



2017-2018 COURSE SYLLABUS

AP Statistics (Two semesters; 5 units each semester)

The Advanced Placement Program offers a course description and examination in Statistics to secondary school students who wish to complete studies equivalent to a one-semester, introductory, non-calculus-based, college course in statistics. This course includes the use of technology, projects, and laboratories, cooperative group problem-solving, and writing, which will allow students to build interdisciplinary connections with other subjects and with their world outside school.

Statistics Students are exposed to four broad conceptual themes:

1. Exploring Data: Observing patterns and departures from patterns
2. Planning a Study: Deciding what and how to measure
3. Anticipating Patterns: Producing models using probability theory and simulation
4. Statistical Inference: Confirming models

Students who successfully complete the course and examination may receive credit advanced placement, or both for a one-semester introductory college statistics course.

Prerequisite: Passing both semesters of Algebra 2 or Math 3 with a C or better.

Vicki Feliz-Smith (Room B-14)

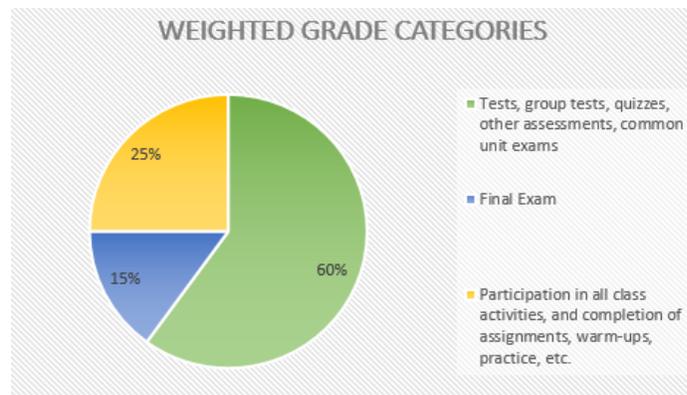
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Please see Infinite Campus for more course information: <http://www.scusd.edu/#>

Textbook: *Statistics and Data Analysis* (Peck, Olsen, and Devore)

Required Materials: Pencils and a dedicated binder or tabbed section of a binder and loose leaf paper. No work will be accepted that is bound in or torn from a notebook, and spiral bound notebooks are not allowed out in class ever. Students will also need to become familiar with TI-83/84 or Casio graphing calculators and may wish to purchase one, but there are downloadable free apps available, and calculators are accessible during class.





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Grading Policy

GRADING SCALE

90% - 100%	A
80% - 89.9%	B
70% - 79.9%	C
60% - 69.9%	D
0% - 59.9%	F

MAKE-UP POLICY FOR ABSENTEEISM: When a student is absent, it is his/her responsibility to find out what assignments and notes were missed and make up that work promptly (typically 1 day is allowed for each day absent). Since class activities can never be duplicated exactly, do not miss class if at all possible.

Course Outline:

The course is divided into eight sections with the following titles.

Semester 1	Semester 2
Ch1 Role of Statistics	Ch10 Hypothesis testing
Ch2 Data Analysis and collection	Ch11 Comparing 2 populations
Ch3 Graphical descriptions	Ch12 Goodness-of-Fit tests
Ch4 Numerical descriptions	Ch5 Bivariate data
Ch6 Probability	Ch13 Simple Linear Regression
Ch7 Random variables & probability distribution	Final
Ch8 Sampling Variability/Distributions	AP Exam
Ch9 Estimation w/single sample	Final Project

Course Objectives :

Students will acquire and demonstrate knowledge of the concepts, definitions and properties required to meet the AP Statistics mathematics standards. Students will develop critical thinking and decision-making skills by connecting concepts to practical applications needed to be productive members of society. All students are expected to demonstrate the following objectives:

1.

- Students should be able gather data responsibly and to work with data represented in a variety of ways: raw, graphical, or tabular and make the connections among these representations.
- Students should be able to communicate mathematics both orally and in well-written sentences and should be able to explain solutions to problems.
- Students should be able to model a written description of a physical situation with a function.
- Students should be able to use technology (graphing calculators and graphing software) to help solve problems, experiment, interpret results, and verify conclusions.



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- Students should be able to determine the reasonableness of solutions, including sign, size, relative accuracy, and units of measurement.

Academic Expectations:

- Attendance – this course is very collaborative and participatory. So, being in class is essential.
- Work Ethic – in addition to attendance, you will be required to work with a group and participate enthusiastically and constructively.
- Prepare for class- do all assigned reading or work for upcoming class discussions and activities.

ACADEMIC DISHONESTY: Academic dishonesty is considered a serious offense in my class. Students cheating will receive a zero grade for that assignment. I encourage collaboration on all assignments but I expect the work you hand in (assignments, exam/quiz, etc.) to be your own.

Behavioral Expectations:

CLASSROOM RULES: The following few rules guide classroom behavior and activity.

- If you make a mess, clean it up, but avoid making messes.
- If you move something, put it back where it belongs.
- If you need classroom materials, get them yourself without disruption.
- Respect the speaker, whether it is the teacher, a student, or someone else.

ELECTRONIC DEVICES: Electronics (music devices, cell phones, etc.) are to be turned completely off and away with exceptions for appropriate cell phone usage as discussed during class. Other technology will be available for class applications.

Extra Help: Tutoring will be Monday after school or drop in when available.