



CHS PRIDE

Problem Solvers • **R**esponsible Citizens • **I**nclusive Leaders • **D**edicated Learners • **E**ffective Communicators

AP STATISTICS

Mr. Briones

Course Description:

The purpose of AP 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: Describing patterns and departures from patterns
2. Sampling and Experimentation: Planning and conducting a study
3. Anticipating Patterns: Exploring random phenomena using probability and simulation
4. Statistical Inference: Estimating population parameters and testing hypotheses

Applications from many realistic contexts such as business, management and economics, the social and physical sciences, healthcare, education, engineering and leisure activities will be examined throughout the text. Students will use realistic data that they have either collected or found using surveys or laboratory investigations and then analyze it for class assignments and projects. Technology is used daily and will enhance the depth of particular topics and lessen the drudgery of hand calculations. Major topics include descriptive statistics, probability and probability distributions, hypothesis testing, correlation and regression analyses, and contingency tables as outlined by the College Board of Advanced Placement.

This course will cover the content of both descriptive and inferential statistics, the curriculum that is typically in two terms of introductory college level statistics. Although the mathematics of statistics is not incredibly difficult (prerequisite is Advanced Algebra), the challenge comes in the written interpretation and communication of the data. **Reading and writing are key elements to success in this course.**

Homework must be done, on a regular basis, if you are to gain anything from the course. This is not your typical math class. **This is a rigorous class** and there will be a considerable amount of writing required. In statistics, one looks for clear, complete, and concise answers in context. In other words, short, sweet, and to the point!

Important components of the course will include the use of **technology**, projects and laboratories, cooperative group problem-solving, **and writing and presentation**, as a part of concept-oriented instruction and oral and written assessment.

Students should have their own **TI-83/TI-84 or TI-84+**, learn its features and how to interpret its output. ***(there are a variety of types but you will be responsible in making sure that you know how your calculator's statistical functions work)***

Students must know other technological tools including, MS Excel and PowerPoint and may require students to use the software outside of class time.

Students will become proficient not only in the computational capabilities of technology, but, more importantly, they will demonstrate how to fully interpret and understand the output from different forms of output from different devices.

The textbook is an excellent resource, and students will be expected to read through each chapter thoroughly as we progress through the semester. Normally, students are expected to have each chapter read with notes taken on important concepts, main ideas, definitions and terms ***before the day*** that we will formally talk about the chapter in class so that we can devote our time to discussion, investigations, and activities with less time lecturing.

- Materials:**
- 1) Textbook: *Stats: Modeling the World*, 3rd edition, Bock, David; Velleman, Paul; De Veaux, Richard
 - 2) One "three-ring binder" with 5 dividers. (You are required to maintain a neat, organized, and legible binder. Your binder needs to contain the syllabus, starters, dated class notes, handouts, homework, and quizzes/tests. Binders will be collected and checked periodically.)
 - 3) Pencils (preferably mechanical) with good quality erasers, lined papers (both graphing paper and loose-leaf binder paper will be needed), and red pens (for corrections). **STRICTLY NO PENS!**
 - 4) Recommended calculator: TI-83, TI-84, or TI-84 Plus.
 - 5) Class Website: www.mathbriones.weebly.com



Classroom Guidelines/Procedures:

1. Obey all school and classroom rules and procedures. School handbook consequences will be enforced. Participation points will be given to those who are following procedures.
2. Be respectful to those around you. Treat others the same way you want to be treated. Have a friendly behavior at all times. Inappropriate conduct or language in the classroom will not be tolerated. This includes abusive, offensive, insulting, name-calling, teasing, profane or demeaning language, not following instruction/direction the first time it's given, etc.
3. Enter room quietly, prepare homework to be corrected, and begin work that is on the overhead or board. You are expected to have your binder open and all needed materials on your desk. You should also have any due assignments for that class meeting on your desk (*i.e.* homework, projects, etc.). If the class is correcting homework, have your book or homework materials on your desk along with your **CORRECTING PEN (RED or any cool color!)**.
4. Be on time. When door closes, you will be tardy.
5. Be seated, be quiet, and work once you enter the classroom.
6. Come to class prepared—bring your textbook, notebook, papers, mechanical pencil (no sharpening of pencils in class due to my allergies), good quality eraser, completed assignments, and other supplies/equipment as assigned to class every day.
7. Eating, drinking (except bottled water with cap), and chewing gums are **NOT** allowed in the classroom.
8. No personal grooming in class—do that in the rest room.
9. Keep your desk, textbook and other school property clean at all times. You'll be assigned your desk and it is your responsibility to keep it clean (including thrash within your area).
10. I'm not a psychologist who can deal with your behavior issues, so please do behave properly.
11. Follow adults' direction the first time without complaining.
12. As you enter the classroom in an orderly manner, check the board/screen for starter. Immediately begin this assignment as soon as you are seated in your assigned seat. If you had homework the previous night, have it out and ready to check.
13. Please raise your hand and sit quietly to ask/answer a question, to comment, or to get permission to leave your desk. Do not blurt out answers or questions.
14. I will dismiss you at the end of class, not the bell so please do not line up at the door!

General Comments:

- You are expected to bring your **textbook, 3-ring binder, and a statistics friendly calculator (TI 83, TI-84, or TI-84+ are the best)**. We will do a lot of in-class reading and working together and will discuss the various types of questions using data from the text so your book needs to be in class with you as well!
- All electronic devices such as cell phones, ipads, ipods, mp3, etc. must be in non-audio form and **OUT OF SIGHT**, while you are in this classroom. Otherwise, they will be confiscated.
- Your conduct in this classroom is expected to be respectful of other students and the teacher at all times. Disruptive behavior will result in removal from the class.
- **COME TO CLASS – EVERY class! Late work will not be accepted** unless your absence is excused.
- **DO READINGS AND HOMEWORK AS ASSIGNED**. It is expected you will be prepared for each class. You will not understand the material unless you study your notes and read the book.
- Please make every effort to organize your materials and establish good study habits early.
- **WORK HARD**. It is not enough to read the chapter. You must take notes from the assigned lessons and try to LEARN before coming to class. Once in class, it is not enough to just sit there (fooling around or socializing!!). Pay attention, take notes, and ask questions. It is strongly recommended

that you review your notes daily. For some material you may need to study it more than once for it to really sink in. Much of the information we will encounter in AP Statistics amounts to educated common sense. While some of the material will seem easy, it is important that you develop a study habit to assist you when the material becomes more difficult. **READ YOUR TEXT** each night and work the handful of problems that are assigned. Keep your homework neat and organized for grading and for your review—the practice is not meant to be busy work or a means to a grade, it is there to help you learn the lessons! Do not put off your problems until they are due as you will get overwhelmed trying to catch up. **ASK QUESTIONS** and be an active participant in class... we need to work together to be successful— AP Statistics is not a spectator sport!

- Many students with histrionic abilities come to me at the end of the semester telling me that they need the class to graduate, that this is their last class, that they need a good grade in order to keep or get a scholarship, blah blah blah... **Please don't bother me with this!** Every student will pass the class just like every other student: ***through hard work and through passing the exams.***
- **ACADEMIC INTEGRITY.** It is expected that all the materials submitted for this course are the actual work of the individual whose name appears on the materials. Violations of this policy include but are not limited to cheating (*receive or provide information during a test; receive or provide information on tests during an earlier period; use unauthorized material on tests*), plagiarism, copying answers and passing off as your own work, allowing other students to use your work, **storing notes on a calculator**, any communication with another person other than the teacher during an individual test or quiz. If you are caught participating in an act of academic dishonesty/cheating, you will receive an **F** in the course and you will be subjected to disciplinary action.

Course Requirements:

- 1) Homework will be assigned each day. It is due the next class period. **No late homework will be accepted**, but if you insist, I'll accept it but don't expect to receive any credit.
- 2) If you are absent, it is your responsibility to obtain assignments both in class and homework from the Homework Log. I will not accept make-up work for unexcused absences. All submitted assignments, tests, quizzes, etc. should be properly labeled (title, page numbers & problem numbers, name, period, and date).
- 3) Quizzes are given regularly so always be prepared. Long tests will be announced several days in advance. If you are absent the day of the test, you must make up the test the first day you're back. If your absence is unexcused, you will **NOT** be able to make up the test. If you are absent the day before the test, you will still be expected to take the test. Students will be allowed to use their **FORMULAS** and **TABLE** sheets and their calculators on their tests and final exam.
- 4) Projects are a significant part of the course. Students complete a project for most units outlined by the course textbook. Course projects are in the form of formal writing assignments with technical adequacy. The main purpose of the projects is for students to gain experience in creating and developing statistical studies in order to make connections between design and results of an experiment. Students will design surveys and experiments, gather and analyze data numerically and graphically, and apply inferential statistics to draw conclusions for a population. Students must present their data in a professional manner, utilizing appropriate statistical language, analyzing the sources of error in their study, and properly demonstrating and conveying the results of the activity or experiment in a presentation- formal writing assessment and/or presentation.
- 5) Students will complete a final culminating project after the AP Examination. The purpose of this project is to give the students the opportunity to demonstrate their understanding of statistics by formulating a question, designing a study or experiment, collecting and analyzing data, and performing appropriate inferential procedures to answer the original question.

TARDY Policy

- ☑ If you're not seated in your assigned seat when the bell rings, then you are tardy.
- ☑ Automatic 5-minute detention **AFTER CLASS** and additional minute/s thereafter
- ☑ 1st tardy: at least 5-minute detention
- ☑ 2nd tardy: 10-minute detention
- ☑ 3rd tardy: 15-minute detention
- ☑ And so on... (Fighting through the door, entering inappropriately, being disrespectful or arguing with me = automatic 30-minute to 1-hr detention depending on situation)
- ☑ 4th tardy: Referral
- ☑ Students tardy to class do not have the option to make-up the Starter for that day

Make-Up Work Policy

- ☑ The student has 2 days upon return to turn in completed make-up work. The assignment for the make-up work may be found on the HW Log. In addition, the student should check with the teacher to schedule any missed classwork, quizzes, tests, inquire about additional projects or information that may have been given, and copy the missed notes. I will only discuss make-up work **OUTSIDE** of regular class time (i.e. brunch, lunch or before/after school).
- ☑ No make-up quiz or test will be allowed when the quiz or test had been handed back to students.
- ☑ If a student does not show up on a schedule makeup test/quiz, he/she will automatically get a **ZERO**.

Academic Integrity

- ☑ Plagiarism, copying answers and passing off as your own work, allowing other students to use your work, receiving or providing any information during a test, providing test questions and answers to students from other periods, storing notes on a calculator, any communication with another person other than the teacher during an individual test or quiz.
- ☑ **Cheating** is considered a top offense in my class. Cheating will result in a grade of **ZERO** for all participants, a referral, and may prevent a student from passing the class. **NOTE** Communication of any kind during a quiz or a test will be considered cheating—**NO EXCEPTIONS!!!** I will also enforce our school's "Guidelines for Student Behavior."

Grading Policy

- ☑ 80%: Tests, Quizzes, Projects
- ☑ 20%: HW, CW, Participation, etc

Semester's Grade:

$$= 40\%(\text{1st Quarter's Grade}) + 40\%(\text{2nd Quarter's Grade}) + 20\%(\text{Final Exam})$$

90 - 100 = A

70 - 79 = C

59 - below = F

80 - 89 = B

60 - 69 = D

Homework, Class work, Test, or Quiz format

- Should be done **neatly** with the following parts:
 - 1) Name
 - 2) Date
 - 3) Period
 - 4) Assignment #
 - 5) Page
 - 6) Problem Numbers
 - 7) Original problem and solution with all steps shown
 - 8) **Circle** or **box** or **highlight** final answers.

HW Ch. 2
#1-25 odds, p. 17-18

Josh Moore
8/25/2014
Period __

- **Start all new assignments on a clean sheet of binder paper.**

REMINDERS:

- Instructional Period: 7:10 a.m. – 3:10 p.m.
- Electronic devices are **NOT** to be used in class during the instructional period, otherwise, they will be confiscated.

~~----- PLEASE SIGN AND TURN THIS IN -----~~

I have read the classroom rules, expectations, and procedures and I wish to be a positive influence in AP Statistics' class by faithfully following every rule, every single day. I am aware that if I cannot behave myself so that everyone can learn, I will be referred to the office immediately for disciplinary action.

Student's Name (**PRINT**): _____ Period: _____

Student's Signature: _____ Date: _____

E-mail: _____

I agree to hold my child accountable for his/her actions in AP Statistics' class and to support any consequences assigned by the teacher or an administrator.

Parent's/Guardian's Name (**PRINT**): _____

Signature: _____

E-mail: _____

Home phone: _____ Cellphone: _____

Work phone: _____