STUDENTS’ STATISTICS PROJECT PROPOSAL

Due Tuesday, Oct. 6, 2009

The term project is meant to encompass many of the elements learned throughout the statistics course. You should think of your group as a small statistics consulting agency, hired to gather information, present the information gathered to “non-statisticians”, and draw conclusions and give recommendations, all in a professional manner. The study should be ONE of the following:

- A comparative analysis of two population proportions. (You would do this by comparing the proportion of a sample drawn from one population with the proportion of a sample drawn from another population).
- A comparative analysis of two population means. (You would do this by comparing the mean of a sample drawn from one population with the mean of a sample drawn from another population).

The proposal (one to two paragraphs, typed) must be received by 11:59:59 pm on Tuesday, Oct. 6, 2009, and should include

1. **The question** you want answered by your project Final Report. This should be stated in the form of an actual question, and it will tie into your 2-sample hypothesis test later on. See the bottom of this page for some examples.
2. A precise description of the two populations involved in your study.
3. Background—what led your group to do this study? This should be written in the perspective of the people who hired your consulting agency. In other words, so-and-so “hired us to look at this question because…”

It is preferred that you submit your proposal as a Microsoft Word Document attached to an e-mail (however, hard copies are also accepted). The proposal submission is worth 5 points. A point will be deducted from your project grade for every day that the proposal is late (including days on the weekend). This is applied to every group member. Only one copy per group needs to be submitted but it must have the full names of all group members on it (as well as the days/times you attend class).

In raising your project question, you’ll also have to have some idea of how the study will be carried out. You may want to consider resources such as the Internet, the library or “hands-on” data collection. Your group should have an approved proposal along with a submitted detailed study design (see separate handout for instructions) by Thursday, Oct. 22, 2009.

The following project ideas may help you think of one for your team. You do not have to choose one of the ideas below. In fact, I prefer that you find something to work on that is of interest to everyone in your group. WARNING: You cannot base your project on anything involving M&Ms candies. Recall that no matter what you decide, you will have to draw two samples from two populations.

- Is there a difference between the number of credit hours that men and women at VCC take during Spring semester?
- Is the proportion of women who prefer Coke-a-Cola over Pepsi greater than the proportion of men who do?
- Is there a difference between the average number of hours per week that men and women exercise?
- Do women prefer Bare Escentuals makeup over Neutrogena makeup?
- Are college students more likely to take a multivitamin than high school students?
- Does the number of raisins in Kellogg’s raisin bran differ from the number of raisins in Post raisin bran?
- Is the average price of gasoline in Orlando more than the average price of gas in Kissimmee?
- Are Freshman more “frustrated” with parking on campus than other students?
- Do the kickers for the NFL score more points per game on average than the kickers for the AFL?
- Are rental prices for a one bedroom apartment less if they are located within 3 miles of campus?

Feel free to e-mail me if you have any questions or concerns.

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