



Introductory Statistical Concepts: Ohio State University

(For a list of materials used in the course, please see http://www.theNCAT.org/R2R/AcadPrac/CM/OSU_IntroStatCon_Mat.pdf.)

Introductory Statistical Concepts is a one-quarter, five-credit course that covers the following topics:

Sampling

Experimentation

Measurement: Reliability, Bias and Validity

Displaying Data Distributions

Center, Relative Standing and Spread

Normal Distribution

Examining Relationships: Correlation and Two-way tables

Regression, Prediction and Causation

Probability

Sampling Distribution

Estimation

Significance Test Concepts

- Hypotheses
- Test statistic
- P-value
- Conclusions
- Types of errors
- Sample size
- Power

Significance Test Methods

- Z-test for the population proportion
- Z-test for the population mean
- T- tests (population mean, 2 samples, paired)