

## **STAT 104 – Introductory Statistics** (formerly MATH 104)

*"Statistical thinking will one day be as necessary for efficient citizenship as the ability to read and write".*

- H.G. Wells

STAT 104 is an intuitive, interesting course, which does not involve mathematical proofs. Statistical methods, such as you will enjoy learning in this course, have a world full of good applications. In fact, the applications of statistics are so numerous that in a sense you are limited only by your own imagination as to what areas in your life you may want to make use of the subject. Statistics is applied in business, economy, agriculture, industry, psychology, medicine, and others.

### **Examples:**

- Most of us have heard someone say that more intelligent people tend to do better in school. Is this true? Experienced instructors of UFV know that is only partially true. Students with higher IQs (intelligence quotients) often do better schoolwork, but factors other than IQ can affect academic success. What is the real relation between IQ and grade point averages?
- The BC Department of Transportation, Provincial Highway Traffic Safety Administration reported that 71% of all fatally injured automobile drivers were intoxicated. A random sample of 50 records of automobile drivers' fatalities in Abbotsford showed that 29 involved an intoxicated driver. Do this data indicate that the population proportion of driver fatalities related to alcohol is less than 71% in Abbotsford?
- A poll taken before the 1976 election showed that 51% of the sample intended to vote for Carter against Gerald Ford. Is this enough to say that Carter is the virtual winner?

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 Principles of Math 11, Applications of Math 11, MATH 085, Foundations of Mathematics 11, or Pre-calculus 11) or (B or better in Apprenticeship and Workplace Mathematics 12) or (one of Foundations of Mathematics 12, Pre-calculus 12, Principles of Math 12, or Applications of Math 12) or (any UFV MATH course numbered 092 or higher) or (a score of 17/25 or better on Part A of the MSAT) or (45 university-level credits with department permission).

### **Transferability:**

UBC, SFU, UVic, Open University, TWU.

### **Content:**

STAT 104 consists of an introduction to descriptive statistics, sampling, probability, estimates, hypothesis testing, correlation, and regression.

**DON'T WAIT - ENJOY THE WORLD OF STATISTICS WITH STAT 104!**