

STATISTICS

MATH 0011. Data Science for All

Units: 4

Prerequisite: Completion of Intermediate Algebra or equivalent with grade of "C" or better, or appropriate placement

Hours: 108 (54 lecture, 54 laboratory)

Designed for students from any major, provides high-level understanding of how data, statistics, and inference are inter-related. Introduces the core concepts of data science, including statistical inference and computational thinking. Teaches critical concepts and skills in computer programming and statistical inference while working with real data, such as economic data, geographic data, and social networks. Prepares students to make more data-driven decisions, gaining experience with machine learning and with the practical application of statistical concepts like hypothesis testing, confidence intervals via bootstrapping, regression, inference for regression, and predictive modeling while considering the social issues surrounding data privacy and data ownership. (C-ID MATH 110) (CSU, UC)

MATH 0013S. Just in Time Support for Introduction to Statistics

Units: 2

Corequisite: Concurrent enrollment in STAT C1000

Hours: 36 lecture

Just in time support option covering the core prerequisite skills, competencies, and concepts for Introduction to Statistics. Intended for students who are concurrently enrolled in STAT C1000. Topics include concepts from arithmetic, pre-algebra, elementary and intermediate algebra, and descriptive statistics that are needed to understand the basics of college-level statistics. Concepts are taught through the context of descriptive data analysis including an introduction to technologies such as Desmos, Excel, Statcrunch, Minitab, SPSS or graphing calculators. Recommended for students taking STAT C1000 with little or no recent algebra knowledge. (not transferable) (not degree applicable) (pass/no pass grading)

PSYC 0142. Introduction to Psychological Statistics

Units: 3

Formerly known as PSYC 42

Prerequisite: Completion of MATH D with grade of "C" or better

Hours: 54 lecture

Statistical procedures used for experimental analysis in the social and behavioral sciences. Descriptive and correlational statistics, parametric and nonparametric inference tests, and current controversies in hypothesis testing. (C-ID MATH 110) (C-ID SOCI 125) (CSU, UC-with unit limitation)

SOC 0015. Introduction to Statistics in Sociology

Units: 3

Prerequisite: Completion of intermediate algebra or appropriate placement

Advisory: Concurrent enrollment in a support course (SOC 15S or SOC 815S) is strongly recommended for those who have not recently completed intermediate algebra

Hours: 54 lecture

Introduction to the use of descriptive and inferential statistics in the analysis of sociological data, including: levels and types of measurement, measures of central tendency and variability, distributions, probability, estimation, hypothesis testing, correlation, and regression. Social science statistical software will be explored as an aid in processing and analyzing sociological data. (C-ID SOCI 125) (CSU, UC-with unit limitation)

SOC 0015S. Support for Introduction to Statistics in Sociology

Unit: 1

Corequisite: Concurrent enrollment in SOC 15

Hours: 18 lecture

Support option covering the core prerequisite skills, competencies, and concepts for Statistics in Sociology. Intended for students who are concurrently enrolled in SOC 15. Topics include concepts from arithmetic, pre-algebra, elementary and intermediate algebra, and descriptive statistics that are needed to understand the basics of college-level statistics. Concepts are taught through the context of sociological data analysis. Strongly recommended for students enrolled in SOC 15 with little or no recent algebra knowledge. (not degree applicable) (pass/no pass grading)

SOC 0815S. Support for Introduction to Statistics in Sociology

Units: 0

Corequisite: Concurrent enrollment in SOC 15

Hours: 18 lecture

Support option covering the core prerequisite skills, competencies, and concepts for Statistics in Sociology. Intended for students who are concurrently enrolled in SOC 15. Topics include concepts from arithmetic, pre-algebra, elementary and intermediate algebra, and descriptive statistics that are needed to understand the basics of college-level statistics. Concepts are taught through the context of sociological data analysis. Strongly recommended for students enrolled in SOC 15 with little or no recent algebra knowledge. (noncredit)

STAT C1000. Introduction to Statistics

Units: 4

Formerly known as MATH 13

Prerequisite: Placement as determined by the college's multiple measures assessment process or completion of a course taught at or above the level of intermediate algebra

Hours: 72 lecture

This course is an introduction to statistical thinking and processes, including methods and concepts for discovery and decision-making using data. Topics include descriptive statistics; probability and sampling distributions; statistical inference; correlation and linear regression; analysis of variance, chi-squared, and t-tests; and application of technology for statistical analysis including the interpretation of the relevance of the statistical findings. Students apply methods and processes to applications using data from a broad range of disciplines. (C-ID MATH 110) (CSU, UC-with unit limitation)