CHS/AP Psychology **Summer 2025**
Mr. Wagenblast wagenblast@cranfordschools.org

Welcome! As of now, you are tentatively enrolled in AP Psychology for the 2025-2026 school year. Final schedules are released in July. I am excited to work with you!

I. Intro

1. To prepare for this course, a large three ring binder, lined paper, pencils, and a highlighter should be purchased.
2. Please Note: This course covers *all* content required by The College Board. Familiarize yourself with it this summer via the **AP Psychology Course Framework**, available on The College Board website. **Be advised: some topics are loaded**. To handle them appropriately, maturity and open-mindedness will be necessary and required.

II. What should I make sure I do before I leave for summer vacation?

1. Get a copy of the **Myers *Psychology For AP* (purple cover) textbook**, and also pick up a **Unit 1 Packet** from Mr. Wagenblast (room L404).
2. Get copies of the supplemental reading PDFs.

III. What do I have to do?

1. **YOU WILL BE EXPECTED TO HAVE THE ASSIGNMENT BELOW COMPLETED BY THE DAY OF YOUR FIRST MAJOR TEST** (the exact date for your section will be announced upon your return in September). This is the material I will be teaching you when we get back to school. Prepare for shorter assessments of the summer reading prior to that date.

- **Read** the textbook on pages **37-74** *(Unit 1, Part II: The Scientific Foundations of Psychology)*. **You do NOT need to read part I on pages 1-36.**
- **Complete the associated Unit 1 Packet- must be handwritten!!! Typed copies are not acceptable.**
- **Read and take notes** on the supplemental reading PDFs (Studies by Milgram, Asch, Zimbardo). We'll see the video footage of these experiments in September. Your notes should include the following about each study:
    - Independent variable
    - Dependent variable and its operational definition
    - What was the researcher's hypothesis?
    - Identify an **ethical** guideline applied by the researchers
    - What did the researchers do to make the study generalizable to the larger population?
    - Did the results of the study support or refute the hypothesis?

This assignment will be collected and graded on the day of your first major test to be announced in September. .

If you have any questions, comments, concerns, or just want to say hello, feel free to email me over the summer…

wagenblast@cranfordschools.org

AGAIN: This MUST be printed and handwritten!!!

The answers to the terms and questions on this document are to be handwritten on hard copies of the paper. If you're downloading this from the CHS website, PRINT IT OUT.

Unit 1: Scientific Foundations of Psychology

1. Why is it important to conduct research scientifically?
   a. Define **hindsight bias**

   b. What is the **overconfidence** phenomenon?

   c. How might the perception of order in random events cause biased interpretations in the world?

2. How do researchers execute **scientific** inquiry→ **The scientific method**
   a. What is the difference between **theory** and **hypothesis?**

   b. What is an **operational definition?** Why is it necessary, particularly in Psychological research?

   c. Look up the term **falsifiability.** Why must a study be **falsifiable** for it to be considered **scientific?**

3. Psychological science uses three general approaches to research→ **descriptive, correlation, and experimentation**.

   a. Descriptive approaches→ attempt to describe variables

   →Case Studies (define the term)

   →Naturalistic Observation (define the term)

   →Survey (define the term)

   -What is the difference between a **population** and a **sample** in research? Why should a sample be **randomized?**

   -What does it mean for a sample to be **representative?** What does a representative sample allow researchers to do?

*****What would pros and cons to each approach be?*****

The answers to the terms and questions on this document are to be <u>handwritten</u> on hard copies of the paper. If you're downloading this from the CHS website, <u>PRINT IT OUT.</u>

<u>Unit 1: Scientific Foundations of Psychology</u>

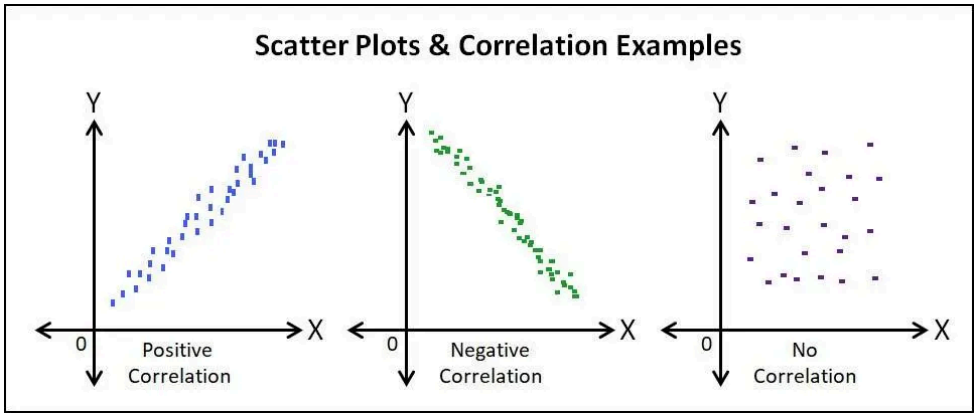
b. Correlational research

-How is this approach **different** from descriptive research like survey, case study, or naturalistic observation?

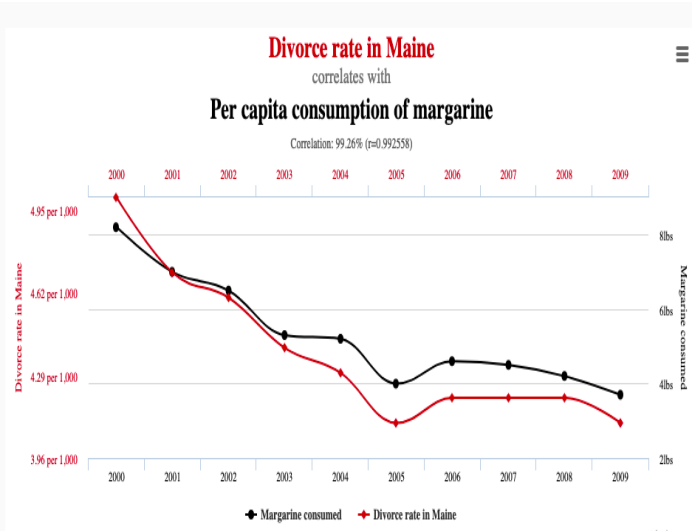
-What is the difference between a **positive** and a **negative** correlation? How are the two **similar???**

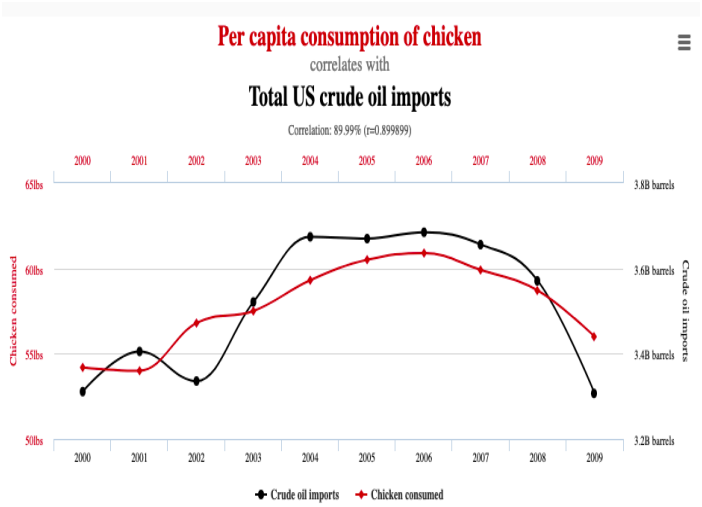
-What is a correlation **coefficient**? How does it represent relationships between variables?

-Correlational data is represented on **scatterplot** graphs, as shown below:



<u>However…just because there is an apparent relationship between two variables, does NOT mean that one has any INFLUENCE on the other…some correlations are ILLUSORY!</u>





-Look up the term **directionality problem.** Why does correlational research **not** necessarily solve that problem?

The answers to the terms and questions on this document are to be <u>handwritten</u> on hard copies of the paper. If you're downloading this from the CHS website, <u>PRINT IT OUT.</u>

<u>Unit 1: Scientific Foundations of Psychology</u>

c. Experimental research

i. What makes experimental research unique? A few things…

1. **Manipulation of an independent variable**
2. **Presence of a control group**
3. **Random assignment of participants**
4. **Results that can yield a cause-effect relationship between variables**

d. What is the difference between an **independent** and a **dependent variable?**

e. What is random assignment?

i. How does random assignment allow for creation of experimental and control groups?

ii. What are **confounding, or "third" variables?** How does random assignment help control for them?

iii. What is the difference between random **sampling** and random **assignment?**

f. What is done to eliminate bias in research?

i. What are double-blind procedures?

ii. How might a **placebo** help control for **participant bias** in a study?

The answers to the terms and questions on this document are to be handwritten on hard copies of the paper. If you're downloading this from the CHS website, PRINT IT OUT.

Unit 1: Scientific Foundations of Psychology

Practice Identifying the Components of an Experiment

(From Waber, et. al, 2008) Investigators had 82 men and women rate the pain caused by electric shocks applied to their wrist, before and after taking a pill. The pain was rated on a scale of 1-10, with 1 being the least painful, and 10 being the most. Researchers randomly assigned half the participants to read that the pill, described as a newly approved prescription pain reliever, was regularly priced at $2.50 per dose. The other half read that it had been discounted to 10 cents. In fact, both were placebo pills. The pills had a strong placebo effect in both groups. But 85 percent of those using the expensive pills reported significant pain relief, compared with 61 percent on the cheaper pills.

Based on the above…

- What is the independent variable in this study?
- What is the dependent variable, and how was it operationally defined?
- In the above study, what does it mean to use a "placebo pill"?
- Identify why the researchers can call this an experiment?
- What conclusion can the researchers draw from this study?

4. Ethics in Research

a. What are **ethics?** Why are ethics important in Psychological research?

b. **Define** the ethical principles for Psychological research below:

i. Informed Consent

ii. Debriefing

iii. What other ethical considerations for humans (and animals) exist?

The answers to the terms and questions on this document are to be handwritten on hard copies of the paper. If you're downloading this from the CHS website, PRINT IT OUT.

Unit 1: Scientific Foundations of Psychology

Read the study below, and answer the questions that follow about ethics in research.

"Tuskegee Study of Untreated Syphilis."

This study took place in Macon County, Alabama. The research itself took place on the campus of Tuskegee Institute. The intent of the study was to record the natural history of syphilis in Black people. When the study was initiated, there were no proven treatments for the disease. Researchers told the men participating in the study that they were to be treated for "bad blood." This term was used locally by people to describe a host of diagnosable ailments including but not limited to anemia, fatigue, and syphilis. A total of 600 men were enrolled in the study. Of this group 399, who had syphilis were a part of the experimental group and 201 were control subjects. Most of the men were poor and illiterate sharecroppers from the county.

As compensation, the men were offered what most Blacks could only dream of in terms of medical care and survivors insurance. They were enticed and enrolled in the study with incentives including: medical exams, rides to and from the clinics, meals on examination days, free treatment for minor ailments and guarantees that provisions would be made after their deaths in terms of burial stipends paid to their survivors.

There were no proven treatments for syphilis when the study began. When penicillin became the standard treatment for the disease in 1947 the medicine was withheld as a part of the treatment for both the experimental group and control group.

How/Why the Study Ended

On July 25, 1972 Jean Heller of the Associated Press broke the story that appeared simultaneously both in New York and Washington, that there had been a 40-year nontherapeutic experiment called "a study" on the effects of untreated syphilis on Black men in the rural south.

Between the start of the study in 1932 and 1947, the date when penicillin was determined as a cure for the disease, dozens of men had died and their wives, children and untold number of others had been infected. This set into motion international public outcry and a series of actions initiated by U.S. federal agencies. The Assistant Secretary for Health and Scientific Affairs appointed an Ad Hoc Advisory Panel, comprised of nine members from the fields of health administration, medicine, law, religion, education, etc. to review the study.

While the panel concluded that the men participated in the study freely, agreeing to the examinations and treatments, there was evidence that scientific research protocol routinely applied to human subjects was either ignored or deeply flawed to ensure the safety and well-being of the men involved. **Specifically, the men were never told about or offered the research procedure. Researchers had not informed the men of the actual name of the study, i.e. "Tuskegee Study of Untreated Syphilis" its purpose, and potential consequences of the treatment or non-treatment that they would receive during the study.** The men never knew of the debilitating and life threatening consequences of the treatments they were to receive, the impact on their wives, girlfriends, and children they may have conceived once involved in the research. **The panel also concluded that there were no choices given to the participants to quit the study when penicillin became available as a treatment and cure for syphilis.**

- How are the participants' rights violated in this study?

- How are **ethical** flaws in research **different** from **research design flaws?**

The answers to the terms and questions on this document are to be <u>handwritten</u> on hard copies of the paper. If you're downloading this from the CHS website, <u>PRINT IT OUT.</u>

<u>Unit 1: Scientific Foundations of Psychology</u>

5. Statistics in research

a. Define these examples of **descriptive** statistics for research.

<u>Measures of Central Tendency</u>

i. Mean-

ii. Median-

iii. Mode-

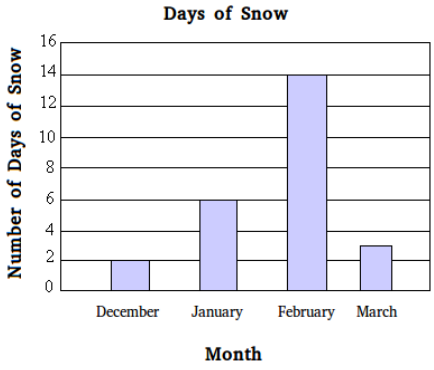
<u>Measures of Variation</u>

iv. Range-

v. Standard Deviation-

b. What is a **histogram?**

c. In a study, researchers are testing the question: "How does the **month of the year** affect the **amount of snow**?" That histogram would look like this:



d. What are **inferential** statistics?

e. Define the principles below that allow scientists to make informed inferences.

i. **Representative** samples

ii. **Variability** of data

iii. **Number of cases**

f. Define statistical significance:

i. What is the "p" value needed for **statistically significant** results?