Statistics

Syllabus

GE-St 101 Statistics

Course Overview

Course Description

Descriptive and inferential statistics: measures of central tendency and variability, discrete and continuous probability functions, sampling, estimation, hypothesis testing, correlation, regression, chi-squared and ANOVA.

Credit Hours: 3 hrs

Learning Outcomes

By the end of this course, you will be able to:

- Apply statistical terminology and concepts to explain behavior, mental processes, and related disciplines.
- Evaluate statistical findings (including graphs, significance levels, and effect sizes) to support or challenge hypotheses.
- Communicate statistical results clearly in both common and professional language for diverse audiences.
- Present quantitative data accurately using APA style in written reports, tables, and graphs.
- Demonstrate ethical principles in the use, interpretation, and reporting of statistical data.
- Employ Excel and Jamovi software to organize, analyze, and interpret quantitative data.

Resources

- Navidi, W. & Monk, B. (2025). *ALEKS 360 Online Access for Elementary Statistics*. McGraw-Hill LLC. New York. 9781260373653
- Microsoft Excel (Office 365 - Free for Students)
- Jamovi Statistical Software (Free Download)

Course Outline

Module Zero: Getting Started

Title	Type	Duration	Points
Syllabus, Pacing Guide, Meet your Instructor	Page/Questionnaire	1.5 hrs	--
Course Materials	Page	.5 hrs	--
ALEKS Setup	Page	1 hr	--
Announcemets/Student Questions	Discussion	Varies	--

Title	Type	Duration	Points
Totals		**3 hrs**	**0**

Module One: Making Sense of Data

Title	Type	Duration	Points
Preparation: Watch and Read	Page	3 hrs	--
Module One Devotional	Devotional	1 hr	10
Statistics and Variables	Discussion	3 hrs	25
Module 1 Prep and Exercises	ALEKS	5 hrs	50
Case Study: Hybrid Cars	Assignment	3 hrs	20
Skewed Data Sets Review	Assignment	2 hrs	20
Learner Survey	Feedback	.5 hrs	--
Totals		**17.5 hrs**	**125**

Module Two: Telling Stories with Numbers

Title	Type	Duration	Points
Preparation: Watch and Read	Page	3 hrs	--
Module Two Devotional	Devotional	1 hr	10
Measures of Center	Discussion	3 hrs	25
Module 2 Exercises	ALEKS	4 hrs	50
Case Study: Recycled Materials in Electronics	Assignment	3 hrs	20
Totals		**14 hrs**	**105**

Module Three: What are the Odds?

Title	Type	Duration	Points
Preparation: Watch and Read	Page	3 hrs	--
Module Three Devotional	Devotional	1 hr	10
Probability & Distributions	Discussion	3 hrs	25
Module 3 Exercises	ALEKS	4 hrs	50
Case Study: Benford's Law	Assignment	3 hrs	20
Totals		**14 hrs**	**105**

Module Four: The Bell Curve and Beyond

Title	Type	Duration	Points
Preparation: Watch and Read	Page	3 hrs	--
Module Four Devotional	Devotional	1 hr	10
Normal Distribution Applications	Discussion	3 hrs	25
Module 4 Exercises	ALEKS	5 hrs	85
Case Study: Testing the Strength of Cans	Assignment	3 hrs	20
Learner Survey	Feedback	.5 hrs	--
Totals		**15.5 hrs**	**135**

Module Five: Putting Ideas to the Test

Title	Type	Duration	Points
Preparation: Watch and Read	Page	3 hrs	--
Module Five Devotional	Devotional	1 hr	10
Two-Sample Confidence Intervals	Discussion	3 hrs	25
Module 5 Exercises	ALEKS	4 hrs	50
Case Study: Global Warming Data	Assignment	3 hrs	20
Totals		**14 hrs**	**105**

Module Six: Numbers vs. Stories

Title	Type	Duration	Points
Preparation: Watch and Read	Page	3 hrs	--
Module Six Devotional	Devotional	1 hr	10
Qualitative vs. Quantitative Data	Discussion	3 hrs	25
Module 6 Exercises	ALEKS	4 hrs	50
Case Study: Electric Fields & Cancer	Assignment	3 hrs	20
Totals		**14 hrs**	**105**

Module Seven: Finding Differences that Matter

Title	Type	Duration	Points
Preparation: Watch and Read	Page	3 hrs	--
Module Seven Devotional	Devotional	1 hr	10
ANOVA Applications	Discussion	3 hrs	25

Title	Type	Duration	Points
Module 7 Exercises	ALEKS	4 hrs	50
Case Study: Renewable Energy	Assignment	3 hrs	20
Totals		**14 hrs**	**105**

Module Eight: When the Rules Don't Fit

Title	Type	Duration	Points
Preparation: Watch and Read	Page	3 hrs	--
Module Eight Devotional	Devotional	1 hr	10
Nonparametric Tests	Discussion	3 hrs	25
Module 8 Exercises	ALEKS	4 hrs	50
Case Study: Water Conservation	Assignment	3 hrs	20
Final Exam (Study & Complete)	Exam	3 hrs	100
Learner Survey	Feedback	.5 hrs	--
Totals		**17.5 hrs**	**205**

Live Sessions

This course may have live meetups for Q & A, occasionally. Since these sessions may be audio-visually recorded, those who participate with their camera engaged are agreeing to have their video, image, or voice recorded.

Grading

- ALEKS Exercises: 435 points
- Case Studies/Assignments: 185 points
- Discussions: 200 points
- Devotionals: 80 points
- Final Exam: 100 points

(1000 points total)

Policy/Procedures

ACADEMIC DISHONESTY STATEMENT

Campus courses maintain a strict policy concerning academic dishonesty, which includes cheating, plagiarism, assisting on an examination or paper when expressly forbidden by the instructor, and any other practices that demonstrate a lack of academic integrity. Cheating occurs whenever a student uses deception to avoid fulfilling the specific requirements of an assignment or course and/or to receive a higher grade than they might otherwise receive. Using artificial intelligence software (such as ChatGPT) to generate writing and pass it off as one's own is also considered cheating. Plagiarism occurs when a student appropriates passages or ideas from someone else's writing into their own without providing proper documentation and/or without using quotation marks to indicate when they are directly quoting a source. It is the student's responsibility to know and adhere to principles of academic honesty. A student found guilty of academic dishonesty will be subject to academic sanctions ranging from failure on the assignment to failure in the course to, in cases of repeated or flagrant violation, suspension, or dismissal from participation in Campus courses. There may also be repercussions with the university transcribing your credit. Consult the Student Handbook of that college or university.

COURSE GRADING SCALE

- 95-100 A (Excellent)

- 92-94 A-
- 89-91 B+
- 85-88 B (Good)
- 82-84 B-
- 79-81 C+
- 75-78 C (Satisfactory)
- 72-74 C-
- 69-71 D+
- 65-68 D (Passing)
- 62-64 D-
- Below 62 F (Below Min. Standards)

DROP PERIOD AND WITHDRAWAL

The Drop period for Campus courses is five days after the student has enrolled and their designated term has begun. No refund will be available after this point.

Although many Campus classes are technically self-paced, students will be provided with a pacing guide (when relevant) to assist them in knowing how best to complete their courses on time. Failure to log in during the first week after their course commences will result in automatic removal from the course.

If a student is significantly behind pace two-thirds of the way through their term, they are encouraged to withdraw from the course with a W or equivalent appearing on their transcript. Beyond that point, they will no longer be eligible for a W on their transcript and thus are in danger of receiving a failing grade. Campus will report persistent failure to participate to the transcribing college or university. After the two-thirds point, a student will receive a letter grade for the course, including the possibility of a failing grade.

INCOMPLETE GRADE

A temporary neutral mark "I" is given at the discretion of an instructor when, for a legitimate reason, a student cannot complete course requirements in a given semester. Apart from catastrophic circumstances, a student is not eligible for an incomplete if they have not completed at least 60% of their coursework for the semester. Typical instances might be an extended illness or an inability to complete the coursework because of extenuating circumstances. A contract between the instructor and the student will accompany this grade to indicate the nature of the work to be completed. An Incomplete Grade (I) should not be used as an alternative to a grade of F. An Incomplete Grade must be made up before the seventh week of the next term whether or not the student is subsequently enrolled with Campus or the university. If the grade is not made up by the deadline, it will be changed to the appropriate grade earned in the course at that point.

DISABILITY STATEMENT

Campus-affiliated institutions comply with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Students with disabilities who need accommodations must self-identify and submit acceptable documentation to the Office of Disability Services.

Additional information is available from the transcribing college or university.

LIBRARY RESOURCES

Library information for the transcribing college or university will be made available.

CREDIT HOUR POLICY - EXPECTATION OF WORK

In compliance with federal regulations (34CFR 600.2), Campus requires its courses to require a total workload of at least 2250 minutes per credit hour for the typical student. This workload may be comprised of time allocated to direct faculty-student interaction, assigned readings, independent or group assignments, expected study time, or other course-related activities as appropriate to the specific course and determined by the faculty of record.

GRADE APPEALS

In the case of a grade appeal, the student shall be considered to have an authentic grievance when he/she can demonstrate his/her grade for a course has been adversely affected due to certain actions by a faculty member. A grade appeal shall be initiated within ten (10) working days after receipt of the grade or after the beginning of the next academic semester. This period may be extended by the chief academic officer of the transcribing college or university on petition from the student(s) involved. More information concerning this policy and the steps for resolution may be found in the Student Handbook of the transcribing college or university.

CAMPUS EDU PRIVACY POLICY

https://www.campusedu.com/privacy-policy