

Syllabus: MAT 225-1 Basic Statistics

Course Information

Course Title: Basic Statistics

Course Prefix/Number: MAT 225-1

Semester: Spring 2022

Class Days/Times: Delivered via Zoom on Monday, Tuesday, Wednesday, and Thursday

from 12:00pm to 1:15pm Arizona Time.

Credit Hours: 3

Instructor Information

Name: Dr. Curtis Peterson

Phone/Voice Mail: 520-479-2300 Extension 1510

E-mail: cpeterson@tocc.edu

Office location: Zoom

Office hours: Available via appointment. Email cpeterson@tocc.edu

Course Description

An introduction to basic concepts in descriptive and inferential statistics. This will include data collection methods, sampling techniques, graphing of data, and the statistical evaluation of data collected through experimentation.

Student Learning Outcomes

- Perform basic statistical analysis of a given data set, including summary statistics and plots, point estimation, confidence interval computation, and hypothesis testing.
- Perform advanced Bayesian probability analyses using conditional probabilities, Bayes theorem, and Central Limit Theorem in a variety of practical situations.
- Students will be able to apply the methodology of basic hypothesis testing and understand how the process is used in business decision making.
- Students will be able to correctly identify and apply appropriate statistical tests for quantitative and qualitative single and two population parameters.
- Students will be able to use and interpret correlation and develop simple and multiple regression models to address a variety of business examples.
- Students will be able to develop and interpret output provided by statistical software for the statistical procedures covered in the course and be able to adequately verbalize the statistical conclusions provided by the software output.

Course Structure

This course is synchronous via Zoom. This means the class meets as if it was face-to-face Monday through Thursday 12:00pm to 1:115pm via Zoom. Students are expected to attend all classes.

Classroom location:

https://us06web.zoom.us/j/88360220909

Meeting ID: 883 6022 0909

One tap mobile

+13462487799,,88360220909# US (Houston)

+16699006833,,88360220909# US (San Jose)

Dial by your location

+1 346 248 7799 US (Houston)

+1 669 900 6833 US (San Jose)

+1 253 215 8782 US (Tacoma)

+1 312 626 6799 US (Chicago)

+1 929 205 6099 US (New York)

+1 301 715 8592 US (Washington DC)

Meeting ID: 883 6022 0909

Find your local number: https://us06web.zoom.us/u/kpbPJ1n0G

Course Learning Materials and Textbook Information

All learning material will be provided in the Canvas Classroom.

Courses Outline and Important Dates

- 1. Introduction to statistics what are they and what are they used for?
- 2. Descriptive statistics summarizing large amounts of information.
- 3. Probability and sampling using a group of individuals to predict a population.
- 4. Hypothesis testing asking a question that can be statistically answered.
- 5. Looking at similarities between variables Correlation
- 6. Making predictions Regression
- 7. Looking at differences between groups.

Summer Semester 2022		
Summer 8 Week Session		
Summer Admissions Deadline	May 20, 2022	
First Day of Instruction	May 23, 2022	
Registration Deadline	May 27, 2022	
Memorial Day - College Closed	May 30, 2022	
Drop/Full Refund Deadline	May 31, 2022	
Withdrawal Deadline	Jun 29, 2022	
Independence Day - College Closed	Jul 4, 2022	
Last Day of Instruction	Jul 18, 2022	
Final Grades Due	Jul 22, 2022	

Evaluations and Grading & Assignments:

Attendance: Course attendance in mandatory for this course, so each student will be given points for attending class each week.

Weekly Assignment: Assignments can include discussion posts, learning activities, and thought questions.

Quizzes: Each week there will be an end of section quiz.

Your grade will be determined by the following:

(The total number of points earned divided by total number points available) X 100

Grade distribution based on the formula above:

90 and above is an A

80 - 89 is a B

70 - 79 is a C

60 - 69 is a D

Under 60 is Failing

Note on late work: Late work will receive a 5% reduction for each day late, up to 65%.

Himdag Cultural Component

This course is in align with the college mission and vision. When possible topics will focus on the exploration of the Himdag.

Policies and Expectations

Attendance Policy

You are expected to complete all learning activities, participation in class, assignments and quiz by the due dates listed in the course syllabus. Four consecutive missed due dates may result in a letter grade of "F" or an instructor withdrawal "FW". 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.

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 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.

Student Withdrawal Policy "W"

Students may withdraw from class at any time during the first two-third of the semester without instructor permission and without incurring any grade penalty. Please be sure to withdraw yourself by [withdrawal deadline date found in Academic Calendar on TOCC website] if you do not expect to complete the class, otherwise you may receive an "F" letter grade for the course. For more information on the student withdraw process email admissions@tocc.edu.

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.

Academic Integrity:

Violations of scholastic ethics are considered serious offenses by Tohono O'odham Community College, the Student Services 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. Copies are available at Tohono O'odham Community College.

All work done for this class must be your own, or the original work of your group. While you may discuss assignments with other class members, the final written project must clearly be original. You may use work from books and other materials if it is properly cited. Copying from a book without proper reference or from a person under any circumstances will result in an "F" for the assignment, and at the instructor's discretion, possibly an "F" for the course. If you are uncertain about proper citations ask your instructor or the librarian.

Course Feedback:

All assignments will be graded and returned to the students promptly, typically within a week after the assignment is closed for handing in. E-mail and phone messages will be returned within two days. A student or the instructor may request a student conference at any time during the semester. Quarterly grade reports will be provided to each student, either in person, by email or via the electronic system of Canvas.

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.