

Project II – Hypothesis Testing

You will work in pairs, or alone on this project. Groups of more than 2 people will not be allowed. Everything should be typed, unless indicated.

Part I - Article and Initial Hypothesis (10 points): due June 8 – at the start of class

Find an article that makes a claim about a single mean or a single proportion.

- Turn in the article, with the claim highlighted
- Answer the following questions in 1-2 *typed* paragraphs.
 - What is the article's population?
 - What are you going to use as your population? *Your population must be a subset of the article's population.*
 - What is the article's claim?
 - Do you think this claim is too high, too low, or different? Why?
 - List the null and alternate hypotheses based on the article's claim and your answer to the previous question.

Part II - Data Collection (5 points) due June 11 – at the start of class

Conduct your survey, collecting at least 40 pieces of data, using a legitimate sampling method.

- Write up a paragraph explaining how, when, and where you got your sample data.
- Turn in your raw data and include n , \bar{x} , and S_x , or x , n , and p' as appropriate for your hypothesis – this does not need to be typed.

Part III – Project Write-up (25 points) due June 19 – by 12 Noon

The Write-up should contain the following, in this order:

- A cover page with a title and your name(s)
- A 01-2 page summary, in paragraph form, discussing/answering the following:
 - A brief discussion of the article, including the source.
 - A statement of the claim made in the article and whether you believe the actual parameter is higher, lower, or different from the article's claim.
 - Discuss the population of the article, and your population, explaining how yours is a subset of the article's.
 - A detailed description of how, where, and when you collected your data, including the sampling technique used.
 - Your conclusion about the article's claim with respect to your population.
 - A sentence interpreting your confidence interval in the context of the situation in your project.
- A completed solution sheet from Chapter 9 – available on my website. This does not need to be typed.
- Part I of the project
- Part II of the project

Part IV – Peer Evaluation (5 points) due by June 22 at 6 PM

Turn in the evaluation of your teammate. Even if you work by yourself, turn in the evaluation to get credit.