



Syllabus: MAT 142H 1 College Mathematics

Course Information

Course Title: College Mathematics

Course Prefix/Number: MAT 142H 1

Semester: Fall 2020

Class Days/Times: Tuesday & Thursday 9:30 a.m. – 12:00 p.m.

Credit Hours: 4

Instructor Information

Name: Ron Palmatier, M.Ed.

Phone/Voice Mail: N/A

E-mail: rpalmatier@tocc.edu

Office location: N/A

Office hours: Zoom 9:30 a.m. – 10:30 a.m.

Meeting ID: 966 2088 5912

Passcode: 76xGXq

Email 10:30 a.m. – 12:00 p.m.

Course Description

Basic algebraic functions, including the language of sets, lines in the plane, systems of linear equations, expressions and equations in rational, radical, quadratic, exponential and logarithmic form. This course will also include a survey of real-life topics in the social sciences and management, along with an introduction to probability and statistics.

Student Learning Outcomes

After completion of the course students will be able to

- Simplify and perform operations with signed numbers, arithmetic and algebraic expressions, understand various uses of constants and variables to represent quantities or attributes, demonstrate operation sense and communicate verbally, graphically and symbolically the effects of common operations on numbers.

- Solve linear equations with rational coefficients. Construct and use equations to represent relationships involving one or more unknowns or variable quantities to solve problems.
- Plot points and graph linear equations on the Cartesian coordinate system. Describe the behavior of linear models using words, algebraic symbols, graphs and tables. Use appropriate terms and units to describe rate of change ex. describe the rate of change using appropriate units: slope for linear relationships or average rate of change over an interval for nonlinear relationships.
- Compare relationships represented in different ways.
- Be able to use and interpret percentages in a variety of contexts including, but not limited to: Parts to whole comparisons, decimal representations of percentages, quantifying risks and other probabilities, rates, change, and margins of error.
- Create (mathematical) models of situations, including representations such as tables, graphs, equations and words, using multiple variables to represent quantities and attributes. Furthermore, students will describe why these tools are a useful strategy for understanding the world, along with their limitations.
- Critically evaluate statistics being presented in a media report including: identifying the reference value for a reported percentage, evaluating the sampling strategy, determining sources of bias, describing the difference between correlation and causation, identifying confounding variables.

Course Structure

Attendance – Attendance for credit will be based on the completion of assignments during the semester. Completion of assignments means that all work (calculations) are shown for the process used to solve a problem. Answers without the supporting work requirement will not receive full credit. Calculators are allowed on all assignments, but the use of a calculator is not a substitute for showing work.

Assignments - With the exception of the first class, lessons and assignments will be sent out at 8 a.m. the day prior to the scheduled class time. Students are expected to begin working on the assignment the day it is sent out, and it will be due by 11:59 p.m. the next day. Late work will be deducted by 10% for each day past the due date. Answer keys will be sent to students after their work has been graded. The Zoom meeting that is held during the class time is for any student in need of additional assistance on the assignments. It is not required but strongly encouraged.

Quizzes – The use of assignment answer keys is allowed on all quizzes; however, quizzes are due by 11:59 p.m. the day they are sent out. Late quizzes will not be accepted and will result in a 0% score.

Final Exam – Rather than administering a comprehensive final exam, the lowest of a student's quiz scores will be dropped and the average of the remaining quizzes will be calculated as the

final exam. Any student preferring a comprehensive final exam will need to notify the instructor prior to the last week of the semester.

Course Learning Materials and Textbook Information

Lessons and assignments will be sent directly to the students through Canvas. For additional help, students are encouraged to utilize the Kahn Academy at www.khanacademy.org as a resource. A scientific calculator is required for MAT089. The Casio fx-280 SOLAR II or Texas Instruments TI-30Xa are inexpensive choices. There is also a free calculator at www.desmos.com.

Course Outline and Important Dates

- Unit 1: Algebraic Concepts
- Unit 2: Graphs and Functions
- Unit 3: Systems of Equations
- Unit 4: Inequalities
- Unit 5: Polynomial Functions
- Unit 6: Rational Functions
- Unit 7: Exponents and Radicals
- Unit 8: Quadratic Functions
- Unit 9: Exponential and Logarithmic Functions
- Unit 10: Conic Sections
- Unit 11: Sequences and Series

Aug. 24-28	Add w/o Instructor's signature
Aug. 31-Sept. 4	Add with Instructor's signature
Sept. 7	No School, Labor Day
Sept. 15	Drop/Full Refund Deadline
Sept. 25	TOCC Closed
Sept. 28-Oct. 2	No School, Fall Break
Nov. 9	Withdrawal Deadline
Nov. 11	No School, Veteran's Day
Nov. 26-27	No School, Thanksgiving Holiday
Dec. 11	Last Day of Classes

Evaluations/Grading & Assignments:

- 90% - 100% is an A
- 80% - 89% is a B
- 70% - 79% is a C
- 60% - 69% is a D

Under 60% is Failing

Your grade will be determined by the following:

Attendance: 10%
Assignments: 30%
Quizzes: 40%
Final Exam: 20%

Himdag Cultural Component

Tohono O'odham traditions and cultural beliefs will be discussed as relevant course topics, and lonely as appropriate to the Tohono O'odham Nation's traditional standards for sharing information as determined by the Himdag Committee.

Policies and Expectations

Attendance Policy

You are expected to arrive to class on time and be prepared to participate in each class period. Four unexcused absences *may* result in withdrawal and a "W" or "Y" will be recorded. You may request to be excused from class for religious observances and practices, for illness, for school or work-related travel or for personal or family emergency. If you will be absent, please notify the instructor as soon as possible (approved by Faculty Senate April 2014).

Incomplete Policy

Incomplete (I) grades are not awarded automatically. The student must request an "I" from the instructor who can choose to award an Incomplete only if all three of the following conditions are met:

1. The student must be in compliance with the attendance policy.
2. The student must have unavoidable circumstance that would prohibit the student from completing the course.
3. The student must have completed over 75% of the course requirements with at least a "C" grade.

Incompletes are not a substitute for incomplete work due to frequent absences or poor academic performance. Incomplete grades that are not made up by the end of the ninth week of the following semester will be automatically changed to an F if the agreed upon work, as stipulated on the written form signed by the instructor and the student when the I grade is awarded, is not completed.

Instructor Withdrawals

Students who have missed four consecutive classes (or the equivalent) not submitted any assignments nor taken any quizzes by the 45th day census report, due on October 8 are assumed NOT to be participating in the class and *may* be withdrawn at the faculty member's discretion.

Student Withdrawals

Withdrawal from class is the student's responsibility. Students may withdraw from class at any time during the first 2/3 of the semester without instructor permission and without incurring any grade penalty. Please be sure to withdraw yourself by November 9 if you do not expect to complete the class, otherwise you may receive an "F" grade.

Special Withdrawals (Y) Grade

The "Y" grade is an administrative withdrawal given at the instructor's option when no other grade is deemed appropriate. Your instructor must file a form stating the specific rationale for awarding this grade. "Y" grades are discouraged since they often affect students negatively. Your instructor will not award a "Y" grade without a strong reason.

Equal Access Statement/Disability Accommodations

Tohono O'odham Community College seeks to provide reasonable accommodations for qualified individuals with disabilities. The College will comply with all applicable regulations, and guidelines with respect to providing reasonable accommodations as required to ensure an equal educational opportunity. This process includes self-identifying as a student with a disability, providing supporting documentation of their disability, and being approved for services through the Disability Resources Office (DRO). It is the student's responsibility to make known to their instructor(s) the student's specific needs within the context of each class in order to receive appropriate accommodations. We will work together in order to develop an accommodation plan specifically designed to meet the individual student's requirements.

For more information or to request academic accommodations, please contact: Anthony Osborn, TOCC Disabilities Resource Coordinator, aosborn@tocc.edu, or 520-383-0033 for additional information and assistance.

Title IX

Tohono O'odham Community College encourages each student to have the knowledge and skills to be an active bystander who intervenes when anyone is observed or being harassed or endangered by sexual violence. Sexual discrimination and sexual violence can undermine students' academic success and quality of life on campus and beyond. We encourage students who have experienced or witnessed 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: Student Services Title IX Coordinator/Counselor, Alberta Espinoza, M.Ed. located in I-We:mta Ki: Room 18. Phone 520-383-0033 email: aespinoza@tocc.edu

Conduct: Bias, Bullying, Discrimination and Harassment

Tohono O'odham Community College faculty and staff are dedicated to creating a safe and supportive campus environment as a core value. Harassment based on age, class, color, culture, disability and ability, ethnicity, gender, gender identity and expression, immigration status, marital status, political ideology, race, religion/spirituality, sex, sexual orientation, and tribal sovereign status will not be tolerated.

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.