LAURENTIAN UNIVERSITY

STAT 2126EL 03 – SCIENTIFIC METHOD and ANALYSIS I (Sept. 2006)

Professor: Dr. Michael Emond
Office: A238
Phone: 675 1151 ext. 4246
Office Hours: 10:00 Tuesday and Thursday. Other times by appointment
E-mail: memond@laurentian.ca
Text: *Essentials of Statistics for the Behavioral Sciences* (5th edition) Gravetter/Wallnau

COURSE OBJECTIVE:
The objective of this course is to introduce the student to the wonderful world of statistics. By the end of the course, the student should have an understanding of the terms and definitions used in the field of statistics. As well, the student will be exposed to the applications of statistics in the behavioral sciences and also in the everyday world of journalism and advertising.

GRADING:
Midterm 1 - **25% October 4th**
Midterm 2 - **25% November 13th**
Final - **40%**
Assignment - **10%**

Tests will cover any material taught up to and including the last class before the test (Midterm 2 will cover any material taught between Midterm 1 and Midterm 2). The Final will cover all of the course material. The tests will be made up of a series of fill in the blank and short answer questions. Students are expected to be able to compute statistical equations and have a theoretical understanding of the statistics covered in class. **Non-programmable calculators can be used during exams.**

There will be an assignment given out during the course of the term. It is each student's responsibility to make sure they get this assignment if they have to miss a class. Note: The explanation of the assignment by the instructor during the class may be more thorough than your friend's notes.

Students are encouraged to seek out the instructor's help whenever they need clarification of the material that has been covered. Appointments can be made at any time.

NOTE: If there is any student in this course who, because of a disability, may have need for special accommodations, please come and discuss this with me.

NOTE: It is the student's responsibility to alert the instructor AS SOON AS POSSIBLE when they are aware they will miss a test or be late for an assignment. Feel free to phone or e-mail the instructor with regards to this. Alerting me **after** you have missed the test is **unacceptable**. Telling me the day an assignment is due you cannot hand it in is also **unacceptable.** Penalties (up to 15% a day) will be assessed to students who hand in assignments late or fail to alert the instructor they have missed a test the day of the test.

LECTURE SCHEDULE FOR SCIENTIFIC METHOD and ANALYSIS I

TOPIC	CHAPTER
Introduction	1
Frequency Distributions	2
Central Tendency	3
Variability	4
How to Misuse Statistics	
Z-Scores	5
Probability	6
Common Sense vs. Statistics	
The Distribution of Sample Means	7
Introduction to Hypothesis Testing	8
Exposure to GRE	
Introduction to the t Statistic	9
Hypothesis Tests with Two Independent Samples	10
Hypothesis Tests with Two Related Samples	11
Correlation and Regression	15

To succeed in this class:

1) **Attend lectures**
2) **Read the book – AND THE STUDY HINTS!**
3) **Do the problems at the back of the book**
4) **Understand the concepts as well as the equations**
5) **Ask questions whenever you don't understand**