C-ID Descriptor Introduction to Statistics in Sociology

Descriptor Details

• **Descriptor Title**: Introduction to Statistics in Sociology

• **C-ID Number**: 125

• Units: 3.0

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General Description

An introduction to the basic statistical methods and analyses commonly used in sociological research. Topics include: descriptive and inferential statistics usually include levels and types of measurement; measures of central tendency and dispersion; normal, t, and chi-square distributions; probability and hypothesis testing; correlation and regression. Applications of statistical software to sociology and/or other social science data required.

Prerequisites

Competency in intermediate algebra or completion of an intermediate algebra course with a grade of "C" or better.

Corequisites

No information provided

Advisories

No information provided

Content

1. Research Design and the role of statistics

- 2. Organizing data and measures of central tendency
- 3. Descriptive statistics for uni-variate distributions
- 4. Descriptive statistics for joint distributions
- 5. Statistical inference
- 6. Statistical tests: one-way and factorial analysis of variance
- 7. Analysis of variance
- 8. Correlation and nonparametric statistical analysis

Lab Activities

No information provided

Objectives

At the conclusion of this course, the student should be able to:

- 1. Practice and use basic mathematical techniques;
- 2. Conduct elementary numerical computations; interpret the results in written form;
- 3. Organize, classify, and represent quantitative data in the social and behavioral sciences in various forms: tables, graphs, rates, percentages, measures of central tendency and variation;
- 4. Make statistical inference using estimation, hypothesis testing, correlation, and regression.
- 5. Demonstrate familiarity with applications to social and behavioral data sets in statistical software.

Evaluation Methods

May include:

In class quizzes and exams Paper assignments Class participation Research project

Textbooks

Rosopa and Minium, Statistical Reasoning in the Behavioral Sciences
Linneman, Social Statistics: The Basics and Beyond
Anderson and Zelditch, Basic Course in Statistics with Sociological Applications
Gravetter and Wallnau, Statistics for the Behavioral Sciences
Thorne, Giesen, Thorne, Statistics for the Behavioral Sciences
Aron, Aron and Coups, Statistics for the Behavioral and Social Sciences
Levin and Fox, Elementary Statistics in Social Research: Essentials