12.5 Integer Exponents and the Quotient Rule: #7,15,19,23,27,35,37,43,47,49,53,55,59,65,67 Due Sept. 10th

12.6 Dividing a Polynomial by a Monomial: 7,9,11,13,15,17,19,21,23,25,27,31 Due Sept. 17th  
Quiz due on September 17<sup>th</sup>

12.7 Dividing a Polynomial by a Polynomial: # 5,7,9,11,13,15,17,19,21,23,25,27,29,31 due Sept. 17th

12.8 An Application of Exponents:# 3,7,11,17,21,25,29,33,37,41,45,49 due Sept. 17th

Test over Chapter 12 due September 17th

## **Chapter 13 Factoring and Applications**

- 13.1 Factors; The Greatest Common Factor: # 15,21,25,29,33,37,41,45,49,53,57,61,65,69,73 due Sept. 24<sup>th</sup>
- 13.2 Factoring Trinomials: 11,13,19,25,31,33,37,43,49,55 due Sept 24<sup>th</sup>
- 13.3 Factoring Trinomials by Grouping: # 3,5,7,9,13,17,19,23,25,27,29,33,35,37,39 due Sept 24<sup>th</sup>  
Quiz due September 24<sup>th</sup>
- 13.4 Factoring Trinomials using FOIL: 5,11,19,25,31,37,43,49 due Oct. 1<sup>st</sup>
- 13.5 Special Factoring Techniques: # 5,11,17,23,,33,39,45,51,57,63,69,75,81 due Oct. 1<sup>st</sup>
- 13.6 Solving Quadratic Equations by Factoring: # 3,9,17,23,29,35,41,47,53,59 due Oct. 1<sup>st</sup>
- 13.7 Applications of Quadratic Equations: #5,7,9,11,13,17,19,21,23,25,27,29,31,35 due on Oct. 1<sup>st</sup>  
Quiz due Oct. 1<sup>st</sup>  
Test over Chapter 13 due October 8<sup>th</sup>

## **Chapter 14: Rational Expressions and Applications**

- 14.1 The Fundamental Property of Rational Expressions: # 5,9, 17,23,27,31,35,39,43,47,51,55 due Oct. 8<sup>th</sup>
- 14.2 Multiplying and Dividing Rational Expressions: #  
3,5,7,9,11,13,15,17,19,23,27,29,33,37,39 due Oct.8<sup>th</sup>
- 14.3 Least Common Denominators: # 7,9,11,13,19,21,23,25,29,31,33,35,39,41 due Oct. 8<sup>th</sup>  
Quiz due October 8<sup>th</sup>
- 14.4 Adding and Subtracting Rational Expressions: # 1,7,13,21,27,33,41,47,53,59 due Oct. 15<sup>th</sup>
- 14.5 Complex Fractions: # 3,5,7,9,11,13,15,17,19,21,23,25,27,29 due Oct. 15<sup>th</sup>
- 14.6 Solving Equations with Rational Expressions: # 5,13,19,25,33,45,53,59,65 due Oct. 15<sup>th</sup>  
Quiz due October 15<sup>th</sup>
- 14.7 Applications of Rational Expressions: # 3,5,7,9,11,13,15,19,21,23,27,29,31,33,35 due Oct. 22<sup>nd</sup>
- 14.8 Variation: # 3,5,7,9,11,13,15,17,19,21,25,27,29,31,33 due Oct. 22<sup>nd</sup>  
Chapter 14 test due October 22<sup>nd</sup>

## **Chapter 15: Systems of Linear Equations and Inequalities**

- 15.1 Solving Systems of Linear Equations by Graphing: #  
5,7,11,13,15,19,21,25,27,29,31,33,35,37 due Oct. 29<sup>th</sup>
- 15.2 Solving Systems of Linear Equations by Substitution: # 3,5,7,9,11,13,15,17,19,21,23  
due Oct. 29<sup>th</sup>
- 15.3 Solving Systems of Linear Equations by Elimination: # 5,7,11,13,15,17,21,23,25,27,31 33,35,37  
due Oct. 29<sup>th</sup>  
Quiz due Oct. 29<sup>th</sup>
- 15.4 applications of Linear Systems: # 1,3,5,11,13,19,21,23,29,31,33,39,41 due Nov. 3<sup>rd</sup>
- 15.5 Solving systems of Linear Inequalities: #  
3,7,11,13,17,19,21,23,27,29,31,33,37,39,41 due Nov. 3<sup>rd</sup>  
Test over Chapter 15 due Nov. 5<sup>th</sup>

## **Chapter 16: Roots and Radicals**

- 16.1 Evaluating Roots: # 17,21,27,31,37,47,51,57,61,67,71,77,81,87,92 due Nov. 5th
- 16.2 Multiplying, Dividing, and simplifying Radicals: #  
9,15,19,29,49,51,59,69,73,83,89,93,99,103,107 due Nov. 5th
- 16.3 Adding and Subtracting Radicals: # 5,7,9,11,15,19,23,27,31,35,39,43 due Nov. 5th  
Quiz due Nov. 5th
- 16.4 Rationalizing the Denominator: # 3,5,9,11,15,17,23,25,29,31,35,37,43,45,49 due Nov. 12th
- 16.5 More Simplifying and Operations with Radicals: #  
3,7,11,15,19,23,27,31,37,41,45,49,53,55 due Nov. 12th
- 16.6 Solving Equations with Radicals: # 3,7,11,15,19,23,29,33,37,41,45,49,53 due Nov.  
12th
- Test over Chapter 16 due on November 19th

## **Chapter 17: Quadratic Equations**

- 17.1 Solving Quadratic Equations by the Square Root Property: #  
11,13,15,21,23,25,31,33,35,41,43,49,51 due Dec. 3rd
- 17.2 Solving Quadratic Equations by completing the square: #  
7,9,11,15,19,23,27,29,31,33,35,37,39 due Dec. 3rd
- 17.3 Solving Quadratics Equations by the Quadratic Formula: #  
3,5,9,11,15,17,21,23,27,29,35,37,41,43 due Dec. 3rd
- Quiz due Dec. 3rd
- 17.4 Graphing Quadratic Equations and Inequalities: # 3,5,7,9,11,13,17  
due Dec. 3rd
- 17.5 Introduction to Functions: #  
3,5,9,11,13,15,17,19,25,27,29,31,33,37,39 due Dec. 3rd
- Test over Chapter 17 must be scheduled with instructor

**Tests:** Chapter test are on MyMathLab or will be given in the evening of the date due. The Final exam is a paper/pencil test taken in the classroom on the day and time set by the Dean of Instruction. The Final Exam schedule is posted on my office door, in the classroom and on the internet.