

EDF 701
Educational Foundations 701
Educational Statistics

Credit Hours : 3

Prerequisite: EDF 600

Course Description

EDF 701 Educational Statistics: Credit 3 hours. Prerequisite: Educational Foundations 600. Study of basic statistical concepts, both descriptive and inferential. Emphasis is placed on the use of these concepts in solving educational problems.

In order to successfully plan, develop, and implement curricula to meet the needs of diverse learners in today's world and to prepare students for the future, the College of Education and Human Development (COEHD) has identified four critical components of The Effective Educator: standards-based instruction (SBI), knowledge of the learner (KL), best pedagogical practices (PP), and content knowledge (CK).

Content Covered

Lesson 1: Introduction
Lesson 2: Describing Univariate Data
Lesson 3: Normal Distribution
Lesson 4: Sampling Distributions
Lesson 5: Point Estimation
Lesson 6: Confidence Intervals
Lesson 7: The Logic of Hypothesis Testing
Lesson 8: One sample Hypothesis Tests
Lesson 9: Independent Samples t-test
Lesson 10: Dependent Sample t-test
Lesson 11: One-way Analysis of Variance (ANOVA)
Lesson 12: Tests Supplementing ANOVA
Lesson 13: Chi-Square
Lesson 14: Power
Lesson 15: Measuring Effect Size
Lesson 16: Describing Bivariate Data (Correlation)

Text

Salkind, N. J. (2000). Statistics for people who (think they) hate statistics. Thousand Oaks, CA: Sage.

References

Howell, D. C. (1997). Statistical methods in psychology (4th ed.). Belmont, CA: Wadsworth.

Kiess, H. O. (1989). Statistical concepts for the behavioral sciences. Boston: Allyn and Bacon.