

Instructor:	Carlos Sotuyo	Ref #:	5123
Office:	Blackboard Collaborate (Virtual)	Term:	Fall 2020
Phone:	305-237-8787	Day/Time:	Tues-Thurs 12:40 pm -1:55 pm
Email:	csotuyo@mdc.edu	Room:	Blackboard, synchronous

Office Hours						
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	3:30 pm -4:30 pm					

Last Day to **drop** with refund, Sept 8. Last day to drop with **W**: Nov 4th.

PREREQUISITES:

MAT0022C, MAT0028 or MAT0057 with a grade of “S”; satisfactory placement test scores; or exempt status per state statute

DELIVERY METHOD:

This course will be taught online through blackboard collaborate synchronously. Teaching synchronously allows online students to interact with the instructor and peers in real time.

COURSE COMPETENCIES:

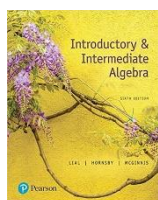
In this course you will learn the concepts of Algebra, including how to solve linear, quadratic, rational, and radical equations; graph linear equations in two variables; solve and graph systems of linear equations and inequalities in two variables; simplify rational expressions; simplify expressions containing rational exponents; simplify complex numbers; and solve related applications. This course **does not** satisfy college-level mathematics requirements for graduation. This is a 3 credit hour (2 hours of class lecture + 1 hour in-class Mastery Math Practice Session every week).

You should take MAT1033 if you are entering a program of study that requires algebra,

such as the sciences, engineering, computer science, pre-medical professions, or business. If you are going into a program that does not require algebra, such as mass communications, criminal justice, arts and humanities, or most social sciences, you should take MAT0029/MGF1106 rather than MAT1033.

If you have any questions about whether this is the right math course for you, please talk to your instructor TODAY.

Textbook:



Lial/Hornsby/McGinnis
Intro & Intermediate
Algebra, 6th Ed.

Student Expectations and Diagnostic:

Students are expected to be able to perform basic and advance arithmetic and have a good understanding of pre-algebra. A diagnostic test will be given on the first day of class, and a list of worksheets will be given. **The worksheet must be completed before Test and will count as part of your portfolio grade.**

Schedule of Lessons and Assessments:

DAY	DATES	Section	TOPIC
1	9/1		Orientation and Syllabus Overview, Diagnostic Assessment
2	9/3	3.2	Graph Linear Equations in Two Variables: Standard Form
		3.3	The Slope of a Line
3	9/8	3.4	Graph Linear Equation in Two Variables: Slope-Intercept Form
		3.5	Writing Equations of a Line: Point-Slope Form of a Line
4	9/10		Mastery Math Practice Session
5	9/15		Test 1
6	9/17	2.5	Linear Equations and Formulas
7	9/22	8.1	Linear Inequalities in One Variable
		8.2	Compound Inequalities
8	9/24	4.1	Systems of Equations in Two Variables-Solve by Graphing
		4.2	Systems of Equations in Two Variables-Solve by Substitution
9	9/29	4.3	Systems of Equations in Two Variables-Solve by Elimination
10	10/1	4.4	Applications of Linear Systems
11	10/6	4.5	Linear Inequalities in Two Variables
12	10/8		Mastery Math Practice Session
13	10/13		Test 2
14	10/15	5.7	Dividing a Polynomial by a Monomial
		5.8	Dividing a Polynomial by a Polynomial
15	10/20	6.1 – 4	Factoring Review
16	10/22	6.5, 6.6	Factoring: Difference of Squares and Difference of Cubes
		6.7	Solve Equations by Factoring
17	10/27	7.1, 7.2	Rational Expressions: Simplify, Multiply, Divide
18	10/29	7.3, 7.4	Rational Expressions: Add, Subtract
		7.5, 7.6	Complex Fractions, Rational Equations
19	11/3		Mastery Math Practice Session
20	11/5		Test 3
21	11/10	9.4	Variation
		10.1	Radical expressions and Graphs
22	11/12	10.2	Rational Exponents
		10.3	Simplifying Radical Expressions
23	11/17	10.4	Adding and Subtracting Radical Expressions
		10.5	Multiplying and Dividing Radical Expressions
24	11/19		Mastery Math Practice Session
25	11/24		Test 4
26	12/1	10.6	Solving Equations with Radicals
		10.7	Complex Numbers
27	12/3	11.1	Solving Quadratic Equations by the Square Root Property
		11.2	Solving Quadratic Equations by Completing the Square
		11.3	Solving Quadratic Equations by the Quadratic Formula
28	12/8		Mastery Math Practice Session
29	12/10		Test 5
30	12/15		Final Exam Preparation
31	12/17		Final Exam

Holidays:	Sept. 5-7 (Labor Day)	Nov. 11 (Veterans Day)	Nov. 26-29 (Thanksgiving)
	Last Day to Drop with full refund: September 8	Last Day to Withdraw with a W: November 4	

Your Study Skills:

Success

in mathematics takes time and practice, and that means that you must make enough time every week to study and complete each one of the required assignments. **Because every new idea you learn in math depends on things you learned before, you must attend all class lectures and practice sessions.** Staying up-to-date with all your homework will give you the time practicing math that you need in order to learn. To help you succeed, we will review how to take notes, how to create a Portfolio, and how to use MyMathLab videos to prepare for class. Your success is our goal.

Your MAT 1033 requirements:

To pass the course, you must take part in **all** of the following activities:

<p>Preparation for Class</p> <p>Online video instruction from assigned videos in MyMathLab</p>	<ul style="list-style-type: none"> • View assigned playlist videos <i>before</i> the class lecture or mastery session • Take detailed notes while watching the videos and keep a copy for the portfolio • Bring the notes to class for discussions or questions
<p>Class Lecture Sessions</p> <p>Tuesdays-Thursdays</p>	<ul style="list-style-type: none"> • Bring your work from outside the classroom if you want to ask questions • Take detailed notes on the lectures and mastery sessions • Exams will be in class on the scheduled dates and times via blackboard.
<p>Mastery Math Practice Session (MMPS) and Interactive Lectures</p> <p>As scheduled</p>	<ul style="list-style-type: none"> • Learn math by doing math: new worksheets will be based on prior lectures, videos and work sessions • Instructor will facilitate practice and problem-solving
<p>Online Homework</p> <p>Suggested 3 hours per week minimum in MyMathLab</p>	<ul style="list-style-type: none"> • Work all problems out on paper • Enter the answers into the online software • Complete assignments by indicated deadlines • MyMathLab instructor id: sotuyo85817 Register at https://www.pearsonmylabandmastering.com/02

Mastery Math Practice Session:

Mastery Math Practice Sessions (MMPS) will be held as scheduled. These sessions will give you the hands-on time you need to practice your new math skills, while getting the help you need from your instructor, your classmates, and the Learning Assistant.

Instructor Support:

If you have any questions or concerns about the class or how you are doing, you can make an appointment to see your instructor outside of class time.

Learning Assistant Support:

A Learning Assistant (LA) will be assigned to this class. The job of the LA is to provide you with support inside and outside the classroom. You can schedule one-on-one or small group review sessions with the LA, or you can just ask questions. The LA for this course is:

Name				Math Lab Support	
E-mail				Location	online
Phone Number		Available		Operating Hours	

Assistance:

Requesting a **Laptop**: <https://tinyurl.com/MDCcompform>

Ordering Books: MDCHialeahshop.com; telephone number is 305.237-8806.

Math Lab Support:

WHAT CONSTITUTES AN ABSENCE IN THIS CLASS?

- 1) Physical absence from a class
- 2) Inactivity in MyMathLab
(1 week inactivity = 1 absence)
- 3) Excessive Tardiness (3 tardies of more than 10 minutes = 1 absence)
- 4) Leaving class early (unless excused by the instructor for a valid reason)
- 5) Failure to bring required study material/video notes to class
- 6) Use of cell phone or other electronic device during class time.

You should plan to regularly go to the campus math lab to receive additional problem-solving support. Your instructor may also refer you to the math lab for extra support if you need it.

Attendance:

It is **MANDATORY** for you to attend class. Attendance will be taken during each class period. Students who miss **TWO** classes may be withdrawn from the course or given a failing grade upon the third absence. If you expect to miss a class or have missed a class for a valid reason, email your instructor immediately to set up an appointment to discuss the absence and potential options for making up the missed class.

Conduct:

You are expected to show courtesy towards the instructor and your classmates at all times. *All cell phones and communications devices are prohibited during class and the Mastery Math Practice Sessions.* Walking into class late and/or leaving before class is dismissed is not acceptable. As a college student, you are expected to behave in a manner conducive to learning and to maintaining high academic standards.

Cheating:

If you are caught cheating, you will receive a zero for that assignment and you will be put on notice of probationary status in the class. Any repeat incident of academic dishonesty (cheating in any form) will result in expulsion from the class and a failing grade. For additional information on academic dishonesty policies, please refer to the [Student's Rights and Responsibilities Handbook](#).



Assessments:

During the semester, you will take a diagnostic assessment, multiple online quizzes to test your progress, five tests and one cumulative departmental final exam.

Special needs, religious observations, grade appeals:

To learn about policies addressing services for students with special needs, religious observations, grade appeals, code of conduct, and many other areas, please review the [Student's Rights and Responsibilities Handbook](#)

Progress Reports:

- ★ **Diagnostic Assessment:** You will take a short diagnostic assessment upon first logging into the online homework on the first or second day of class. Based on your score on this assessment, you may be
 1. Referred to a different mathematics course that would better meet your skill level
 2. Referred to a Learning Assistant to create and follow a study plan that includes additional support and practice.
- ★ **Week Two Progress Report:** You will receive a progress report that may include a referral to a Learning Assistant to create and follow a study plan that includes additional support and practice.
- ★ **First Month Progress Report:** You will receive a progress report which may include a referral to a Learning Assistant to create and follow a study plan that includes additional support and practice.

During the term, you may be contacted by your instructor, your Learning Assistant or your advisor based on your progress in MAT1033. We all support each other to help you be successful in this course.

Grade:

You need an overall average score of 70% or above to pass this course. Your score will be based on the weighted average of your test scores, homework scores and the cumulative final exam score.

The final exam will be the ONLY make-up exam for the course.

All exams are mandatory for all students and cannot be made up at an alternative time. Missing an exam for any reason will result in a zero score for that exam. In the case of an excused absence for an exam, the final exam score will be used in place of the missing exam score. Your final exam score will also be used to replace your lowest test score provided the final exam score is higher.

Grading Scale:

- A 90-100%
- B 80-89%
- C 70-79%
- D 60-69%
- F below 60%

Grading Weights:

Your course grade will be weighted according to the following:

- a. MyMathLab homework grade – 15%
HW = % of completed assignments: assignments 80% or over.
- b. Average of five tests and Final – 85%

Note: only 69, 79, and 89 are rounded up to the next value.

Important: Blackboard grading book reports your Tests and HW grades. Overall grade is calculated using the formula stated above,

which is equivalent to: Overall Grade = $0.15 (HW) + \frac{0.85}{6} (\text{Test 1} + \text{Test 2} + \text{Test 3} + \text{Test 4} + \text{Test 5} + \text{Final})$

Date	Test	Grade
9/5	1	
10/13	2	
11/5	3	
11/24	4	
12/10	5	
12/17	FINAL	

Incomplete Grades:

Incompletes will only be considered if you have completed two-thirds of the course requirements with a passing average (70% or higher) and have a serious documented personal illness, family death, or unexpected crisis. If the instructor agrees to grant a grade of Incomplete, a written agreement must be completed between the instructor and you, specifying the coursework to be completed, in what manner, and by when. You cannot remove an Incomplete by registering in a subsequent term to re-take the course. For more information on Incomplete grades, see the [Student's Rights and Responsibilities Handbook](#).

MAT1033 Course Competencies:

Competency 1: The student will demonstrate knowledge of the slope of a line by:

- a. Determining the slope of a line given two points that lie on the line.
- b. Determining the slope and intercept(s) of a line given its equation.
- c. Determining the slope of a line from a graph.
- d. Finding the slope of a line that is parallel to a given line.

- e. Finding the slope of a line that is perpendicular to a given line.

Competency 2: The student will demonstrate knowledge of linear equations and inequalities in two variables by:

- a. Solving literal equations.
- b. Finding an equation of a line given two points.
- c. Finding an equation of a line given a point on the line and information about the slope of the line.
- d. Writing an equation of a line in standard form.
- e. Writing an equation of a line in slope-intercept form.
- f. Graphing linear equations in two variables using the slope and y-intercept of the line.
- g. Graphing linear inequalities in two variables.

Competency 3: The student will demonstrate knowledge of equations in two variables by:

- a. Solving direct variation problems.
- b. Solving inverse variation problems.

Competency 4: The student will demonstrate knowledge of systems of linear equations by:

- a. Solving a system of linear equations in two variables using the addition method.
- b. Solving a system of linear equations in two variables using the substitution method.
- c. Solving a system of linear equations and inequalities in two variables by graphing.
- d. Solving applications involving systems of linear equations.

Competency 5: The student will demonstrate knowledge of rational expressions and equations by:

- a. Performing operations of addition, subtraction, multiplication and division on rational expressions.
- b. Simplifying complex fractions.
- c. Solving equations involving rational expressions including literal equations.
- d. Dividing polynomials.

Competency 6: The student will demonstrate knowledge of radicals and rational exponents by:

- a. Adding, subtracting, multiplying, and dividing expressions involving radicals
- b. Simplifying expressions containing rational exponents.
- c. Applying the properties of exponents to expressions with rational exponents
- d. Solving radical equations

Competency 7: The student will demonstrate knowledge of complex numbers by:

- a. Knowing the meaning of i .
- b. Writing the square root of a negative number in terms of i .

Competency 8: The student will demonstrate knowledge of quadratic equations by:

- a. Solving quadratic equations by factoring.
- b. Solving quadratic equations by the square root method.
- c. Solving quadratic equations by the quadratic formula.
- d. Solving quadratic equations by completing the square.

Miami Dade College Learning Outcomes:



As graduates of Miami Dade College, students will be able to:

1. Communicate effectively using listening, speaking, reading, and writing skills.
2. Use quantitative analytical skills to evaluate and process numerical data.
3. Solve problems using critical and creative thinking and scientific reasoning.
4. Formulate strategies to locate, evaluate, and apply information.
5. Demonstrate knowledge of diverse cultures, including global and historical perspectives.
6. Create strategies that can be used to fulfill personal, civic, and social responsibilities.
7. Demonstrate knowledge of ethical thinking and its application to issues in society.
8. Use computer and emerging technologies effectively.
9. Demonstrate an appreciation for aesthetics and creative activities.
10. Describe how natural systems function and recognize the impact of humans on the environment.

Each course taken at the college addresses some of these learning outcomes.

MAT1033 addresses outcomes 1, 2, 3, 4, 5, 8, 9.

NOTE: Your instructor reserves the right to amend the schedule in this syllabus as needed.

Miami Dade College offers Bachelor's degree options in the following areas: Film, Television and Digital Production; Supervision and Management; Supply Chain Management; Early Childhood Education; Exceptional Student Education (K-12); Secondary Mathematics Education; and Secondary Science Education. For more information, go to <http://www.mdc.edu/academics/programs/bachelors.aspx> or visit an academic advisor.

Addendum to course syllabus:

Class lectures may be recorded and made available to students enrolled in the same class. Students who do not wish to be recorded, please contact the class instructor in the first week of class to discuss alternative arrangements. Student recording of classroom lectures or other presentations must be for the student's own use and not for financial gain. Any other uses must be agreed to by the College and the class instructor.