

AP/KAP Statistics

Hilliard Davidson High School 2014-2015 Ms. Taylor

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<u>What is AP/KAP Statistics?</u>: AP/KAP Stats is a college level introductory course in statistics. You'll learn how to collect, analyze and interpret data. You can earn college credit for this course through Kenyon College or by scoring a 3, 4, or 5 on the AP test in May.

<u>Why should I take Statistics?</u>: Statistics is the most widely applicable branch of mathematics, used by more people in more different areas than any other kind of math. You'll never wonder when you'll ever use this stuff! Many former students have returned after a couple of years in college to say that AP Stats was the most important and helpful course they took in high school. Finally, you'll enter college ready to apply your skills in your first semester courses.

<u>How hard is AP Stats?</u>: It is a college course, so the expectations are high. You will need to think hard about the concepts. You will <u>write</u> - a lot. You won't get a good grade just for showing up. There is plenty of work. You must be a self-motivated scholar, the students who aren't ... usually end up learning little and dropping the class.

Required Course Materials

- 1. Statistics notebook/binder/spiral to organize homework, notes, and homework guizzes.
- 2. Loose-leaf notebook paper or spiral notebook.
- 3. Graph paper.
- 4. Statistics Textbook (covered to protect it from damage and you from fines).
- 5. Graphing Calculator. (I recommend a TI-83, 83+, 84+, or 89)
- 6. Pencils/Pens (I recommend not erasing. Cross out instead.)
- 7. Your attention and commitment to put forth your best effort daily!

Daily Expectations and Classroom Rules

- 1. Come to class prepared and on time with the required course materials.
- 2. Any behavior that prevents Ms. Taylor from teaching to the best of her ability or prevents you or any other student from learning to the best of your/his/her ability will not be tolerated. (This includes using your cell phone, iPod, etc. If you can't help yourself, I can hold onto the device for you until the end of class.)
- 3. Treat others as you wish to be treated.
- 4. Be a productive member of the class. Check solutions, ask questions, and help each other every day.

Failure to comply with the classroom/school rules and expectations may result in a stern warning, removal from class, a referral to the office, a phone call home, an after school detention, or any other disciplinary action that Ms. Taylor feels is warranted. All situations are different and will be handled as Ms. Taylor deems appropriate. Remember that you have choices in regards to your classroom behavior and performance. Please choose to pay attention, work hard, respect others, and promote learning in the classroom.

Tardies and Hall Passes

Be to class on time! Please be in your seat and quiet when the bell rings. Success requires daily attendance and effort. Absence from class creates difficulties and confusion for students. As a result, the hall pass will only be used in emergency situations.

AP Exam

A requirement of AP Statistics is that all students will take the AP Exam in May, 2015. The exam will cost approximately \$90. If money is an issue, please see Ms. Taylor as soon as possible. Any student not taking the exam in May, will be required to take an alternate version of the AP Exam that will count as a final exam grade in the 4th quarter of the class. If you are unsure about the AP exam, please see Ms. Taylor immediately.

Grading:

During each grading period, the final grade will be determined based on total points earned from homework, quizzes, and tests. Grades will be assigned on the bases of; 100 - 90 % (A), 89 - 80% (B), 79 - 70% (C), 69 - 60 % (D), 59 - 0 % (F).

Tests

There will be three to four chapter and mid-chapter tests each grading period. Tests will include some multiple choice and free response questions from old or sample AP exams. If a student misses a test, it must be made up as soon as possible. Please communicate with Ms. Taylor as much as possible about absences and be prepared on the day that you return to take the test or make arrangements with Ms. Taylor. In order to fully prepare for the AP exam in May, all students are required to take the semester exam, no exam exemptions allowed!

Homework/Quizzes

Homework will be assigned daily and will follow a calendar guideline for each unit. *All assignments are expected to be completed for the next school day.* All assigned problems must be completed **with work shown** in order to receive credit. In the case of problems that may be solved using a graphing calculator, the set-up for the problem must be provided in addition to the final answer.

Time will always be given to discuss homework difficulty during class so it is imperative that all assignments are completed on time. All homework solutions will be made available to students for each section of the text. Many assignments will be collected each day at the beginning of the period (Make sure your name is on your homework paper). All students are expected to complete their own assignments. Cooperation and peer assistance are strongly encouraged; cheating and copying are not!

At least once per section, a short quiz will be given in class. Quizzes will vary in value. Homework quizzes may or may not be announced beforehand. All quiz questions will be from topics that have been discussed in class and covered in the assigned homework. Quizzes will occur after you have had homework practice with those particular learning targets. Homework quizzes are a great indicator of your understanding before the test.

Responsibilities

Students are expected to complete their daily assignments, to prepare for tests and quizzes, to participate in class every day, to work well with others in class, to seek extra help when having difficulty, and to pass the AP exam. Ms. Taylor's responsibilities include preparing engaging and purposeful work for class, challenging all students to reach their full potential, using classroom technology well, and being available to provide extra assistance. Most days Ms. Taylor gets to school by 7:00am and can often be available after school as well. Please make an appointment with Ms. Taylor to get extra help as soon as you begin to struggle!

<u>Course Content</u>: Displaying and Describing univariate data, Describing bivariate data, Collecting data, Probability, Random variables, Sampling distributions, Confidence intervals, Hypothesis tests, Two sample procedures, Chi-square tests, Inference for the slope, Anova, and Nonparametic tests.

<u>Extra Content:</u> Prediction and Inference for Multiple Linear Regression & Prediction and Inference for Logistic Regression.