



BOSTON LATIN SCHOOL

Department of Mathematics

2010-2011

COURSE AP Statistics

TEACHER Mr. Simoneau
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Online Gradebook: www.jupitergrades.com

CLASSROOM 206

DESCRIPTION

This course seeks to give superior students a through presentation of a freshman college course in Statistics. Students should have an honor grade in Pre-Calculus and excellent study skills for the rigors of this college course. The scope of this course is similar to the regular statistics course (see below) but will cover topics in greater depth in accordance with College Board specifications. All Advanced Placement students are required to take the Advanced Placement Examination in May. A graphing calculator is required for the course and the AP exam.

The purpose of the Statistics course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. At the conclusion of this course, students will be able to: Construct and interpret graphical displays of distributions of univariate data (dotplot, stemplot, histogram, cumulative frequency plot); summarize and compare distributions of univariate data; explore bivariate and categorical data; review methods of data collection; plan and conduct surveys with sampling methods; plan and conduct experiments; generalize conclusions drawn from observational studies; experiments and surveys; interpret probability; apply the addition rule, multiplication rule, conditional probability, and independence; compute and interpret the mean and standard deviation of a random variable, and linear transformation of a random variable; combine independent random variables; study properties of the normal distribution; use the normal distribution as a model for measurements; review sampling distributions; estimating population parameters and margins of error; understand the meaning of confidence levels and intervals, and apply properties of confidence intervals; understand the logic of significance testing, null and alternative hypotheses, p-values, one- and two-sided tests for a mean and a difference between 2 means; Chi-Square test for goodness of fit; and test for the slope of a least-squares regression line

READING SYLLABUS

(Homework/Studying/In-Class) The Practice of Statistics (2nd Edition) – Yates, Moore, Starnes
(In-Class Packets) Workshop Statistics – Discovery With Data – Rossman
(In-Class) Activities and Projects for Introductory Statistics – Millard & Turner

GRADING

This class will be graded on a point scale system. Each graded assessment will have an assigned point value. Typical assignments for each term will include tests, quizzes, projects, class work/class participation, and homework. At the end of each term, all points earned are totaled and divided by the total number of possible points. There is no set number of tests/quizzes per term; it all depends on how much text is covered.

Final Grade: 1st term 20 %, 2nd term 20 %, 3rd term 30 %, 4th term 30 %

HOMEWORK

Homework assignments are given to help students learn the material in the class and to develop good reasoning and problems solving skills. The expectation is that students will do each night's assigned homework.

If a student completes all homework assignments then 2 percentage points will be added to his or her term average.

If a student completes all but two or fewer homework assignments then the term average is unaffected.

If a student misses more than two homework assignments in a term then he or she will lose 1 percentage point from the term average for each assignment missed.

*** Repeatedly failing to complete homework assignments may result in mandatory study sessions after school.

CONDUCT

Students will be expected to follow the following class rules:

1. Respect for all
2. Come to class on time
3. Come to class prepared with notebook, handouts, calculator, and pen/pencil.

4. Be attentive at all times (no putting your head down)
5. No talking while the teacher is talking
6. No electronic devices – such devices will be confiscated and turned into the office.
7. Work hard – stay on task

STYLE

My class will implement the following teaching recommendations emphasized in the AP Statistics Course Description:

The AP Statistics course lends itself naturally to a mode of teaching that engages students in constructing their own knowledge. For example, students working individually or in small groups can plan and perform data collection and analyses where the teacher serves in the role of a consultant, rather than a director. This approach gives students ample opportunity to think through problems, make decisions and share questions and conclusions with other students as well as with the teacher.

Important components of the course should include the use of technology, projects and laboratories, cooperative group problem-solving, and writing, as a part of concept-oriented instruction and assessment. This approach to teaching AP Statistics will allow students to build interdisciplinary connections with other subjects and with their world outside school.

CLASS WEBSITE & ONLINE GRADEBOOK

I encourage all students and parents to visit my class website at www.bls-stats.org and online gradebook at www.jupitergrades.com for up-to-date class and student grades. (Parental passwords for each student will be sent home this week)

TO RECEIVE A PASSING GRADE FOR AP STATISTICS

As an AP class, it is my expectation that all of my students will work diligently to pass the AP Statistics exam in March by consistently working hard throughout the year. To ensure that each student remains committed to passing the AP exam in March, each student must satisfy the following two requirements:

- 1) All work considered relevant to passing the AP exam must be completed in a manner expected of AP students by Friday, May 11th. A list of all missing assignments, or assignments deemed unacceptable, will be provided mid-April to every student.
- 2) A passing score (3 or greater) must be earned on a practice AP Exam to be given the week of April 23rd. During this exam, a student may use his or her personal study guide notebook for the duration of the exam. For those who fail to pass the first exam, a second exam will be given; however, no personal study guide will be allowed for the duration of the exam.

OFFICE HOURS

It is my expectation that all students will excel in my class. With that said, I will do everything possible to help my students. If a student needs help, they are encouraged to speak to me. Upon request, I am available before school, during R5, or after school from 2:15 to 2:45 (Mon – Thurs).

Students and Parents:

Please read the above information together, and indicate by your signatures on the reverse of the color copy of this syllabus that you understand the purpose, format, and expectations of this course. Please return the color copy to me and keep the white copy for your own reference. Please feel free to see, call, or e-mail me with any questions or problems you might have.

Student:

I have read and I understand the course description and classroom expectations for AP Statistics.

Student signature _____ Date _____

Student e-mail _____

Parent:

I have reviewed the course description and classroom expectations for AP Statistics with my son or daughter.

Parent signature _____ Date _____

Parent e-mail _____

Parent phone/s _____