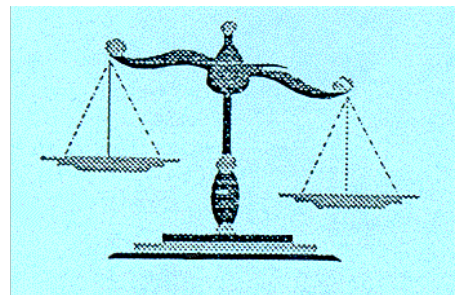


STAT 106 – Statistics I (formerly MATH 106)

Why take STAT 106?

Most of the important decisions in life involve incomplete information. Such decisions often involve so many complicated factors that a complete analysis is not practical or even possible. We are often forced into the position of making a guess based on limited information. However, a blind guess is not the best solution. Statistical methods, such as you will learn in STAT 106, can help you make the best “educated guess.” Let’s consider a problem pondered seriously by millions of hopeful Canadians:

What are the chances of winning a 649-lottery? You must choose 6 numbers between 1 and 49 inclusive. If you get the same 6-number combination that is randomly drawn, you win millions of dollars. There are some lesser prizes, but they are relatively insignificant. With 649 lottery, there is only one way to win the grand prize: Choose the same number combination that is drawn in the lottery. Knowing that there is only one way to win, we need to determine the total number of outcomes: that is, how many b-number combinations are possible? Writing out a list of the possibilities would take about four years of non-stop work, and that’s no fun. We could construct a tree diagram, but it would be about 120 miles high and would violate airspace regulations. We need a more practical way of finding the total number of possibilities.



**To guess is cheap,
To guess wrongly is expensive.**

Efficient methods are introduced in STAT 106 for finding such numbers. Also, you will find answers to important questions like in the following:

Examples:

- Is it true that women in this country have equal job opportunities with men?
- Is there any difference of the distance required to stop a vehicle on wet pavement of four major brands of tires?
- Is there any relationship between age and weight?
- Is there any relationship between rate of inflation and fate of unemployment?
- What is the possibility to have one boy and one girl in two born children?
- Is there any relationship among socioeconomic status and juvenile delinquency?

These are difficult issues, and statistical methods help quite a lot in analyzing them and finding the best ‘educated answer.’

Prerequisites:

One of the following: (C or better in one of Pre-calculus 11, Applications of Mathematics 12, Principles of Mathematics 12, Pre-calculus 12, MATH 092, MATH 096, MATH 110, MATH 124, or MATH 140) or (C or better in both MATH 094 and MATH 095) or (B or better in Foundations of Mathematics 12) or (a score of 17/25 or better on Part B of the MSAT together with a score of 34/50 or better on Parts A and B combined).

Transferability:

UBC, SFU, UVic, Open University, TWU.

Content:

Introduction to statistical concepts, descriptive statistics, probability, inferential statistics, and relationship between variables.

DON'T WAIT - ENJOY THE WORLD OF STATISTICS WITH STAT 106!