

**60080079 Introduction to Statistical Methods**  
**Semester 2 2023-2024**  
**Report writing**

Choose Item 1 or 2 below. Solve the research questions (at least **two**) **using something you have learned from this course** and write a report (**about 1000 words**) about:

- Your research questions;
- Methods (e.g., sample, instrument(s) used, analysis);
- Results;
- Conclusion.

Please be cautious about academic integrity.

1. Using the HSB data, we are interested in examining whether students from different races or ethnicities (Hispanic = “1”, Asian = “2”, Black = “3”, and White = “4”) performed differently on the science test.

This is the main question for this study:

I. Are the 4 groups different?

In addition, we may be also interested in some other questions. Here are some sample questions:

- a. Is the performance of the majority group different from the average performance of the minority groups?
- b. Is the average score of the two high-performing groups different from the average score of the two low-performing groups?
- c. Do White and Asian students have different mean science scores?

2. Find and use the data available online that interests you. Decide on your own research questions.