

Miami-Dade College

Homestead Campus

Instructor: Jorge Taboada.

Phone: (305) 815-3261.

Email: jtaboada@mdc.edu

Course Title: Intermediate Algebra. **3 credits.**

Course number: MAT 1033.

Textbook: Elementary Algebra (Second Edition)

Tom Carson, Ellyn Gillespie, and Bill Jordan

Description: Through this course students develop various concepts of Algebra. Students will solve linear, quadratic, rational, and radical equations; graph linear equations and inequalities in one variable; 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; solve related applications. Prerequisites MAT 0024 or 0020 with a grade of S or appropriate placement test score. (3 hr. lecture).

Attendance: Try not to be absent! Keep in mind that this course is a 3-credit course and it requires a lot of meeting hours and lab hours.

If you are absent it is your responsibility to catch up with the rest of the class. Please see me if you have questions on the material you have missed.

Supplementary Materials:

MYMATHLAB on line software package sold separately or included with new textbook. Graphing calculator is required, preferably Texas Instruments-83, 83-plus or 84.

Learning Support Lab and MYMATHLAB Requirement.

1) Visit the Learning Support lab at least one hour per week.

- 2) Complete the homework that will be posted before its due date, you must completed at least 70%, if you want obtain a 100 points of the LAB. For registration in the Lab, you should use the Course ID# taboada12848.

Tests: There will be 5 tests, all equally weighted, and Final Test

NOTE. Students must score at least 70% on the final AND have 70% overall in the class AND complete 70% of the homework that will be posted in MYMATHLAB.

Final Course Grade.

Grading Scale:

- A – 90% to 100%**
- B - 80% to 89%**
- C - 70% to 79%**
- D - 60% to 69%**
- F - 59% to 69%**

Final Course Average:

Tests	100 points (each one)
Assignments (Will be collected in every test)	5 points (Additional)
MYMATHLAB (accomplish the homework before the due date)	100 points

Final Course Average: 600 points, and the students must reach at least 420 points, and also obtain at least “C” in the Final Test.

Student Responsibilities:

- 0 It is imperative that you complete the homework as best you can.
1. Try not to be late as it is distracting to the other students.
2. Put all cells and beepers in vibrating mode.
3. **No cheating. Cheating of any form will be cause for immediate removal from this class and a grade of F will be given for the course.**
4. I do not give W's. It is your responsibility to withdraw from the course prior to the deadline. I also do not place a student into an “audit” status. You must declare yourself as an auditing student during the first week of the semester. If you simply stop attending class without formally withdrawing from the course, you will receive an automatic U.

5. Please take advantage of the math lab and my office hours.
6. Respect your fellow classmates and your instructor.

Objectives:

The most important objectives are:

0. To motivate students about College and Math
1. Prepare students for MAC 1105.
2. Challenge students to think analytically.
3. To show how Mathematics can be integrated into the scientific and business related fields.
4. To help students overcome Math anxiety.
5. To challenge students to explain to their peers what they have learned in the course.

Final Notes:

The Teacher will verbally announce dates of all Tests at least two weeks in advance. All changes to this Syllabus will be made by the Teacher and announced in advance, in class.

MAT-1033	Date	Topics
Week -1	8-Jan	Introduction of the Course Section 4.1 The Rectangular Coordinate System Section 4.2 Graphing Linear Equations
	10-Jan	Exercises 4.1 and 4.2
Week -2	15-Jan	Section 4.3 Graphing using intercepts
	17-Jan	Section 4.4 Slope Intercept Form
		Section 4.5 Point- Slope Form
Week -3	22-Jan	Exercises 4.4 and 4.5
	24-Jan	Section 4.6 Graphing Linear Inequalities (two variables)
		Section 4.7 Introduction to Functions and Function Notation
Week -4	29-Jan	Exercises 4.6, 4.7
	31-Jan	Review for Test#1
		Test#1
Week -5	5-Feb	Section 8.1 Solving Linear Equations Graphically Section 8.2 Solving System of Linear Equations by Substitution

	7-Feb	Section 8.3 Solving Systems of Linear Equations by Eliminations Exercises of Sections 8.2 and 8.3
Week -6	12-Feb	Section 8.4 More Applications with Systems of Equations
	14-Feb	Section 8.5 Solving System of Linear Inequalities Exercises for 8.4 and 8.5, Review for test#2
Week -7	19-Feb	Review for test#2 Test#2
	21-Feb	Section 7.1 Simplifying Rational Expressions
Week -8	26-Feb	Section 7.2 Multiplying and Dividing Rational Expressions Section 7.3 Adding and Subtracting Rational Expressions with the same denominator. Section 7.4 Adding and Subtracting Rational Expressions with the different denominator.
	28-Feb	Section 7.5 Complex Rational Expressions
Week -9	4-Mar	Exercises 7.3 and 7.4 Exercises 7.5
	6-Mar	Section 7.6 Solving Equations Contain Rational Expressions
Week -10	11-Mar	Section 7.7 Application with Rational Expressions
	13-Mar	Review for Test#3 Test#3
Week -11	18-Mar	Section 9.1 Square Roots and Radical Expressions Section 9.2 Multiplying and Simplifying Square Roots Section 9.3 Diving and Simplifying Square Roots
	20-Mar	Section 9.4 Adding and Subtracting Square Roots
Week -12	25-Mar	Exercises of 9.1, 9.2, 9.3, and 9.4 Section 9.5 Solving Radical Equations
	27-Mar	Section 9.6 Higher Roots and Rational Exponents
Week -13	1-Apr	Exercises of 9.5 Exercises of 9.6, Review for Test#4
	3-Apr	Test#4

Week -14	8-Apr	Section 10.1 The Square Root Principle, Section 10.2 Solving Quadratic Equations by completing the square
	10-Apr	Section 10.3 Solving Quadratic Equations using the Quadratic Formula Exercises of 10.1, 10.2, and 10.3
Week -15	15-Apr	Section 10.4 Complex Numbers
	17-Apr	Section 10.5 Graphing Quadratic Equations Exercises of 10.5
Week -16	22-Apr	Review for Test#5
	24-Apr	Test#5
Week -17	29-Apr	Review for final test
	1-May	Final Test