# High Impact Discussions including Growth Mindset and Metacognition

## Discussion #1

Students are asked to answer the following questions: what techniques have you found successful in learning the statistics vocabulary and other introductory content? With what have you struggled---time management, learning/applying vocabulary, or other content issues? Additionally, students must reply to at least two classmates' initial posts.

## Discussion #2

Students are asked to answer the following questions: As the course introduces concepts you may not have seen before, consider how has this course is different from other Math courses you have taken in high school or college? Have you developed new ways to understand the concepts? Additionally, students must reply to at least two classmates' initial posts.

## Discussion #3

Students are asked to answer the following: the topic of Hypothesis Testing, is often a challenging, yet important, concept in Statistics.  Hypothesis Testing is the ultimate procedure used to verify your proposed answer to a research question, much like an experiment in a Chemistry class.   Using the problem assigned based on the first letter of your last name, demonstrate how you would dissect the problem.   What roadblocks or issues do you encounter?   Think about which test you should conduct, the necessary information, stating the hypothesis, making a decision, and the final conclusion. Additionally, students must reply to at least two classmates' initial posts.

## Discussion #4

Students are asked to answer the following: You are in the homestretch of the course, please reflect on and describe what strategies or activities have helped you learn the vocabulary, concepts, and/or procedures.   What would you do differently? Additionally, students must reply to at least two classmates' initial posts.

# Learning or Study Skill Strategy Assignments including Growth Mindset and Metacognition

## Learning or Study Skill Strategy Assignment #1

Students are asked to create a vocabulary study plan using the following guidelines: Your vocabulary study plan should be for a 4-5 day period (Monday through Thursday, Tuesday through Saturday).  Think about what days are best for you.  Please use complete sentences to describe what you plan to do each day.   Be as detailed as possible.  The plan should be at most 1 page in length.  Please use at least size 11 font.  (I am old and have bad eyes) Consider the following as you make your plan:

1. What strategies have you used in the past to learn vocabulary? Did those strategies work well for you?
2. What strategy or strategies are you going to try this time?
3. How much time will you devote to studying vocabulary before the first test? Keep in mind that there's a lot of vocabulary in Module 1.
4. Make time in your study plan to complete the Practice Problems for MATH 0996 and Homework for MATH 1401

## Learning or Study Skill Strategy Assignment #2

Students are asked to watch a short 2-minute video on [Growth Mindset](https://youtu.be/JfdoJxPjp1k), and then create their own personal mantra using Padlet. [This is the Padlet link for Spring 2021](https://padlet.com/lralston4/p6rupv4zvhyv10qh).

## Learning or Study Skill Strategy Assignment #3

Students are asked to watch a short video on [Note-Taking Strategies and Techniques](https://youtu.be/ryTYn12g--0). Examples of some of the techniques created Mrs. Ralston are provided: Guided Notes, Mind Maps-Graphic Organizer, Outlining, and Mind Maps-Flowcharts. A second video that discusses [scientific study tips](https://youtu.be/C2aigfiAFDA) is included. Students are required to complete a midterm exam practice that is formatted with questions similar to those on the MATH 1401, Elementary Statistics, midterm exam.

## Learning or Study Skill Strategy Assignment #4

focuses on reading comprehension skills as we begin the discussion of one of the main statistical concepts: Hypothesis Testing. Students are provided with a variety of strategies and asked to complete a Key Words Quiz. Students struggle with translating words to the appropriate mathematical symbols.

## Learning or Study Skill Strategy Assignment #5

Students are provided with some advice and information from Dr. Saundra McGuire's Metacognition Presentation at Georgia Highlands College in Fall 2020 and from Dr. McGuire's books, "Teach Students How to Learn" and "Teach Yourself How to Learn." Students are asked to reflect on their experience in MATH 0996 by answering the following two questions:

1. Which of the students' actions have been YOUR actions throughout the semester---students who did not do well or students who made an A?
2. What learning or study skill strategy (discussed throughout this course) do you plan to use in other courses to help you be successful?

# Time Management

[Time Management Video and PowerPoint](https://www.youtube.com/watch?v=AGOa1QGbVNw)