



Deer Valley Unified School District No. 97

BOULDER CREEK HIGH SCHOOL
40404 N. Gavilan Peak Parkway ❖ 623-445-8600 ❖ 623-445-8680 (Fax) ❖ bchs.dvUSD.org

AP Statistics Course Syllabus

Course Title: AP Statistics
Instructor: Mr. Barker
Room: 438
Teacher Web Page: <http://bcphysics.weebly.com/>
Email: steven.barker@dvUSD.org

Note:

Course procedures and policies may change to accommodate the new IPAD technology.

Course Description:

AP Statistics is a dynamic class that will impact your thinking and the way you view the world. Statistics is everywhere in our culture: election polls, medical studies, and bags of M & M's. Assignments will be always tied to real world data and class time will often include interactive experiments and activities. The goal of the class is to teach you to think carefully about collecting and analyzing data.

Prerequisite: Algebra 3-4

Official Course Competencies

1. Identify the difference between descriptive and inferential statistics.
2. Distinguish between a population and a sample.
3. Group a set of data and present the grouping in graphical form.
4. Determine the mean, median, mode and standard deviation of data set and find the z-score for a data piece.
5. Define random variable and the probability distribution of a random variable.
6. Find probabilities for normal random variables by using the standard normal distribution.
7. Construct random samples.
8. Graph the sampling distribution of the mean for all sample sizes and all populations.
9. Find point and interval estimates of population means and proportions.
10. Describe the logic of hypothesis testing emphasizing the role of probability distributions and types of error.
11. Perform inferences about one mean or proportion in the case of normal populations or large sample size.
12. Perform inferences about two means or proportions in the case of normal populations or large sample size.
13. Use the Chi-square goodness-of-fit test to determine if two populations have the same shape.
14. Use the Chi-square independence test to determine whether two characteristics of a population are associated (dependent).
15. Identify the best-fitting regression line for a set of data points.
16. Partition the total sum of squares for a set of data points to find measures of regression line fit and linear relationship.

Textbook:

Statistics: The Art and Science of Learning from Data
3rd Edition Agresti, A. and Franklin, C. 9780321755940

Required Materials:

Each student must have the following materials every day in class: ti-84 calculator (required), charged IPAD, dry erase marker, bell work notebook, note taking notebook, pencil or pen.

Grading:

A = 100 - 90
B = 89 - 80
C = 79 - 70
D = 69 - 60
F = 59 - 0

Homework, in class assignments = 20 % of grade
Labs, projects, in class activities = 20 % of grade
Tests, quizzes, projects = 40 % of grade
Final Exam = 20%

- The final will be at the end of each semester. The final exam will be a comprehensive test provided by the instructor.

Advanced Placement Examinations

AP Exam & Practice Testing

It is the expectation of this class that **ALL** students will take the AP exam in May 2017.

Funding is available for the exam on a financial need basis.

In addition, it is a BCHS policy for all students will take a complete practice exam. This practice exam will be scheduled in advance and participation is **mandatory**.

All students, whether testing for Advanced Placement College Board credit or not, will sit for a full board exam in April. Students testing for college credit will test with the appropriate facilitator.

Exam check-in for all students is at 7:40 am and students will miss their 1-3 hour classes that day (as an excused internal school absence that will not count as an absence for school attendance policy purposes {code 8}). Participation in this exam date is not optional.

• Adherence to the Boulder Creek Academic Integrity Code

- All students enrolled in Honors Physics will adhere to the framework and guidelines set forth in the Boulder Creek High School Academic Integrity Code. Cheating and Plagiarism will not be tolerated. The purpose of this code is to promote a positive learning environment for all involved. As humans, we will make mistakes as we grow. It is understood that we can learn from those mistakes and become better individuals in the future. Any student who violates this code will be referred to the Students Rights and Responsibilities handbook and assignment of appropriate consequences. Please refer to the Academic Integrity Code in its entirety for definitions and examples of plagiarism and cheating and strategies on how to avoid these infractions.

Class Expectations:

1. Be prepared with your dry erase marker, charged IPAD, note taking notebook, bell work notebook, pen and pencil, and a scientific calculator every day.
2. Respect the rights and property of others at all times.
3. Be in your seat and prepared to begin when the bell rings.
4. Do not talk while someone else is talking.
5. Follow safety guidelines and directions carefully.
6. No food or drink in class.
7. No cell phones—you should be using your IPAD exclusively.

Classroom Behavior Expectations and Consequences- PBIS

	Learning Environment
P repared	<ul style="list-style-type: none">• Bring materials• Come prepared to learn
R espectful	<ul style="list-style-type: none">• Respect others, their property, equipment, and the facility
I ntegrity	<ul style="list-style-type: none">• Complete your own work• All cell phones are off and out of sight
D iscipline	<ul style="list-style-type: none">• Arrive on time & be in your seat• Behave appropriately and use courteous language• Keep food and drink outside
E veryone United	<ul style="list-style-type: none">• Encourage confidence• Cooperate and collaborate

Consequences:

Steps:

1. Verbal warning
2. Isolation in the room, and a parent phone call
3. Removal from class, parent phone call, and detention
4. Referral
5. Cheating: The student will receive a zero on the assignment! If a student talks during a test for any reason to any student, both students will receive a zero. **NO TALKING!** Sharing answers on class work is also cheating and you will receive a zero. The use of a cell phone or electronic device during a test is cheating and will also result in a zero.

Laboratory:

- Horseplay will not be tolerated. Students will leave the lab and will not receive credit.

*Breakage or disfigurement of lab equipment due to vandalism or horseplay will be replaced at the cost to the student.

Miscellaneous Rules, but important:

- Use of cell phones is not allowed in class without permission—use your ipad only
- PARENTS are to call the school directly if an emergency exists. Do not use a pager or cell phone.

Make-Up Work/Retaking Exams/Late Work Policies

Upon return to class after an absence, a student has one school day for each day missed to make up work/test assigned during his/her absence regardless of the number of days absent. For example, if a student is absent on Thursday and Friday, he/she will have Monday and Tuesday of the following week to make up work and must turn in the work that was assigned during the days absent on Wednesday.

Coursework and assessments assigned prior to the absence(s) may still be due on the date assigned. It is the student's responsibility to check with teachers immediately upon return for work missed and possible adjustment of due dates. Teachers may choose to schedule an appointment with the student to arrange due dates as needed. . Late work will not be accepted unless indicated by the instructor.

There will typically be one quiz and one exam for each unit. Retake quizzes and exams may be provided at the discretion of the instructor. There will be only one opportunity to retake quizzes or exams if the opportunity is

provided. If a student is absent on exam day and a retake opportunity is provided to students, the retake exam will become the single opportunity for the absent student to make up the exam. No additional retake opportunities will be provided to students who miss the retake exam unless that student makes plans with the instructor ahead of time.

Communication

Please contact the teacher for any student concerns. It is crucial that teachers, parents, and students maintain open lines of communication. Contact information is provided at the top of the first page.