

Advanced Placement® ** Statistics

COURSE DESCRIPTION:

AP Statistics data analysis is dependent on the use of technology. Students should have access to computers that include software capable of doing data analysis. Students will be required to interpret output generated by statistical software programs. Students are not expected to learn how to use various statistical programs. In addition one of the following Texas Instruments calculators is required, TI-83, TI-83+, TI-84, TI-84+, or a TI 89. The TI-83+ is the most popular calculator for AP Statistics. In most cases the calculator is sufficient but the fundamental tool of data analysis is the computer.

PREREQUISITES: Two years of high school algebra

COURSE LENGTH: Two semesters

REQUIRED TEXT: *The Practice of Statistics, TI-83/89 Graphing Calculator Enhanced, Second Edition*, Dan Yates, David S. Moore, Daren S. Starnes – ISBN #071674773173

COURSE OUTLINE:

Semester 1

Organizing Data: Looking for Patterns and Departures from Patterns

- Exploring Data
- The Normal Distributions
- Examining Relationships
- More on Two-Variable Data

Producing Data: Samples, Experiments, and Simulations

- Producing Data

Probability: Foundations of Inference

- Probability: The Study of Randomness
- Random Variables

Semester 2

- The Binomial and Geometric Distributions
- Sampling Distributions

Inference: Conclusions with Confidence

- Introduction to Inference
- Inference for Distributions
- Inference for Proportion
- Inference for Tables: Chi-Square Procedure
- Inference for Regression

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