

AP STATISTICS SYLLABUS

Credits: 1

Prerequisites: Algebra 1, Geometry, Algebra 2

Instructor: Bridget Matamoros
School #: (940) 369-1077
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Room #: D109

Conference Period: Fifth Block 3:10 – 4:10pm
Tutorials*: Wed 4:15 – 5:30pm; Tues 8:15 – 8:45am
Or by appointment if conflicts arise
*Additional times are added for test retakes

Course Description: Statistics is the science of collecting, analyzing, and interpreting data. A statistic is a numerical measurement describing some characteristic of a sample. There are two parts to this Statistics class: Descriptive Statistics and Inferential Statistics. Descriptive Statistics focuses on methods of organizing, displaying, and describing data using tables, graphs, and summary measures. Inferential Statistics uses the collected data to make generalizations about an entire group and measures how confident we are that these generalizations are correct.

Dual Credit: This course is offered as dual credit through TWU. Registration occurs in the Spring, but you must pass the TSI test at TWU (or be exempt with minimum ACT/SAT score requirements) in order to be eligible. It is recommended to complete this during the Fall so you do not miss the registration deadline in January.

Textbook: *Stats: Modeling the World*, by David E. Bock, Paul F. Velleman, Richard De Veaux – 2nd Ed.

Curriculum Outline by Topics (not necessarily all sections in textbook):

1st Semester:

Gathering Data
Surveys, Experiments & Observational Studies
Exploring, Understanding, & Representing Data
Exploring the Relationships Between Variables

2nd Semester:

Randomness, Probability, & Simulations
Confidence Intervals for Proportions and Means
Hypothesis Testing for Proportions and Means
Hypothesis Testing for Categorical and Bivariate Data

Important Dates

AP Statistics Study Sessions (tentative): TBD in April and May based on students' preferences

2017 AP Practice Exam: Tuesday, April 18, 5-8pm

2017 AP Statistics Exam: Thursday, May 11, 12:00pm

Required Supplies: pencils with erasers; colored pens; graph paper notebook (either spiral or composition notebook); highlighters; 3 x 5 index cards

Recommended Supplies: a 3-ring binder for handouts/notes (which you will get plenty of); calculator*

*It is strongly recommended that each student obtain his/her own calculator to use throughout their high school career. The AP Statistics curriculum and textbook make extensive use of graphing calculators. The TI-84 plus will be used in class and is available for use, but may not be checked out or taken home.

Grading guidelines:

Major – Tests/Projects: 70%

Minor – Quizzes/AP Sets/Investigations: 30%

Homework: The purpose of homework is to practice the material in order for the brain to store it in long term memory, therefore you will be expected to complete homework each day it is assigned. Homework assignments are not meant to be burdensome and usually only consist of about 5 problems with the solutions to 3 of those posted online. **The remaining 2 HW problems will be checked at the door each day and recorded.**

Quizzes: Be prepared for a quiz every day. There *might not* be a quiz, but you should anticipate having to show me you know and understand what was addressed the day before. Quizzes are usually short and only consist of 2-3 problems depending on the content.

AP Sets: These are assignments that serve as practice for the AP exam in May. You will have at least a week to complete the problems which are then due on the test day for that unit. You may use your notes, textbook, or other students for assistance. Think of AP Sets as “take home quizzes.”

Investigations: These are in-class versions of AP Sets where you will work with an assigned group to complete an investigative task (a longer multi-part problem). Think of these as “group quizzes.”

Make-up Work policy: The following is taken directly from the Student Handbook:

1. "The student will have one more class day than the number of class days missed to turn in make-up work. Make-up work should be completed in the order it was assigned."
2. "If a test was assigned and material covered before the absence, then the test must be taken on the first class day the student returns. The same procedure applies for book reports and other major projects."
3. "Students are responsible for making arrangements for all make-up work when they return to school. **This should be done at a convenient time for the teacher and not during instruction time.**"
 - If you miss class, check the calendar in my classroom or on my website for assignments. Also check the handout crate for any papers/notes that were given.

Fall Semester Exam: Everyone must take the Fall semester exam – there are no exemptions.

Spring Semester Exam: In order to exempt the Spring semester exam there are three requirements:

- 1) You must have an A average for each of the first three quarter grades.
- 2) You must not have missed more than 5 HW's during the year.
- 3) You must take the AP Exam.

Responsibilities of the Instructor:

- You can expect me to be on time and prepared for class. In the case of a substitute, detailed plans will be arranged to give you the opportunity to continue learning without interruption.
- You can expect me to be honest about any mistakes that I make and to correct them as soon as I am made aware of them. Feel free to point them out to me.
- You can expect fair and equal access to the material that I will present in this class. I will not allow the irresponsibility and disrespect of some to ruin the educational privileges of the class.
- You can expect your tests to be graded and returned in a reasonable amount of time.
- You can expect me to ignore my silenced cell phone for the duration of class.

Responsibilities of the Student:

- You are expected to read and abide by this syllabus and the student handbook and will be held accountable for all information contained in them.
- You are expected to come to class **on time** prepared with all materials needed and all assignments completed.
- You are expected to take notes over the material in this class and to read assignments carefully. In the case of absence, it is **YOUR** responsibility to obtain any handouts and assignments missed and to complete them in a timely manner. (See homework and make-up policy)
- You are expected to seek help in class by asking questions when you do not understand a topic. If further understanding is needed, you are expected to seek help through tutoring. If no attempt is made, I will have no sympathy and no choice but to give you the grade you deserve.
- **You are expected to ignore your silenced cell phone for the duration of class.** Putting it on vibrate does not count as silent. I WILL take up cell phones that become a distraction, even from the entire class if necessary. Texting while driving is deadly. Statistics uses more brain power than driving. Therefore, texting while doing Statistics is deadly.

Discipline:

Any action that is disrespectful, intentionally distracts other students from learning, or violates the student code of conduct, will warrant consequences. You are (or almost are) a young adult about to enter college and it is expected that you act like one.

Final Note: This is not an easy class. It is a college level class so give it the attention it deserves and you will reap the benefits. Taking statistics now in high school is probably the best thing you can do to prepare for college since it is required of almost every major. Every student who has taken my class and repeated statistics in college has made a B or better with most getting A's and boosting their GPA. **Anything worth achieving is never easy.** So take care of business.