Miami-Dade College
Homestead Campus

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Course Title: College preparatory Mathematics. **5 credits.**

Course number: MAT 0020.

Description: This course combines arithmetic and beginning algebra. Topics include sets, operations on signed numbers, solving linear equations and inequalities in one variable, operations on polynomials, factoring, integer exponents, radicals, graphing, and applications of these topics.

Text: Elementary Algebra by Tom Carson an Ellyn Gillespie and Jordan (Second Edition).

Attendance: Try not to be absent! **Keep in mind that this course is a 5-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. No calculators allowed.

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# taboada64399.

Tests: There will be 5 tests, all equally weighted. NO MAKE UPS. And also you must pass the exit test, which is requirement for passing this class.

NOTE. Students must score at least 60% on the final AND have 70% overall in the class AND complete 16 lab hours to pass this class.

Final Course Grade.

There are three possible Course Grades. They are **S**, **P** or **U.**

S – Satisfactory. Students receiving "S" may proceed to the next math course. Course Average 70%.

P - Progress. Students must repeat the course (GPA not affected). Course average below 70%.

U – Unsatisfactory Students must repeat the course (GPA AFFECTED)
Students display unsatisfactory behavior such as insufficient effort, poor attendance, missing tests, etc.

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 and Final exam (Every one must take the final exit exam)
100 points (each one)
Text book assignments (Will be collected in every test)
5 additional points (each one)
MYMATHLAB (homework will be posted on line) 100 points

Final Course Average: 600 points, and the students must reach at least 420 points, if you want to have right for doing the Exit 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 MAT 1033.
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-0020	Date	Topics
Week -1	8-Jan	Introduction of the Course Section 1.1 Number set and Structure of Algebra
	9-Jan	Section 1.2 Fractions
	10-Jan	Examples Section 1.1 and 1.2
Week -2	14-Jan	Section 1.3 Adding and Subtracting Real Numbers and Section 1.4 Multiplying and Dividing Real Numbers
	15-Jan	Examples of Section 1.3 and 1.4
	16-Jan	Section 1.5 Exponent, Roots, and Order of Operations
	17-Jan	Examples of Section 1.5
Week -3	21-Jan	Section 1.6 Translating Word Problem to Expressions Section 1.7 Evaluating and Rewriting Expressions
	22-Jan	Examples of Section 1.6 and 1.7
	23-Jan	Review for Test#1
	24-Jan	Review for Test#1
Week -4	28-Jan	**Test#1**
	29-Jan	Section 2.1 Problem-Solving Process Section 2.2 The addition Principle Section 2.3 The Multiplication Principle
	30-Jan	Exercises of Section 2.1, 2.2 and 2.3
	31-Jan	Exercises of Section 2.1, 2.2 and 2.3
Week -5	4-Feb	Section 2.4 Applying the principle to formulas Section 2.5 Translating Word Sentences to Equations
	5-Feb	Section 2.6 Solving Linear Inequality
	6-Feb	Exercises of Section 2.4, 2.5 and 2.6
	7-Feb	Review for Test#2
Week -6	11-Feb	**Test#2**
	12-Feb	Section3.1 Ratios and Proportions
	13-Feb	Section 3.2 Percents
	14-Feb	Exercises of Section 3.1 and 3.2
Week -7	18-Feb	Section 4.1 The Rectangular Coordinate System Section 4.2 Graphing Linear Equations Section 4.3 Graphing Using Intercepts
	19-Feb	Exercises of Section 4.1, 4.2, and 4.3

	20-Feb	Review for Test#3
	21-Feb	Review for Test#3
Week -8	**25-Feb**	**Test#3**
	26-Feb	Section 5.1 Standard and Scientific Notation Section 5.2 Introduction to Polynomials Section 5.3 Adding and Subtracting Polynomials Section 5.4 Exponent Rules and Multiplying Monomials
	27-Feb	Exercises of Section 5.1, 5.2, and 5.3
	28-Feb	Section 5.5 Multiplying Polynomials: Special Product Section 5.6 Exponent Rules and Dividing Polynomials
Week -9	**3-Mar**	Section 6.1 Greatest Common factor and factoring by Grouping
	4-Mar	Section 6.2 Factoring Trinomials Section 6.3 Factoring Trinomials when a is not equal to 1.
	5-Mar	Exercises of Section 6.1, 6.2, and 6.3
	6-Mar	Section 6.4 Factoring Special Products
Week -10	**10-Mar**	Section 6.5 Strategies for Factoring
	11-Mar	Section 6.6 Solving Quadratic Equations by Factoring
	12-Mar	Review for Test#4
	13-Mar	Review for Test#4
Week -11	**17-Mar**	**Test#4**
	18-Mar	Section 7.1 Simplify Rational Expression Section 7.2 Multiplying and Dividing Rational Expression
	19-Mar	Exercises of Section 7.1, and 7.2
	20-Mar	Exercises of Section 7.1, and 7.2
Week -12	**24-Mar**	Section 7.3 Adding and Subtracting Rational Expression with the same Denominator
	25-Mar	Section 7.4 Adding and Subtracting Rational Expression with the Different Denominator
	26-Mar	Exercises of Section 7.3, and 7.4
	27-Mar	Exercises of Section 7.3, and 7.4
Week -13	**31-Mar**	Section 9.1 Square Roots and Radical Expressions
	1-Apr	Section 9.2 Multiplying and Simplying Square Roots Section 9.3 Dividing and Simplifying Square Roots
	2-Apr	Exercises of Section 9.1, 9.2, and 9.3
	3-Apr	Section 9.4 Adding and Subtracting Square Roots

Week -14	7-Apr	Exercises of Section 9.4
	8-Apr	Review for Test#5
	9-Apr	Review for Test#5
	10-Apr	Review for Test#5
Week -15	14-Apr	**Test#5**
	15-Apr	**Workshop for the Exit Exam**
	16-Apr	**Workshop for the Exit Exam**
	17-Apr	**Workshop for the Exit Exam**
Week -16	21-Apr	**Workshop for the Exit Exam**
	22-Apr	**Workshop for the Exit Exam**
	23-Apr	**Workshop for the Exit Exam**
	23-Apr	**Workshop for the Exit Exam**
Week -17	28-Apr	**Workshop for the Exit Exam**
	29-Apr	**Workshop for the Exit Exam**
	30-Apr	**Workshop for the Exit Exam**
	1-May	**Workshop for the Exit Exam**