

FORT COLLINS HIGH SCHOOL *AP Statistics*

Off Periods: 5th and 8th

Instructor: Dan Reinke

Phone: 970-488-8116

Email: dreinke@psdschools.org

Room: L110



COURSE DESCRIPTION

This is an Advanced Placement course in statistics for secondary school students who wish to complete studies equivalent to a one-semester, introductory, non-calculus-based, college course in statistics. In colleges and universities, the number of students who take a statistics course is almost as large as the number of students who take a calculus course. An introductory statistics course, similar to the AP Statistics course, is typically required for majors such as social sciences, health and medical sciences, business, mathematics, and just about any post-bachelor degree where research is required.

The purpose of the AP 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:

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.

The Exam

The AP Exam is 3 hours long and consists of a multiple-choice section and a free response section. In determining the grade each of the two sections will be given equal weight. The total raw score will be converted to AP's 5-point scale:

- | | |
|---|---------------------------------|
| 5 | Extremely Well Qualified |
| 4 | Well Qualified |
| 3 | Qualified |
| 2 | Possibly (But Rarely) Qualified |
| 1 | No Recommendation |

Students should contact individual universities to help establish what grade is needed.

The time and date of this year's exam will be given in class. We will meet several times outside of class prior to the exam to make up for the time missed after the exam. This will provide a valuable review as well as make-up for lost class time.

Class format and expectations:

Grading scale: 90%=A, 80%=B, 70%=C, 60%=D, below 60%=F.

Grades will not be rounded.

Homework (15%): Homework will be given and checked daily. A homework quiz will be given after 6-10 assignments have been checked. Students will receive a point for each completed assignment and a point for each correct quiz problem. A cumulative homework grade will be figured and it will count as 15% of your grade. Do not just copy your answers from your classmates. Show all of your work and circle your answers. You will be given one day to make-up work for every day you are absent. **NO LATE WORK WILL BE ACCEPTED!**

Exams and projects (65%). Examinations will be given after every unit.

- Exams will be a mixture of multiple choice and free response questions at an AP level like the AP Exam.
- Exams must be completed within the classroom during the scheduled time. **If you are not finished you will not be allowed to finish later.** (IEP modifications are exempt)
- Quizzes will be given throughout the units and will be worth less than the exams. They will follow the same guidelines as exams.
- Any project will be treated as an assessment and the points will be put into the Exam category.
- If you are going to be absent you must try to take the exam before you leave. After the exam, the make-up test WILL BE MUCH HARDER!

Final Exam (20%).

- Every student will be required to take a first semester and second semester final. The final exam will be made up entirely of multiple choice and free response questions that are at an AP level.

MY PHILOSOPHIES AND EXPECTATIONS

We are all in this together. Math can be difficult, so it is important to learn from one another and help each other. Do not be afraid to ask questions. AP Statistics is a very important class for a number of reasons so *take advantage of every opportunity* (class period) to learn and get better! Your ATTITUDE and EFFORT (in everything you do!) will determine what you get out of your days in AP Statistics and at Collins.

PLEASE (Notice I asked nicely...)

(1) Be prepared: This means bringing paper, pencils, a calculator and the textbook to class every day.

(2) Be respectful: Respect yourself, your peers, and me (remember...I'm here to help). This includes showing up on time, being polite, and listening objectively to peers' opinions and questions. This also includes putting cell phones and iPods away and keeping our room clean.

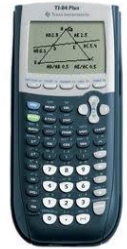
(3) Be an active participant: ASK QUESTIONS!

L110 CELL PHONE / MUSIC PLAYER RULES:

Put your cell phones and earbuds away during instruction!! You can listen to music in class when we have time to start homework assignments and when we are working on classwork assignments. You may not listen to music during tests and quizzes. Sorry, but “cheater kid” ruined that for you!

CALCULATORS

Graphing calculators are **required** for AP Statistics. The best *graphing* calculators include: TI-83, TI-83+, TI-84, or the TI-84+. These cost from \$80 to \$95. These are the calculators that are used on SAT/ACT tests, AP math tests, and they can be used through every college math class, too. Even though they are expensive, they are **worth the investment**.



STUDENT RESPONSIBILITIES

STUDENTS WILL ADHERE TO ALL FCHS POLICIES AND THE POUDDRE SCHOOL DISTRICT “CODE OF CONDUCT” AT ALL TIMES TO INCLUDE, BUT NOT LIMITED TO, THE FOLLOWING:

1. **Attendance** – Students must attend class to receive the greatest benefit from instruction and class interaction. Students who miss class are never able to completely make up missed work. Nevertheless, students with excused absences will be allowed to make up work according to Poudre School District policy. *It is the student's responsibility to contact the instructor – outside of class – to complete missed assignments.* Unless prior approval is granted by the instructor, **late work will not be accepted!!!!**
2. **Participation** – Each student is responsible for participating in class discussions and contributing to the learning environment of the class. In order to fulfill his/her responsibility, it is necessary to be in class, on time with all materials, including paper and a writing instrument.
3. **Assignments** – Students are responsible for coming to class prepared. All assignments are due at the start of the class on the date the assignment is due. Please consult the Blackboard website or hard copy of assignments for due dates.
4. **Classroom Conduct** – Food and drink are not allowed in class, but water is permissible. Please help keep the room clean! The classroom is a formal setting - adhere to the school dress code.
5. **Electronic Devices** – No electronic device of any kind may be used in class without permission. The presence of an electronic device during a test or quiz will be considered evidence of academic dishonesty.
6. **Final Examination** – Failure to take the final examination may result in a failing grade for this class.

ACADEMIC DISHONESTY

Each student is required to do his/her own work. Plagiarism and/or cheating will not be tolerated, and if detected, will result in disciplinary referral action. The Fort Collins Student Handbook outlines the consequences for cheating and plagiarism, and the instructor will, with the assistance of an administrator, implement the policy. A first incident of plagiarism and/or cheating will result in a zero. Additional incidents may result in expulsion from school. Please consult the Handbook for the full text of the consequences for academic honesty.

