AP STATISTICS
COURSE OVERVIEW

Mr. Brian Murphy
bmurphy@siprep.org

2024 – 2025
6705

(415) 731–7500 ext.

Struggle is a feature of education, not a bug.

The moment the unbelievable happens, it becomes ordinary

Don't let the fear of looking stupid hold you back

Pay attention to your learning today. The grade will take care of itself.

My Schedule								
8 am	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**Until 4 pm**
Office Hours by appt	PreCalc Acc Room V7		PreCalc Acc Room V7	AP Statistics Room V4			PreCalc Acc Room V7	Office Hours by appt

Time: Period 4

Textbook: Readable Statistics; *Maychrowitz & Murphy*

Office Hours: 8 - 8:55 am and 3-4 pm by appointment.

Course Description: The AP Statistics course is equivalent to a one-semester, introductory, non-calculus- based college course in statistics. This course introduces 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, and
(4) Statistical Inference: estimating population parameters and testing hypotheses.

Students use technology, investigations, problem solving, and writing as they build conceptual understanding.

Screencasts

Screencasts are designed to ***introduce*** topics outside of class in order to allow more efficient use of class time. Please note that they are not intended to take the place of in class discussion of new content but rather to offer a pre-class introduction to what will be discussed. Some screencasts will include online quizzes that will be part of the unit homework assignment.

Screencast solutions are designed to walk you through the problem solving process on specific problems in order to help you further develop your own problem solving skills.

Class Expectations

- Problem solving in class is like piloting a flight simulator. You can learn from mistakes without consequences.
- Failure does not have to be a permanent condition.
- If you don't know or remember something, look it up (except on an assessment of course). Use the resources you have such as iPads, books, notes, classmates, etc.
- Self-Advocate - Do not be afraid to ask questions! You might be surprised how many of your classmates might also be struggling with the same content.
- Be cooperative with not only the teacher but with each other. A positive learning environment depends upon everyone. This means respect each other's feelings, physical space, and property.
- When working in groups, maintain your "table voices".
- The question "Will this be on the test?" will only be answered during the last five minutes of any class period.

Course Preparation and Participation: Each member of this class is a professional student. As such, everyone is expected to be fully prepared for—and ready to participate in—class every day. Students are expected to bring all of the following materials to class each day:

- *iPad with stylus or 3-Ring Binder or notebook*
- *Pencil & Paper (sometimes your devices will have to be put away)*
- *Graphing Calculator*

Work Expectations

- Plan to work on this class while in this class
- Students must be able to complete assignments on their own, and there will be times when the student is expected to read and understand material independently.
- While this class will have assigned homework, it will usually involve finishing assignments started in class.
- Written homework must show work and be legible.
- Online work includes assigned screencasts (10 minutes or less) followed by formative quizzes both from class and AP Classroom.

- Students will be given access to AP Classroom once the College Board makes it available.

Calculators: We will be using a TI-84 (or TI-83) calculator throughout the year. Other College Board approved calculators are ok as well but if it's not one I'm familiar with, you will be on your own with usage issues. The Desmos app for your iPad would be helpful to have though not required. You need to have access to at least one of these technologies in class every day.

Preparation: Students must be prepared for class. This means that all required materials are on hand, homework is thoroughly completed, and the student is prepared to present his or her work as well as ask thoughtful questions that demonstrate his or her understanding of the material.

Participation: Students are expected to participate in class in a positive manner on a daily basis by answering classmates' questions sensitively and constructively, by volunteering their own relevant questions, by skillfully presenting solutions to the class, and by using assignments to sharpen written presentation skills.

iPad Usage: Distraction resulting from mobile devices happens to all ages (not just teenagers). This does not mean that disraction must be considered inevitable. **All iPads are to be set to Do Not Disturb at the beginning of class.** Non-academic use of iPads is not allowed. On first offense, the iPad will be confiscated for the duration of the period. Repeated offenses on this policy will be referred to the Dean's Office.

Apple Classroom: At times, it will be necessary for class efficiency for everyone to navigate to the same page or to be using the same app for a particular unit of study. In order to accomplish this, students are expected to sign into Apple Classroom at the beginning of the year. If technical issues cause your device to sign out or not be able to join, see me outside of class to discuss next steps.

Airpods: Airpods are not to be used during class time without express permission from the teacher

Cell phones: You are all familiar with and expected to follow the school cell phone and watch (we have a clock in the room and so does your iPad ☐) policy. Failure to adhere to this policy will result in phone confiscation for the duration of the school day.

Food: Eating in class is allowed within reason. Students may not use class time to obtain or heat food. Students must clean up after themselves. Failure to comply by the food allowances may result in food being prohibited for the offending student(s) and/or the entire class.

AI Usage Policy: Use of AI tools in this course is encouraged (keep reading) as a starting point for further exploration and analysis, engaging in discussions with peers and teachers to deepen understanding. More specific limits per assignment will be given by the teacher. It's imperative that all work submitted should be your own. The information derived from these tools is based on previously published materials. Therefore, using these tools without proper citation constitutes plagiarism. Any assignment for which the solutions are found to have been plagiarized or to have used unauthorized AI tools may be reported for academic misconduct. If you are not sure whether your use of AI with an assignment exceeds the limits outlined here, ask the instructor. As you discern your AI usage, keep in mind the following:

- Because AI uses large language models merely to summarize (however eloquently) data that can be found on the internet, information derived from these tools, like any information found on the internet, is often inaccurate or incomplete.

- While apps like Photomath and websites like Wolfram Alpha are very useful in helping you with problems, you should not use them to do work for you - using them to help you understand a problem is appropriate, having them solve problems on tests or quizzes is cheating.

- In addition, ChatGPT is quite bad at math and will often give incorrect or incomplete responses, and it will often "double down" on mistakes it has made and try to convince you it is correct when it isn't.

Cheating is a betrayal of the student-teacher relationship and will be dealt with harshly. While I expect and encourage you to collaborate (to collaborate is not to copy!) on problem sets, projects and investigations unless I tell you otherwise, ANY sharing of information either about or during quizzes or tests will not be tolerated. This includes but is not limited to using a graphing calculator to store inappropriate information or discussing the contents of a quiz with students in another class. Honor and integrity are expected. **This policy is still in place while we are in a virtual learning environment. See Page 12 of Student Handbook: Academic Integrity and the Pursuit of Academic Excellence**

Student Absences: Students should be prepared to make up missed quizzes or tests on the day of return to school. Make-up exams are given normally during office hours or at a resource period. It is the ***student's responsibility*** to ensure that all make-up work is completed in a timely manner. *The number of days allowed for make-up work will equal the number of days missed*. Students must submit all missed work/tests due to being on retreat within one week of their return to class. If you know you are going to miss a class meeting (retreat, athletic event, field trip, etc.), please make arrangements to take any quizzes or tests ***before*** you miss class

Grading

Category	Fall	Spring
Classwork & Homework	15%	10%
Quizzes	30%	20%
Tests	40%	35%
Final Exam	15%	15%
AP Packets	0%	15%

93.5 – 100% A	72.5 – 76.4% C
89.5 – 93.4% A–	69.5 – 72.4% C–
86.5 – 89.4% B+	66.5 – 69.4% D+
82.5 – 86.4% B	62.5 – 66.4% D
79.5 – 82.4% B–	59.5 – 62.4% D–
76.5 – 79.4% C+	00.0 – 59% F

Semester Grade: The course grade will be determined by counting assignment (homework) scores, quiz scores, test scores, and your final score, with the following weight factors. We will use the following grading scale:

Course Expectations and Policies

Students are expected to adhere to the Four P's in addition to the code of conduct outlined in the student handbook.

- **PROMPT**: Students should arrive to class on time and be seated and ready to begin when the meeting is scheduled to begin.

- **PREPARED**: Students should come to class prepared with all necessary materials each day.
- **POLITE**: I respect you. You respect me. We respect each other. Be your best self each day.
- **PRODUCTIVE**: We are here to learn! Ask questions. Participate. Take ownership of your learning.

How is this course different than prior math courses?

- This course has a heavy focus on reading. Most problems are word problems.
- There is an even greater focus on explaining your reasoning. This includes computational reasoning and proof and written (verbal and often oral) explanation.
- Engaging in this course requires a commitment to learning—reading, writing, and analyzing
- While mathematics is involved, English, science, and social science (history, economics, politics, sociology) are significantly incorporated.
- Algebra and computation are minimized (although an understanding of linear equations and some knowledge of logarithms is expected). Thinking and analysis are maximized.
- This is a college course. It is rigorous and expectations are high.