

# STATISTICS (STAT)

---

## STAT 015 STATISTICS FOR BUSINESS AND ECONOMICS

### 4 unit

*Transfer Credit: CSU; UC credit limitations. See counselor.*

*C-ID: MATH 110*

**Prerequisite(s):** *Intermediate Algebra or placement into any Math course numbered 001-099*

(Business Division) (Business and Enrollment Management Division) Descriptive and inferential statistics. Collection, analysis, and presentation of business and economic data using probability techniques, hypothesis testing, and predictive strategies to facilitate decision-making. Topics include measures of central tendency and deviation, probability and sampling distributions; statistical inference, correlation, and linear regression analysis of variance, chi-square, and t-tests, and, application of technology for statistical analysis, including the interpretation of the relevance of the statistical findings. No credit if taken after STAT 018, 050, or 050H. Total of 54 hours lecture and 54 hours laboratory.

**Grade Mode:** *Letter Grade*

## STAT 018 STATISTICS FOR BEHAVIORAL AND SOCIAL SCIENCES

### 4 unit

*Transfer Credit: CSU; UC credit limitations. See counselor.*

*C-ID: SOCI 125*

**Prerequisite(s):** *MATH 131 or 150 or placement based on the statistics placement process*

(Social Sciences Division) Data-analysis concepts and procedures used in the social sciences. Topics include measures of central tendency and dispersion; probability and sampling distributions, methods of evaluating hypotheses and testing inferential statistics (t-tests, chi-square, ANOVA, correlation and regression) Applications to the social sciences using calculators and spreadsheets. No credit if taken after STAT 015, 050, or 050H. Total of 72 hours lecture.

**Grade Mode:** *Audit, Letter Grade, Pass/No-Pass*

## STAT 050 ELEMENTARY STATISTICS

### 4 unit

*Transfer Credit: CSU; UC credit limitations. See counselor.*

*C-ID: SOCI 125; MATH 110*

**Prerequisite(s):** *MATH 131 or 141 or 150 or placement based on the Math assessment process*

(Mathematics Division) Analysis of data using statistical methods: data collection, descriptive statistics, probability theory and inferential statistics. Topics include: sampling; measures of central tendency and variation; frequency charts and graphical representations of data; introductory probability; sampling distributions; correlation and linear regression; confidence intervals; hypothesis testing, including analysis of variance; and technology based statistical analysis from applications in engineering, social sciences, economics, psychology, and natural sciences. No credit if taken after STAT 015, 018, or 050H. Total of 72 hours lecture.

**Grade Mode:** *Letter Grade, Pass/No-Pass*

## STAT 050H HONORS ELEMENTARY STATISTICS

### 4 unit

*Transfer Credit: CSU; UC credit limitations. See counselor.*

*C-ID: SOCI 125; MATH 110*

**Prerequisite(s):** *MATH 131, 141, or 150 or placement based upon the math assessment process*

**Enrollment Limitation:** *Acceptance into the PCC Honors program*

(Mathematics Division) Analysis of data using statistical methods: data collection, descriptive statistics, probability theory and inferential statistics. Topics include: sampling; measures of central tendency and variation; frequency charts and graphical representations of data; introductory probability; sampling distributions; correlation and linear regression; confidence intervals; hypothesis testing, including analysis of variance; and technology based statistical analysis from applications in engineering, social sciences, economics, psychology, and natural sciences. As an honors course, students will be expected to complete additional assignments to demonstrate stronger analytical skills and critical analysis of articles published in peer-reviewed journals and primary scientific literature. No credit if taken after STAT 015, 018, or 050. Total of 72 hours lecture.

**Grade Mode:** *Letter Grade, Pass/No-Pass*

## STAT 065 INTRODUCTION TO STATISTICAL PROGRAMMING

### 1 unit

*Transfer Credit: CSU; UC*

**Prerequisite(s):** *Intermediate Algebra or placement into any Math course numbered 001 - 099*

Exploration of applied computer programming methods for statistics with hands-on activities. Use computer coding and scientific libraries for statistical analysis including random sampling, data wrangling, visualization, inference, regression, modeling and simulation. Total of 54 hours laboratory.

**Grade Mode:** *Letter Grade, Pass/No-Pass*

## STAT 150 SUPPORT FOR ELEMENTARY STATISTICS

### 0.5 unit

**Corequisite(s):** *STAT 050*

(Mathematics Division) of core prerequisite skills, competencies, and concepts for statistics with an emphasis on critical thinking and problem solving. Intended for students who are concurrently enrolled in STAT 050: Elementary Statistics. Topics include learning strategies and mathematical knowledge necessary for successful completion of Elementary Statistics. Total of 36 hours laboratory.

**Grade Mode:** *Pass/No-Pass*