

AP STATISTICS COURSE OUTLINE

The purpose of the Advanced Placement course in statistics is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes:

- I Exploring Data: Observing patterns and departures from patterns
 - A. Interpreting graphical displays of distributions of univariate data
 - B. Summarizing distributions of univariate data
 - C. Comparing distributions of univariate data
 - D. Exploring bivariate data
 - E. Exploring categorical data: frequency tables

- II Planning a Study: Deciding what and how to measure
 - A. Overview of methods of data collection
 - B. Planning and conducting surveys
 - C. Planning and conducting experiments
 - D. Generalizing results from observational/experimental studies and surveys

- III Anticipating Patterns: Producing models using probability theory and simulation
 - A. Probability as relative frequency
 - B. Combining independent random variables
 - C. The normal distribution
 - D. Sampling distributions

- IV Statistical Inference: Confirming models
 - A. Confidence intervals
 - B. Tests of significance
 - C. Special case of normally distributed data

MATERIALS

Loose Leaf Binder
Dividers – Drills, Classwork, Homework, Quizzes & Tests
Sharpened Pencils
TI-83/ Plus Graphing Calculator

Technology – We will be doing very little pencil-and-paper calculation. Almost all our computation will be done with computers or calculators. It will be essential to have your own calculator, either a TI-83Plus or another graphing model that includes statistics functions. If it is not possible for you to obtain your own graphing calculator, please see me for the option of renting a calculator from the school. Bring your calculator to class everyday, as they will not be available in class for short-term loan.

Text - Our textbook is *Stats: Modeling the World* by Dave Bock, Paul Velleman, and Dick DeVeaux. The book has lots of well-thought-through explanations of the material we will be learning and it is absolutely required that you read assigned portions.

Grades – Class grades for each quarter are figured as follows:

Homework/	15%
Classwork	20%
Reports/special problems	20%
Quizzes and tests	45%

Academic Honesty – In working on class reports problems and other out-of-class assignments you are encouraged to seek help from other students; teachers, parents or other adults; and outside books or electronic sources. A very important distinction to make when getting outside help is between assistance that allows you to understand the material, so you can best explain your own work and ideas; and assistance that substitutes someone else’s knowledge and understanding for your own. **Help that lets you do your own work is wonderful; help that replaces work you have not done is cheating.** Academic dishonesty is discussed in the student handbook and you are encouraged to review the material there.

CLASSROOM PROCEDURES

1. When the bell rings you should be in your seat, quietly working on the drill or warm-up exercise. Pencils should be sharpened prior to the start of class and personal business should be taken care of between classes.
2. Homework will be checked and questions answered.
3. We will proceed through the lesson, taking notes, going over examples, and answering questions. You are expected to copy all notes and show all work!
4. The bell is an indication of class ending and not an automatic signal to leave the room. The teacher will instruct you when to pack up and will dismiss you.

EXTRA HELP

Please let me know if you need extra help. I am available during planning periods and after school (by appointment). Math Clinic will also be available Wednesdays and Thursdays after September (activity bus provided Wednesday with sign-up). Math Academy is also available on alternate Saturdays. **DO NOT WAIT UNTIL THE DAY BEFORE A TEST TO SEEK HELP!!**

ATTENDANCE

- When returning from an absence, give me your pass at the beginning of the period. It is your responsibility to make up all work missed, including quizzes and tests.
- Remember, 3 uncoded or illegal absences will result in automatic failure for the quarter.
- Furthermore, any student absent 6 days or more during a semester (regardless of reason) may be denied credit for the course.

This Form Should Be Signed By You and Your Parent/Guardian

I have read and understand the Syllabus for AP Statistics.

Student Name _____

Student Signature _____ Date _____

Parent or Guardian Signature _____ Date _____

e-mail address _____

daytime phone number _____