

Syllabus: MAT 086 Pre-Algebra

Course Information

Course Prefix/Number: MAT 086 Credit Hours: 3

Semester: Summer 1 2018
Class Days/Times: M T W R

1:00 PM to 3:00 PM

Credit Hours. 3

Course Title: Pre-algebra

Room: GSK 3

Instructor Information:

Name: Jorge Guarin

Phone/Voice Mail: (520) 383-0101

E-mail: jquarin@tocc.edu (Prefered)
Office location: Main Campus Building A

Office hours: To Be Determined

Course Description:

Transition from arithmetic to algebra. It includes signed numbers, commutative, associative, and distributive laws, order or operations, algebraic expressions, polynomials, fractions, and linear equations. Also includes percents, ratio and proportion, graphing, perimeter, area, volume, and optional topics..

Course Objectives:

During this course students will

- 1. Define absolute value and graph real numbers on the number line.
- 2. Perform operations on signed numbers and apply to practical problems.
- 3. Apply commutative, associative, distributive properties and order of operations to arithmetic and algebraic expressions.
- 4. Simplify and evaluate algebraic expressions.
- 5. Perform addition, subtraction, and multiplication on polynomials.
- 6. Simplify and perform operations on arithmetic and algebraic functions.
- 7. Solve linear equations including equations with decimal and fractional coefficients.
- 8. Translate percent problems into algebraic equations and solve.
- 9. Solve ratio and proportion problems.
- 10. Solve application problems using perimeter, area, and volume.
- 11.Plot points and graph linear equations on the Cartesian coordinate system

Student Learning Outcomes (SLOs):

After completion of the course students will be able to

- Perform basic operations using whole numbers, fractions, decimals, ratios and proportions.
- Apply the five-step process for solving a wide variety of situational (word) problems.
- Employ technology to set up and solve real world situations.

Himdag Cultural Component:

Mathematics faculty's interpretation of what Nahban said in the "Desert Smells Like Rain" is this: While the Himdag discourages direct, exact answers, in the mathematical world, my students are expected to be able to come up with a precise answer for the situation. As a community college closely associated with the Tohono O'odham Nation, TOCC encourages growth of students' cultural knowledge and my class takes steps to transmit learning mathematics in a way that respects the Tohono O'odham Himdag.

Texts and Materials:

An iPad is required for this class. Checking out and returning an Ipad from the Library is a requirement to obtain a grade in this class.

Required Text: Pre-Algebra. Publisher: EDUCO and it is available on the EDUCO site. To enter to this site, students need to get the **ACCESS CODE** from the library.

APPS: The "Free GraCalc 2" and "My script calc" apps can be downloaded from the Apple store..

Evaluation and Grading & Assignments:

Attendance:

The attendance policy for this class is simple and it gives you 10% of your grade. You are all adults who have in some form paid for this class. If you do not wish to come to any session, you do not have to attend. However, you are still responsible for completing work on time. If you are late for class, enter quietly and sit down. You will not be allowed to make up any quiz you miss because of tardiness. In case of a valid emergency, email your instructor using the information given on the first page. After receiving the email, the instructor will decide whether or not can give you an excused absence.

Academic Integrity: Violations of scholastic ethics are considered serious offenses by Tohono O'odham Community College, the Mathematics Department, and by your instructor. Students may consult the TOCC Student Handbook sections on student code of conduct, on scholastic ethics and on the grade appeal procedure.

- [a] All homework can be done independently or with other students. The purpose of homework is to develop critical thinking skills and also to develop specific skills related to teaching mathematics by repeated practice of these skills. Without this practice most students find it impossible to perform well in this class. No collaboration is tolerated during exams in-class exams.
- [b] Students are expected to abide by the Student Code of Conduct and the Scholastic Code of Conduct found in the Tohono O'odham Community College Student Handbook. Copies are available at the main student bookstore.

Course Feedback:

Homework by Sections, Chapter Tests. Practice Chapter Tests, Practice Final Exam and Final Exam have been posted on the EDUCO site: www.educosoft.com. All materials submitted will be graded and they scores returned inmediately after they are submitted. Students can take up to 3 times any homework, Test or Final Exam. Higher score will be recorded. Datelines for every assignment is on the site. Once the assignment expires, it is removed and you can not continue taking it.

Homework Policy:

Homework has been assigned and it is posted on the EDUCO site: Each one comes with its own dateline. You must submit the homework before its dateline.

Withdrawals:

Please be sure to withdraw yourself by **June 21, 2018** if you do not expect to complete the class, otherwise you may receive an "F" grade.

Workload:

Students are expected to spend an average of 18 hours per week attending class sessions, doing assignments and preparing for exams. The standard Carnegie Unit of college credit assigns one credit hour for each 15 hours of class time and assumes that students spend two hours working

outside the classroom for each hour of classroom instruction. For a three-credit semester course, this translates to an average of 6 hours spent outside of class weekly for 16 weeks.

Grading System/Policies:

Your final grade will be ca	aiculated as foi	IOWS:	Grading Scale	
Attendance	100 points	10%	A =	1000 - 900 point
Homework assignments	350 points	35%	B =	899 - 800 poin
Chapter Tests	350 points	35%	C =	799 - 700 poin
Tutorial Time	200 points	20%	D =	699 – 600 poin
Total possible	1,000 points	100%	F =	less than 600 poin

Incomplete (I) grade:

To receive an "I " grade, you must have finished at least 3/4 of the course requirements and specifically request the grade. Please call before the last week of class to be sure that there is sufficient time to consider your request. An incomplete grade generally implies that a student has shown sufficient initiative to complete the course on his or her own. You will receive a copy of the standard "I" form filed with the grade. This form details specifically what must be done to complete the course. A student has one year to complete the required work, after which the grade automatically reverts to an "F."

Make-up Assignments:

No make-up assignments will be given and no late assignments will be accepted unless the student has made arrangements with the instructor.

Extra Credit Opportunities: Do not ask for extra credit opportunities until you have completed all of the required assignments to date. The instructor will occasionally give extra credit homework, quiz, and exam questions that test critical thinking skills.

Final Grades: Students will receive a grade transcript from the college mailed to the address given with registration materials at the end of the semester when all grades have been recorded. At any time, at the EDUCO site, educosoft.com you are able to see your grade.

SPECIAL NOTE TO STUDENT: For privacy and security reasons, instructors are advised **NOT** to give grades over the telephone.

DISCLAIMER: This syllabus is designed to evolve and change throughout the semester based on class progress and interests. You will be notified of any changes as they occur.

Class Schedule

#	Day	Date	Sections	Hw Due	Test
1	Tuesday	5/29/2018	Class Overview, 0.1		
2	Wednesday	5/30/2018	0.2 - 0.3		
3	Thursday	5/31/2018	1.1 - 1.2	0.1 - 0.2	
4	Monday	6/4/2018	1.3 - 1.4	0.3	Ch 0
5	Tuesday	6/5/2018	2.1 - 2.2	1.1 - 1.2	
6	Wednesday	6/6/2018	2.3 - 2.4	1.3 - 1.4	
7	Thursday	6/7/2018	Review Ch 1&2	2.1 - 2.2	
8	Monday	6/11/2018	3.1 - 3.2	2.3 - 2.4	Ch 1&2
9	Tuesday	6/12/2018	3.3 - 3.4	3.1 - 3.2	
10	Wednesday	6/13/2018	3.5 - 3.6	3.3 - 3.4	
11	Thursday	6/14/2018	3.7 - 3.8	3.5 - 3.6	
12	Monday	6/18/2018	4.1 - 4.2	3.7 - 3.8	Ch 3
13	Tuesday	6/19/2018	4.3, Review Ch 4	4.1 - 4.2	
14	Wednesday	6/20/2018	5.1 - 5.2	4.3	
15	Thursday	6/21/2018	5.3, Review Ch 5	3.5 - 3.7	
16	Monday	6/25/2018	6.1 - 6.2		Ch 4, Ch 5
17	Tuesday	6/26/2018	6.3 - 6.4	6.1 - 6.2	
18	Wednesday	6/27/2018	Review Final Exam	6.3 - 6.4	Ch 6
19	Thursday	6/28/2018	Final Exam		Final Ex