

# Midterm 1: College Writing Seminar

Prof. Jordan C. Hanson

October 28, 2022

Assigned: October 28th, 2022 at 11:00 am. Due: October 31st, 2022 at 9:00 pm. Submit all answers in one PDF document, and submit this PDF on Moodle under the midterm 1 submission link.

## 1 Unit 1: Concise Writing 1

1. *Using the delete button.* For the sentences below, re-write them more concisely.

Create an edited version in your document.

- (a) Knowing the orbits of the stars around the center of the galaxy, scientists use the orbits to calculate the mass of the object at the center of the galaxy. The object has the mass that is so large the mass has to be of a black hole.
- a . Scientists use the orbits of the stars to calculate the mass of the object at the center of the galaxy, and believe it's a black hole due to its large mass.
- (b) Epidemiologists use a parameter called the reproduction parameter,  $R_0$ , which is the number of new infections resulting from one new infected person.
- b.  $R_0$  is the reproduction parameter, which is the number of new infections resulting from one new infected person.
- (c) According to the Newton's Laws of motion, things that have different masses and different shapes would still accelerate downward at the same rate when dropped.
- C. According to Newton's Laws of motion, objects with different masses and shapes accelerator at the same rate downwards.

2. *Creating an outline.* Create an outline of the following set of ideas, such that it describes how to determine optimal tomato growing conditions. Use the outline to write a well-organized paragraph describing the experiment. Submit *both* the paragraph and the outline.

Create a paragraph in your document.

- ^ Ten tomato seedlings are obtained
- ^ A patch in the garden is reserved with space for all ten
- ^ A photo-sensor can be used to determine the light level at each spot in the patch
- ^ Each tomato plant is given a different amount of water per day
- ^ This whole process is done during the summer when the amount of sunshine is maximized

In a garden full of fruit and vegetables there is a spot right in the middle for tomatoes, but only ten tomatoes can be grown there due to the space given. There was a certain patch reserved for ten tomatoes to make the fruit and vegetable garden look even and not one fruit or vegetable favored. The gardener picked this certain spot, because the sun would hit it the best to grow the best, most juicy, bright red tomatoes you can possibly grow. If you had anymore the angle of the sun causes a shadow to not allow that extra tomato to grow to its fullest. Before the tomatoes were planted there was a photo-sensor that was left for one month to make sure that the spot was perfect and is still intact next to the tomatoes. Everyday the tomatoes are taken care of and watered, but watered with a different amount everyday. They water everyday differently because some days there was sun and some days it rained and it didn't need as much or needed more deepening on the weather. Lastly, the perfect time to do this experiment is the summer, because you get to maximize the sun at its best. And with that the tomatoes turn out its best due to the process taken, From picking the perfect spot, the right water amount, and maximizing the sun lead to having the brightest, juiciest red tomatoes you can have.

## 2 Unit 2: Concise Writing 2

1. *Hierarchy of detail and outlines.* Choose from any of the 4 topics from slide 4 of the Week 2 Lecture Notes. Select 3-4 sources online and use them to create an outline with the appropriate hierarchy of details covering the subject. Submit the outline and a 200 word summary of the subject, written concisely and without ambiguous words or phrasing. Properly cite your sources.

Add the work to your document.

<https://embryo.asu.edu/pages/ignaz-philipp-semmelweis-1818-1865#:~:text=Ignaz%20Philipp%20Semmelweis%20demonstrated%20that,birth%20or%20undergoing%20an%20abortion.>

<https://www.washingtonpost.com/nation/2020/03/23/ignaz-semmelweis-handwashing-coronavirus/>

<https://www.npr.org/sections/health-shots/2015/01/12/375663920/the-doctor-who-championed-hand-washing-and-saved-women-s-lives>

The scientific attitude is shown in the study done by Dr. Ignaz Semmelweis in the vietnam hospital where he was experiencing the puerperal fever. Dr. Ignaz Semmelweis shows the scientific attitude by first showing interest in the desire to know everything he wants to make sure that he finds the reasoning behind the problem. He first starts questioning all statements by asking what may the problem be, is it the doctors, is it the utensils, is it the room, is it the whole hospital. He realizes this and knows that puerperal fever is a disease that is spread and received by women who are giving birth. There are two different rooms that are giving birth and doing the abortions. There is a room full of housewives and a room full of medical students. He then has all of the utensils and medical equipment disinfected and changed to make sure that it is not that. The disease still spread and was happening in the hospital. He switches the housewives and the medical students to other rooms and realizes that it was the medical students that were messing up and they were not washing their hands and that's what led to the spreading. In this he questioned all statements, searching for data and their meaning, searching for verification, and consideration of consequences.

## 3 Unit 3: Technical Description 1

1. *Removing ambiguous words.* In the following sentences, remove or replace ambiguous words.

Write the new sentences in your own document.

^ When born, the baby was fairly heavy and really long.

- When the baby was born it was 8.5 pounds and 25 inches.

^ The baby grew really fast, by the time she was 1 year old, she was a lot longer.

-The baby grew 10 inches, by the time she was 1 she was 35 inches.

1

^ Radio transmission took a long while between the Earth and the Moon.

- Radio transmission took 30 seconds between Earth and the Moon

^ A hiker walked the full 60 km trail in 4 days, making her average speed moderate.

- A hiker walked the full 60 km trail in 4 days, at an average speed of 3 mph..

2. *Spatial and temporal detail, perspective.* Recall the exercise we performed in class, in which we wrote our favorite recipe. In this exercise, explain to the reader from where you are gathering the ingredients, *and* the recipe. Thus, the result should be a tract of writing that would enable someone to prepare the dish using your kitchen and

pantry. Notice how this requires you to pay attention to both time and space.

Write a paragraph in your own document.

First, walk into the kitchen all the way down to the left is the refrigerator. Open the refrigerator and on the top shelf is a stick of butter, milk, and eggs. Right below the top shelf on the next shelf down is brown sugar and baking soda. Close the fridge and place everything on the counter to the left of the refrigerator, across the way of the stove where the chocolate chips are. Directly above it is a cabinet, there you will find on the second shelf all your measuring cups, and measuring utensils. Place those on the counter below it with all the other ingredients. Directly under the counter are two drawers, open the right one and there will be mixing utensils. Next go directly under the drawer, there will be two doors open to the right and there will be bowls and pans. Grab a gray pan for cookies and a red bowl to mix your ingredients. Place it on the counter above with the rest of the ingredients. When facing the counter, turn around and you will see a cabinet, open the cabinet and there you will find flour, vegetable oil, vanilla, and salt on the fourth shelf. Grab all the items and place it on the counter with the rest of the ingredients. That is all you need to prepare homemade chocolate chip cookies.

## 4 Unit 4: Technical Description 2

### 1. *Convert to passive voice.*

Re-write the paragraph in your own document.

I measured the acceleration due to Earth's gravity,  $g$ , with a pendulum. First, I measured the length of my pendulum to be 20 cm. Second, I hung my pendulum straight down and displaced the bob 5 cm to my right. I released the pendulum and recorded the number of times it returned to the same position as it swung back and forth for one minute. I calculated that it returned to its original position every 0.90 seconds. I inserted my results into the formula predicted by Newton's Laws. The result for  $g$  was  $9.81 \text{ m/s}^2$ .

1. The acceleration was measured by me due to Earth's gravity,  $g$ , with a pendulum. The length of my pendulum was 20 cm I measured. Then the pendulum was hung straight down and displaced the bob 5 cm to my right. The pendulum was released and recorded, the number of times it returned to the same position as it swung back and forth for one minute. It was calculated that it returned to its original position every 0.90 seconds. The results were inserted into the formula predicted by Newton's Laws. The result for  $g$  was  $9.81 \text{ m/s}^2$ .

### 2. *Rearrange the sentences to have the proper hierarchy of detail.*

Re-write a paragraph in your own document.

The trials were conducted in a room with no air conditioning, and therefore no air flow.

The average horizontal distance bacteria travel after a person sneezes was measured.

First, a sample of 20 infected people was gathered.

The category of dishes with the largest colonies were the ones corresponding to 8.0 meters.

Third, once each subject felt the urge to sneeze, the subject was required to aim the sneeze down the line without covering their mouth.

The height of each subject was required to be within 6 inches of 5 feet 6 inches tall.

Second, petri dishes were arranged in 0.5 meter intervals out to 10.0 meters on the floor in front of the subject. Fourth, bacterial colonies were allowed to grow in the dishes for one week under ideal conditions.

These results inform the epidemiology of spreading bacteria.

The results show that when a person sneezes, it is possible to spread infection to someone who happens to be 8.0 meters away.

2. First, a sample of 20 infected people was gathered. The height of each subject was required to be within 6 inches of 5 feet 6 inches tall. The trials were conducted in a room with no air conditioning, and therefore no air flow. Second, petri dishes were arranged in 0.5 meter intervals out to 10.0 meters on the floor in front of the subject. The category of dishes with the largest colonies were the ones corresponding to 8.0 meters. Third, once each subject felt the urge to sneeze, the subject was required to aim the sneeze down the line without covering their mouth. The average horizontal distance bacteria travel after a person sneezes was measured. Fourth, bacterial colonies were allowed to grow in the dishes for one week under ideal conditions. The results show that when a person sneezes, it is possible to spread infection to someone who happens to be 8.0 meters away. These results inform the epidemiology of spreading bacteria.

3. *Rearrange the sentences to have the proper hierarchy of detail, and convert to passive voice. Remove ambiguous words, and make the writing more concise.*

Re-write a paragraph in your own document.

Using a diagram of the forces, we show that the tangent of the angle is the friction coefficient. I measured the coefficient of friction to be 0.095. The tangent of the angle is measured many times. The average friction coefficient is 0.095. We placed an eraser on a meter stick. We increased the angle between the meter stick and the table. We measured the angle with a protractor. We increased the angle until the eraser slides off the meter stick. Using a diagram of the forces, we show that the tangent of the angle is the friction coefficient. The standard deviation of the coefficient was 0.05. A future idea for an experiment is to change the temperature of the eraser and determine if the friction coefficient depends on temperature.

3. A future idea for an experiment is to change the temperature of the eraser and determine if the friction coefficient depends on temperature. The eraser was put on a meter stick. The angle was measured with a protractor. The angle between the meter stick and the table was increased by 10 degrees. The angle was measured until the eraser slides off the meter stick. The tangent of the angle is measured 10 times. Using a diagram of the forces, the tangent of the angle of the friction coefficient was shown. Using a diagram of the forces, the tangent of the angle was shown as 0.095. The coefficient of friction was measured to be 0.095. The standard deviation of the coefficient was 0.05.