



Syllabus: MAT 142-3 Topics in College Mathematics

Course Information

Course Title: Topics in College Mathematics

Course Prefix/Number: MAT 142-3

Semester: Summer 2022

Class Days/Times: Monday through Wednesday 8:20 a.m. – 9:50 a.m.

Thursday 8:20 a.m. – 11:30 a.m. & 12:30 p.m. – 3:00 p.m.

Credit Hours: 3

Instructor Information

Name: Ron Palmatier, M.Ed.

Phone/Voice Mail: N/A

Office location: N/A

E-mail: rpalmatier@tocc.edu

Course Description

Survey of mathematical topics and applications. Includes application of mathematics to the social sciences, management science, growth, and probability and statistics.

Student Learning Outcomes

After completion of the course students will be able to

- Solve application problems in the areas of dimensional analysis, percentages, proportional reasoning, and basic geometry.
- Identify empirical and theoretical probability, utilize counting principles, and determine expected values.
- Identify and utilize concepts of data collection and descriptive statistical topics.
- Utilize standard normal distribution to solve problems related to normally distributed data.
- Solve financial problems related to simple and compound interest, annuities, and loans.

Course Structure

Final grades will be based on attendance, assignments and exams. Students are strongly encouraged to attend and actively participate in classroom discussions, and contact the instructor by email if help is needed outside the normal class times.

Assignments – All assignments will be due prior to the exam for each unit. Assignments submitted after the unit exam will receive a 10% reduction in score

Exams – One exam will be administered each week one day after the last lesson for the unit. The use of handouts provided in class will be allowed as a resource. Exams must be completed within the time period for the class.

Course Learning Materials

Approximately two lessons will be presented each class period. Assignments will be handed out based on the number of lessons completed. Students who are absent for a class will have the material and assignments sent to them in the afternoon of that class period. For additional help, students are encouraged to utilize the Kahn Academy at www.khanacademy.org as a resource. A Casio fx-280 SOLAR II scientific calculator will be provided during the class periods and will be the only calculator allowed during exams

Course Outline

Unit 1: Problem Solving

- Dimensional Analysis
- Percentages
- Proportional Reasoning
- Geometry

Unit 2: Probability

- Empirical and Theoretical Probability
- The Counting Principle
- Conditional Probability
- Permutations and Combinations

Unit 3: Statistics

- Basic Statistics
- Description of Data
- Measures of Center and Variation
- Normal Distribution

Unit 4: Finance

- Interest
- Annuities

- Loans

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%

Exams: 60%

Himdag Cultural Component

Tohono O'odham traditions and cultural beliefs will be discussed as relevant course topics, and only 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 fifth 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) and not submitted any assignments nor taken any quizzes by the census report 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 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.