#### Statistics Syllabus 2021 - 2022

Contact Information: Kara Campbell Phone: 623-455-7436 Room: F103 Email: <u>kcampbell@paradiseschools.org</u> Monday - Friday from 7:30 am - 4:30 pm Website: <u>mrscampbellsmathclass.weebly.com</u> Office Hours: By appointment Monday 3:00-3:30

#### Course Description:

This problem-based Statistics course engages students in design thinking, research, and collaborative problem solving as tools to investigate mathematical problems in their world. Students will learn how to use sampling techniques, probabilities, experimental design, hypothesis testing and summary statistics to predict, limit and describe outcomes and scenarios from their probable future careers.

#### Course Key Objectives:

- Examining Relationships-The students will evaluate the relationship between two variables through the creation and interpretation of numerical summaries and visual displays.
- Sampling Methods-The students will evaluate the sampling methods used in studies including the effect they have on conclusions that can be made.
- Designing Studies-The students will design and conduct observations studies, controlled experiments, and surveys to explore population characteristics.
- Determining Probability-The students will determine the probability of events using simulations, diagrams, and probability rules.
- Random Variables-The students will analyze probability distributions of discrete and continuous random variables to determine probabilities and solve expected value problems.
- Sampling Distributions-The students will use sampling distributions and the Central Limit Theorem to identify unusual samples and solve problems.
- Estimation-The students will estimate population parameters using point estimates, confidence intervals, and an understanding of the factors that influence the accuracy and precision of estimates.
- > Hypothesis Testing-The students will apply the logic and process of hypothesis testing to evaluate claims about populations.

#### Classroom Rules and Expectations:

I am so honored to be spending this year with you and for most of you, this will be your last year in high school. You are all in a senior level class now and should be mature enough to follow the rules and expectations and I look forward to having a classroom where students will follow the rules and expectations set forth. The most important rule is to respect and value yourself, your peers, education, your school environment and the diversity of the PHHS community. Next, I believe in grace. You are going to make mistakes. I am going to make mistakes and I ask that you give me the grace that will be given to you. Your contributions to the class are valuable and when the situation requires working cooperatively in group settings is expected.

- > Come into class and sit down and be prepared when the bell rings.
- > Please keep backpacks (with cell phones in them) at the back of class.
- > No eating or drinking in class, except for water.
- ➤ No restroom use during the first 10 minutes and last 10 minutes of class. You do not have to ask to use the restroom. Just make sure you sign out and back in using the QR code and take the hall pass.
- > Wait to be dismissed when the bell rings. Do not stand and crowd in front of the door.

### Absent Work Policy:

Per school policy, students will be permitted to complete make-up work regardless of the type of absence accrued. Teachers will inform the student of the length of time allowed to turn in work missed. Students are permitted one day to complete missed work for each absence.

# Late Work Policy:

The classroom will adhere to the PHHS student handbook's guidelines for late work. Please be sure to read and understand the Panther expectations in regards to timely work completion.

# Grading Scale:

Grades are determined by following a standard percentage breakdown as follows:

90-100% A (4.00) 80-89% B (3.00) 70-79% C (2.00) <69% Failing \*\* No credit shall be earned if a student fails to achieve 70% or higher. Formative AssessmentBell work/Class work/Worksheets/Just Checking25%The purposes of these assessments are used to measure mastery and may be corrected to earn up to half of the<br/>points originally missed on your first attempt.50%Summative Assessment<br/>CFA Weekly Quiz/CSA Unit Test60%The purpose of these assessments is to measure student performance at the end of a learning cycle. Unit Test,<br/>Midterms, and Finals are final scores and CANNOT be redone or corrected.15%

Supplies Required:

 Scientific Calculator – you really cannot do statistics without one. The best calculator is the TI-30. They come in different colors and can be found at Walmart and Target. (Cell phones will not be allowed to be used as calculators.



• 2 pocket folder

# Plagiarism:

All students must show their work. No work will be accepted if typed or copy and pasted into GoFormative. No work from Photomath will be accepted. You must take a picture of your work and upload it. Any student who compromises the academic integrity policy will automatically receive a zero, and parents and admiration will be notified immediately. For any questions on academic integrity please reference the Paradise Honors student handbook.

For additional questions please refer to the student handbook or contact Mrs. Campbell. This syllabus is subject to change during the school year.

Please complete and submit the Google form no later than Friday, August 6th. This will be the first assignment in Powerschool.