916.395.5090

6715 GLORIA DRIVE SACRAMENTO CA 95831

HOME OF THE COUGARS

2019-2020 COURSE SYLLABUS

AP Statistics (Two semesters; 5 units each semester)

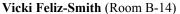
The Advanced Placement Program offers a course description and examination in Statistics to secondary school students who wish to complete studies equivalent to a one-semester, introductory, non-calculus-based, college course in statistics. This course includes the use of technology, projects, and laboratories,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

Statistics Students are exposed to four broad conceptual themes:

- 1. Selecting Statistical Methods: Deciding what and how to measure and analyze
- 2. Data Analysis: Describing patterns, trends, associations, and relationships in data
- 3. Exploring Random Phenomena: Producing models using probability theory and simulation
- 4. Statistical Argumentation: Justify a conclusion from data and statistical inference.

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.



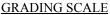
Vicki-feliz-smith@scusd.edu

(916)395-5090x506114

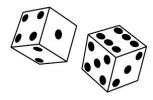
<u>Textbook:</u> The Practice of Statistics by Starnes and Tabor (Please cover your book.)

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. 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 (Wabbitemu), and calculators are accessible during class for the exchange of an ID. If you need to borrow one for an extended time, please provide four AAA batteries. Some assignments will be submitted online, either through Google Classroom or College Board. Students are required to sign on College Board using a non-school gmail account with a respectable name. Access codes will be available soon.

Grading Policy There are no weights for different types of assignments. Some graded assignments will have more point values than others based on their importance in assessing your understanding. There will be frequent small quizzes and exit slips, one test per unit, one project per quarter, and one final per semester. Bookwork has no point value, but you really want to make sure you can do it, so you can earn points on graded assignments. Progress can be viewed on Infinite Campus through scusd.edu.



| OTO IDIT TO DET TEE | |
|---------------------|---|
| 90% - 100% | A |
| 80% - 89.9% | В |
| 70% - 79.9% | C |
| 60% - 69.9% | D |
| 0 % - 59 9% | F |





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

JOHN F. WANNAOY HIGH SCHOOL

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Course Outline:

| Semester 1 | Semester 2 |
|---|---|
| Data Analysis | Sampling Distributions |
| Modeling Distributions of Data | Estimating with Confidence |
| Describing Relationships (Regression) | Testing a Claim |
| Collecting Data | Comparing Two Populations |
| Probability: What are the Chances? | Inference for Distributions of Categorical Data |
| Random Variables | More about Regression |
| Final (Buffet test: The student chooses 3 topics) | Final and AP Exam and 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:

- Students should be able to 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, spreadsheets, and graphing software) to help solve problems, experiment, interpret results, and verify conclusions.
- 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 any class. Students cheating will receive a zero grade for that assignment. I encourage collaboration on all assignments but I expect the work you submit (assignments, exam/quiz, etc.) to be your own.

Behavioral Expectations (See JFK Student Handbook for details.):

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.
- The Class Pass will be on the microwave. One person may use it at a time for five minutes, and if you abuse the pass, you will be restricted in using it. Do not use it every day or take too long.

ELECTRONIC DEVICES: Personal 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: Bring your questions at lunch or let me know when you are coming after school.

