First Writing Assignment, Winter 2004

Sections A and B: Monday afternoon sections (Sophia Efstathiou, TA)

Write a two page, double-spaced (600 words maximum) paper answering the following:

Find an example of a scientific research where a level of statistical significance is mentioned. [Remember to cite your source! - More credit will be given to examples outside the lecture and section materials] What is meant by a level of statistical significance (n value)? Why should the researchers include

What is meant by a level of statistical significance (p-value)? Why should the researchers include this information in their research? What considerations might have guided the researchers to choose the level mentioned rather than some other smaller or bigger level?

Please include a word count, your name and your section time. The paper is due on Thursday February 19th, at lecture.

Sections C and D: Thursday afternoon sections (Lisa Damm, TA):

You are to write a two page (600 words maximum with double spaced, 1" margins) paper responding to the prompt below. You must express the ideas in your own words. Do not copy anything from the on-line modules or powerpoints from the lectures. There is no need to quote anyone else-explain everything in your own words. The paper is to be handed to me at the of lecture on Thursday, February 19.

So without further delay here is the prompt:

First come up with an example (real or made-up) in which one is examining the difference in means between two groups. Make sure that you identify the null hypothesis for your example. Then explain whether you think that it is more important in THIS example to avoid type I or type II error. Make sure you explain why you think it is more important in the example to avoid one type of error over the other. Also make sure that you explain the difference between type I and type II errors. Now think about a strategy that would help to reduce both type I and type II errors. Explain why you think this strategy would work.