

Welcome to AP Statistics! I want to start by saying I am very excited that you are taking this course, and I am looking forward to getting to know each and every one of you. Many students find this class to be challenging, but fun and totally different from other math classes. You will learn how statisticians collect data, how to analyze data in context and a lot more about probability and inference. You will use your algebra skills to perform statistical calculations and analysis and then use your verbal skills to write descriptive paragraphs explaining your analyses and conclusions. We will spend a lot of time preparing for the AP exam, and you will be taking the exam on the first two full weeks of May 2022. You also will learn a lot about the world around you, looking at data and analyzing data about health, science, politics, sports, and many other topics.

Prerequisite: Success in Algebra 1 EOC, Geometry EOC, and Algebra 2. Students should have a good reading and writing skills.

Below are the list of resources and supplies needed as well as and directions for the summer assignment. The purpose of this assignment is to get us off to a strong start and will focus on some foundational and pre-requisite skills required to be successful in this course. Taking the time to complete the assignment will ensure that we have sufficient time to cover all of the material in the course and ample time to review for the AP exam. The assignment is due on the first day of school, Tuesday August 10, 2021. It will count as your first quiz. Please read the directions carefully and contact me by email at michael.doustani@hcps.net if you have any questions or concerns. Don't procrastinate until the last days before school starts to begin this assignment! I recommend that you begin about halfway through the summer and then work on it a few hours a week so the material will be fresh in your mind when school starts. Have a wonderful summer!

Resources/supplies needed for AP Statistics:

Textbook: The Practice of Statistics (Starnes, Yates, Moore, Updated 6th Ed.) This new textbook is aligned to the new AP Statistics curriculum and the sample problems and activities will prepare you well for the AP Statistics exam.

- 2" 3-Ring binder with dividers (need 5 dividers)
- Loose leaf notebook paper
- Notecards to make flashcards throughout the year (Electronic card is acceptable)
- Pencils with erasers
- Pens
- Highlighters
- TI-84, TI-84 PLUS, TI-84 Plus Silver, TI-84 Plus C Silver, TI-89, TI-89 Titanium, and TI-Nspire. (**TI-84 is recommended**)
- Recommended: Barron's AP Statistics newest Edition.

****Please have your materials and calculator with you on the first day of school. Having your materials on the first day of school will set you up for success.**

What You Can Expect:

- Facilitating/ teaching
- Student learning tasks (group & individual tasks that will reveal statistical relationships)
- Daily homework (Reading, activities, and problems to work)
- Quizzes that will provide feedback on what you need to work on before the test.
- Tests, which include all of the material in the unit.
- To learn how to study. You will not receive a review sheet for assessments.
- Reading, both in the textbook and in problem situations.
- Showing all your work. I will role-model the expectations when working problems in class.

- Explaining in words and full sentences.
- Learning will start on the first day of school.

Ways to Succeed in this Class:

- Be in class every day.
- Take notes every day and keep them organized by date in your binder.
- Fully completed homework every day, putting forth your best effort following process. Check your solutions. Ask questions regarding your homework from your group then from me during extra help.
- Read all of your notes and/or homework from the current unit every day. In other words, study every day and not just the night before the assessment. Ask for clarification, as needed, well in advance of the test.
- Get help when you are confused by asking questions during class via messaging, or attending after school ELP sessions.
- Quiz yourself using the Barron's flashcards to study for all tests.
- Bring your textbook with you.

Summer Assignment:

Use <http://stattrek.com/Help/Glossary.aspx> to define the terms below. You will have to click the drop down menu to locate each word. Create electronic or regular flashcards for the terms.

Unit 1 Vocabulary	
1. Individuals	26. Shape (mode)
2. Variable	27. Outlier
3. Categorical variable	28. Center
4. Quantitative variable	29. Spread (range)
5. Discrete variable	30. Symmetric
6. Continuous variable	31. Symmetric distribution
7. census	32. Skewed distribution
8. Distribution	33. Unimodal
9. inference	34. Bimodal
10. Frequency table	35. Multimodal
11. Relative frequency table	36. Mosaic plot
12. Round off error	37. Parameter
13. Pie chart	38. Stem plot
14. Bar graph	39. Splitting stems
15. Two-way table	40. Back-to-back stem plot
16. Marginal distribution	41. Mean
17. Conditional distribution	42. Median
18. Segmented bar graph	43. Resistant
19. Side-by-side bar graph	44. Range
20. Association	45. Interquartile range (IQR)
21. Dot plot	46. Five-number summary
22. Histogram	47. Boxplot
23. Quartiles	48. Standard deviation
24. First quartile Q1	49. Variance
25. Third quartile Q3	