

Math 13 (Online) – Statistics – 40769  
Fall 2021

Instructor: Richard Kaeser  
School Email: [rkaeser@peralta.edu](mailto:rkaeser@peralta.edu)  
Office: D-217



## Statistics

### Class Meetings

- I highly recommend that all students check in with me via zoom at least once per week during the semester. There are no actual lecture class meetings.

### Instructor Communication and Office hours

Office Hours Online(via zoom):  
<https://cccconfer.zoom.us/j/7127161669>

Mon - Thur: 9a – 5p

School Email: [rkaeser@peralta.edu](mailto:rkaeser@peralta.edu)

I will be communicating with students regularly in multiple fashions such as through CANVAS email, Discussions, Announcements, and through comments on assignments.

## Welcome to Statistics!

Hi Everyone!

Welcome to Math 13, Introductory Statistics. I am very excited to help you on your educational journey in learning math this semester. It was always a struggle for me as a student learning math and I have many stories on why. But learning math can be fun and fulfilling if you give it a chance! ☺

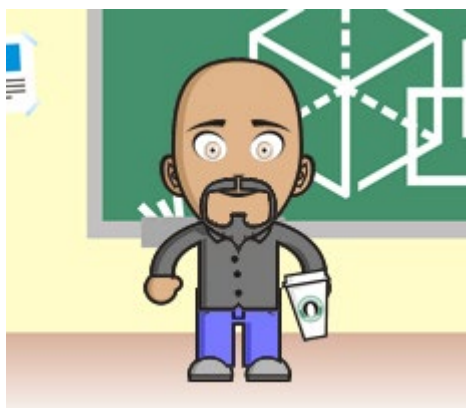
It is from my own learning experiences that I try to base my teaching style to be more helpful in guiding students so that it is not so much a struggle learning math, but more a fun and productive challenge.

This course is designed to introduce the student to the study of statistics and probability. Topics include descriptive statistics (organization of data, histograms, and measures of central tendency and spread), linear correlation and regression, design of experiments, introductory probability, random variables, the normal distribution and Student's t-distribution, and statistical inference, including confidence intervals and tests and significance. Use of a graphing calculator or computer for statistical analysis is required. CAN STAT 2, CSU, UC (credit limits may apply to UC-see counselor).

Math can be challenging, but with regular practice and hard work, everyone can be successful! ☺

Please feel free to drop by my zoom room or email me (preferably through CANVAS) if you need anything. ☺





## Discussions (75 points)

Since this is an online course, there is minimal contact with other students. But it is always recommended for students to discuss with their peers in any class. So to encourage this in an online setting, there will be discussions on each packet of notes of which you will get points for. Posting regularly can help students clear up many questions you may have and possibly help you have a deeper understanding of the math we are doing in the class, as well as getting to know some of your peers in the class. Remember, you are all in this together and it is okay (and highly recommended) to talk to each other and help each other out.

NOTE: Though I do tend to leave most of the discussions for students, I or our embedded tutor will be checking these discussions regularly to answer any unanswered or challenging questions.

## Statistics

### Student Learning Outcomes

- 1) Interpret measures of central tendency, variation, and position of data sets.
- 2) Compute and interpret probabilities using normal and t-distributions.
- 3) Analyze hypothesis tests

To get the most out of this class students will want to have:

Pencil, pen, & eraser  
Paper for Homework  
Binder for organizing handouts  
TI 83 or 84 Graphing Calculator (these can be checked out at the library as



## Video Reflections (75 points)

Throughout the class students will be expected to watch videos and take notes in Packets. Part of your homework will be to take notes by watching the videos on CANVAS. You can access these blank packets on CANVAS in the modules section.

***In order to receive points on taking notes and watching the videos, you will need to fill out a "video reflection" quiz on CANVAS.***

It is ***VERY*** important to watch videos and take notes before their corresponding due dates, since students will be posting discussion questions and answers.

***Note:*** The main purpose of the videos is to write ***ALL*** notes down. It is not expected to understand everything from the videos after watching them. So be sure to highlight and write down any questions you may have and post on the Discussions, ask a Tutor, or ask me. 😊



## Homework (300 points)

All assignments will be done through CANVAS. To access these assignments, you just need to log into CANVAS and click on the "modules" tab. All the assignments and their due dates are located here. To receive full credit, all you need to complete is 70% of each assignment. It is very important to be on top of the HW assignments, but it is also unrealistic to assume that students can complete all the HW by the due date. So you will be able to work on assignments after the due dates, but know that all assignments should at least be attempted by the due date. I would recommend trying to finish 50% by the actual due dates, then save the rest to practice before the final exam about a month before our final exam. Below is how I would suggest students to approach the HW.

### Homework suggestions:

- 1) As soon as you get notes, or even better, before you even take notes on the topic on a certain topic, make sure to read through the HW on that particular topic and attempt any that may seem pretty simple.
- 2) Before the checkpoint on that topic, go over the HW again and focus on the ones that you didn't get right. You can always do problems over whether you get them right or wrong.
- 3) When it is time to start studying for the final exam (about a month before), go over the HW again and try and finish any other problems up.

Doing the homework in this way will increase the likelihood that you will get the needed 70% or higher needed to get full credit. 😊

In order to be on track with class, make sure you are regularly/daily working on math. Students are expected to work on math outside of class two hours for every hour spent in class. Which means at least 10 hours of math outside of class.

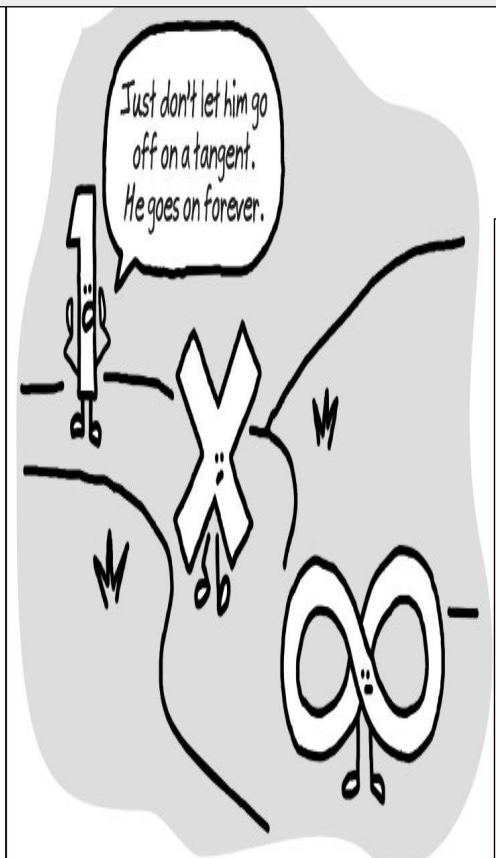
# HOLY SHIFT! LOOK AT THE ASYMPTOTE ON THAT MOTHER FUNCTION.

## DISABILITY SUPPORT SERVICES

As much as I love math and hope that students do too, I do understand that there are many anxieties surrounding the subject that can make it more difficult to learn. It is a real thing and we can accommodate to anyone who has this issue. Any student with a documented disability is encouraged to contact SAS as early in the semester as possible so that we may arrange reasonable accommodations. I am more than happy to show anyone where this is as well. Everyone at the SAS office is friendly and willing to help. As part of this process, please be in touch with SAS. SAS is located in D-117; their phone number is (510)748-2328.

<https://alameda.peralta.edu/student-service/dsps/>

[SAS.Alameda@peralta.edu](mailto:SAS.Alameda@peralta.edu)



wronghands1.wordpress.com

© John Atkinson, Wrong Hands

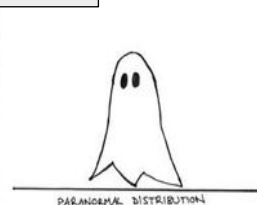
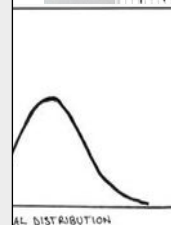
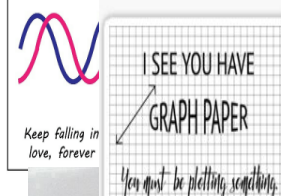


ALL YO  
 $y = \frac{1}{x}$   
 $x^2 + y^2 =$   
 $y = | -2x$   
 $x = -3|sin$

## TEXTBOOK

Introduction to Statistics  
<https://openstax.org/subjects/math>

**Note:** An actual book is not required for purchase, once you enroll in CANVAS, you automatically have access to all the necessary materials for the class. But you definitely are encouraged to use this resource as you need it. 😊



## Note on regularity

In order to succeed in any course, it is important to keep up with everything. Since this is an online class, it is easy to procrastinate and wait until the last minute to complete work. This can potentially create a very stressful situation in the class. So I highly recommend that students create a weekly schedule for doing the work, and by work I mean Video Notes, Online Homework, Video Reflections, Discussions, and time for preparing for each Checkpoint. Remember, it is estimated that students should spend about 8 (maybe more) hours per week on this class. Keeping a set schedule for yourself will highly improve chances for success in the class. 😊

## Checkpoints

In order to see where students are at during the semester, there will be 4 checkpoints. These checkpoints are great learning points in the class. This is where you can learn how well you know certain topics in the class at a certain point. I will post solutions on CANVAS for each of these checkpoints.

With these checkpoints, do not think you need to get everything correct. I expect mistakes, students learn by making mistakes and reflecting on those mistakes. Please see the Self Grade and Reflections for Checkpoint rubric to see how to interpret results.

Checkpoints will be given about every three weeks. Please note that dates may change, but I will let you know ahead of time if they do.


Make-ups for Checkpoints are very unlikely, and are at my discretion.

Since this course is fully online, there are a few options and requirements for taking each checkpoint. Please see "Options for Online Checkpoints Using Zoom" in the Student Orientation section on CANVAS.

## Self Grade and Reflections for Checkpoints (400 points)

After each Checkpoint, students will be expected to complete the Self Grade and Reflection assignment. Students will get the chance to go over their solutions and grade each problem according to the given rubric. Also, this is an opportunity to reflect on your mistakes and review those mistakes. This can also help students reflect on their own study habits and possibly help on how to improve those study habits. Then students will write a reflection on the Checkpoint to receive extra points on that Checkpoint.

**Note:** If the Self Grade and Reflection are not done by the due date, I will grade the Checkpoint accordingly. Students can still do the reflection to receive bonus points.

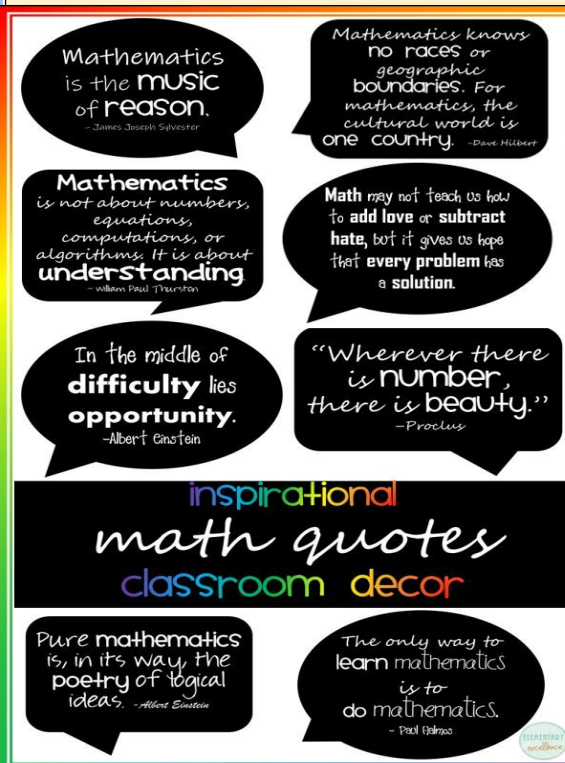


# MATH

The only place  
where  
people  
buy 64  
watermelons  
and  
no one  
wonders why...

### Grading:

895 points – 1000 points : A  
795 points – 894 points : B  
695 points – 794 points : C  
595 points – 694 points : D  
Below 595 points : F



Mathematics is the music of reason. — James Joseph Sylvester

Mathematics knows no races or geographic boundaries. For mathematics, the cultural world is one country. — Dave Hilbert

Mathematics is not about numbers, equations, computations, or algorithms. It is about understanding. — William Paul Thurston

Math may not teach us how to add love or subtract hate, but it gives us hope that every problem has a solution.

In the middle of difficulty lies opportunity. — Albert Einstein

"Wherever there is number, there is beauty." — Proclus

inspirational  
math quotes  
classroom decor

Pure mathematics is, in its way, the poetry of logical ideas. — Albert Einstein

The only way to learn mathematics is to do mathematics. — Paul Halmos

### Tentative Checkpoint Dates:

Checkpoint 1: Wednesday, September 8  
Checkpoint 2: Wednesday, September 29  
Checkpoint 3: Wednesday, October 20  
Checkpoint 4: Wednesday, November 10

**Note:** Students will have a window of logging into CANVAS to take each Checkpoint from 10am – 6pm. Once students start Checkpoint they will have 2.5 hours to take it and an extra 15 minutes to allow for scanning and uploading necessary files. If you have a conflict with any of these days/times, let me know ASAP so we may discuss other options.

### Point Breakdown

**Total Homework Points = 300 (10 points each)**

**Total Discussion Points = 75 (3.5 points each)**

**Video Reflection Points = 75 (3.5 points each)**

**Total Self Grade and Reflection points = 400 (100 points each)**

**Final Assessment = 150**

**Total Possible Points = 1000**



### Final Assessment (150 points)

The final assessment is on Wednesday, December 15, and students will have a window of logging into CANVAS to take it from 10am – 6pm. If you have a conflict with this day/time, let me know ASAP so we may discuss other options. The final is cumulative. You should keep all your checkpoints and use them as a study tool.

**Note:** The final assessment is a way for students to show me what they have learned. At this point, students have hopefully learned from their mistakes, therefore reflecting on them and improving on study habits.

