



Syllabus: ***MAT 086 Prealgebra***

Course Information

Course Prefix/Number: **MAT 086 Section 1**

Semester: **Spring 2018**

Class Days/Times: **TR 3:00-4:15P**

Credit Hours: **3**

Course Title: **Prealgebra**

Room: **Main Campus, Gewkdag Şon Ki: A1**

Instructor Information:

Name: **David Morales**

Phone/Voice Mail:

E-mail: **dmorales@tocc.edu**

Office location:

Office hours: **By appointment**

Course Description:

A gentle transition from arithmetic to algebra. Includes signed numbers, the laws of mathematics (commutative, associative, distributive), order of operations, algebraic expressions, polynomials, fractions, decimals and linear equations. Also includes percents, ratios / proportions, 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 them to practical problems.
3. Apply the laws of mathematics and the order of operations to arithmetic and algebraic expressions.
4. Simplify and evaluate arithmetic and algebraic expressions as well as functions.
5. Perform addition, subtraction and multiplication on polynomials.
6. Solve linear equations with various rational coefficients (decimal, fraction,...).
7. Translate percent problems into algebraic equations and solve.
8. Solve ratio and proportion problems.
9. Solve application problems using perimeter, area and volume.
10. 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:

- Use the skills of arithmetic and algebra, in isolation and in application, with and without technologies (including but not restricted to calculators and computer programs).
- Express themselves visually (in graphing functions and) in presenting their answers to real-life problems.

Course Structure:

This course will be operating on a combination of traditional lecture, group activity, and discussions that will enhance the student's knowledge of mathematical concepts.

Texts and Materials:

- [Required] Registration in the EducoSoft website (www.educosoft.com). An access code must be purchased through the college's bookstore.
- [Required] A calculator that is NOT on a cell phone or electronic device.

Evaluation and Grading & Assignments:

Homework 20%

Exams 80%

Grades:

A: 90-100%

B: 80-89%

C: 70-79%

D: 60-69%

F: <59%

Himdag Cultural Component:

My interpretation of what Nahban said in the Desert Smells Like Rain is this: while the himdag discourages direct, exact answers, in the mathematical world, one is expected to be able to come up with a precise answer for the situation. That being said, there are a few common issues shared:

- Baban (coyotes) are not going to affect your homework or my tests – they didn't write either.
- While one must go through a maze to see i'ittoi, there was no mention as to how many mazes there were to get to him. Likewise, you will discover in this course that there are many different ways to perform the algebra necessary to see the final answer.
- I-we:tma: for your success and the college's and the community's, you should not go work on mathematics alone – it can be a group activity (except on the tests, of course).
- T-pik elida: we respect each other and ourselves. We respect and take pride in our own work. We respect each other's abilities, quirks and privacy.

Policies and expectations

Student Conduct

- Please be respectful of myself and other students in the class. Disruptive behavior may result in you being asked to leave the class. This includes but is not limited to talking, eating, rustling papers, clicking on electronics, texting or playing with your phone, late arrival and early departures (late arrival to class disrupts the learning activities and is unprofessional and disrespectful towards fellow classmates), any abusive or indecent language. Collegial behavior is required at all times. Turn off cell phones, PDAs, iPods, laptops, and other electronic devices not related to the course before entering the class.
- Cheating in my class is unacceptable. If you are caught cheating, you will be given a zero on that exam or quiz and may result in my filing an Academic Honesty Incident Report which could result in suspension or expulsion from the college.

E-mail Requirement

- All students must activate and regularly check their Tohono O'odham Community College e-mail account. It is mandatory that students use the TOCC e-mail account for all communications with the instructor.
- The instructor will not reply to any non-TOCC e-mail address the student uses to contact him.

Attendance

- The student is responsible for any work missed during an absence.

Homework

- As you might expect, homework is the essential ingredient in a math grade (20% of course grade) and will be assigned regularly.
- Assignments should be written clearly and stapled if there are multiple pages with your name, instructor's name and the class (MAT 086 Section 1). Put the problems in the order they were assigned.
- You are permitted to work together on the homework, but you must write up your own solutions to be turned in. They should not be identical to your study partner's.

Exams

- There will be a chapter exam given the day after we complete each chapter.
- These exams in total will constitute 80% of your overall grade.

Important Dates

- Withdrawal deadline is March 30th, 2018.

Incompletes

- Incompletes (I): The nature of this course (where you are learning something new every single class) makes it very improbable for an incomplete to be given. However, per TOCC policy, if you have completed $\frac{3}{4}$ of the course and specifically request it, I may consider it. Please call before final exams to assure enough time to consider your request.
- In handing out an incomplete:
 - I am assuming that the student will finish this course on his/her own time.
 - You will receive the form with the "I" grade filled in, with a request as to what must be done to complete the course.
 - You have one year to complete the work, else the grade will revert to an F. Final Grades They will be sent to the address on record. Per FERPA and the Himdag, I will not give grades over the phone and am strongly discouraged from emailing same. (Again, see t-pik elida above.)

In accordance with t-pik elida:

- the Americans with Disability Act 1990 (ADA) and Section 504 of the Rehabilitation Act: if you have a learning problem, physical disability, or medical illness that requires you to have any special arrangements, please inform your instructor at the beginning of the semester so your academic performance will not suffer because of the disability or handicap.
- Title IX: Tohono O'odham Community College faculty and all staff are dedicated to creating a safe and supportive campus. Title IX and our school policy prohibit discrimination on the basis of sex - this includes sexual misconduct; harassment, stalking, domestic and dating violence and sexual assault. Sexual discrimination and sexual violence can undermine students' academic success and quality of life on campus and beyond. We encourage students who have experienced any form of sexual misconduct to talk about their experience and seek the support they need. Confidential support and academic advocacy can be found with: Christie Kelly, MA, Counselor/Title IX Coordinator
ckelly@tocc.edu

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.