UNIVERSITY OF CALGARY

Faculty of Science
DEPARTMENT OF MATHEMATICS AND STATISTICS
Course Information Sheet

					FALL 2001
1. **Course:**	STATISTICS 213				Room: SA 104
Lecture/Time/Session:	**L 01**	MWF	09:00		ST 143
	L 04	MWF	13:00		
Instructor(s):	J. Stallard				
Office:	MS 448		220-3953	**email:** jbstall@math.ucalgary.ca	

2. **Prerequisites:** Math 30
   Co-requisites: -

NOTE: The Faculty of Science policy on pre- and co-requisite checking is outlined on page 198 of the 2001-2002 Calendar. **It is the students' responsibility to ensure that they have the pre- and co-requisites for the course, and if they do not they will be withdrawn from the course without notice.**

3. **Fee policy:** After the last day to drop/add courses, there will be no refund of tuition fees if a student withdraws from a course, courses or the session.

4. **The University policy on grading and related matters** is described on pages 40-54 of the 2001-2002 Calendar. In determining the overall grade in the course, the following weights will be used:

Mid-term Test	[1]	20%	
Quizzes	[4]	40%	(Best 4 of 5)
Final Exam	[1]	40%	

   A passing grade on each particular component of the course is essential to passing the course as a whole. There will be a final examination scheduled by the Registrar's Office. The use of aids such as open book, etc. is not permitted.

5. **Missed Components of Term Work.** The regulations of the Faculty of Science pertaining to this matter are outlined on page 198, of the 2001-2002 Calendar. It is the student's responsibility to familiarize herself/himself with these regulations.

6. **Academic misconduct** (cheating, plagiarism, or any other form) is a very serious offence that will be dealt with rigorously in all cases. A single offence may lead to disciplinary probation or suspension or expulsion. The Faculty of Science follows a zero tolerance policy regarding dishonesty. Please read the sections of the 2001-2002 University Calendar under the heading "Student Misconduct", pages 50-52.

7. **Dates and times of class exercises held outside of class hours (evening tests, Saturday laboratory examinations, weekend field trips, etc.):** There will be no out-of-class-time activities. REGULARLY SCHEDULED CLASSES HAVE PRECEDENCE OVER ANY OUT-OF-CLASS-TIME-ACTIVITY.

Please turn off all cell-phones during lectures.

Additional Course Information

Rec. Text: *Statistics - A First Course (First Canadian Edition), by D. Sanders, R. Smidt, A. Adatia, G. Larson, McGraw-Hill, 2001.*

Software: MINITAB. You are by no means required to purchase the software. However, if you find the lab time insufficient for you to become comfortable with MINITAB, the program can be purchased along with the above textbook for an extra $15.00. This may be an option worth considering if you are registered to take Statistics 217 and you have a computer at home.

Assignments: Assignments are based on the material covered. They should be worked on either individually, or with the assistance of your tutorial instructor. The assignments are not for credit, and are simply to assist you in your study of the course material. Detailed assignment solutions will be available from the reserve reading desk, main circulation desk, in the library tower.

Tutorials: Pre-assigned tutorial sections will be used to write quizzes, discuss the assigned problems, and to give students experience with MINITAB and help with problems on request. These tutorials are not mandatory, but you attendence is **strongly recommended**. In addition, there will be continuous tutorials run everyday in **MS 571, from 11:00 - 14:00.**

Quizzes: As stated above, you will write each quiz in your assigned quiz section. It is of utmost importance that you **check your registration and insure you write each quiz in your registered quiz section.** Students who fail to do so without prior consent from me, will not receive credit. Quizzes will be based on the assigned questions and will be constructed with the expectation that ALL PROBLEMS HAVE BEEN ATTEMPTED and are understood.

QUIZ SCHEDULE

Lecture Section	L01: MWF 09:00		L04: MWF 13:00	
Lab Section	B01, B02	B03, B04	B13, B14	B15, B16
Quiz 1	Sept. 18	Sept. 21	Sept. 20	Sept. 21
Quiz 2	Oct. 9	Oct. 12	Oct. 11	Oct. 12
Midterm Exam	Friday, October 26 (in the lecture)			
Quiz 3	Nov. 6	Nov. 8	Nov. 8	Nov. 9
Quiz 4	Nov. 20	Nov. 22	Nov. 22	Nov. 23
Quiz 5	Dec. 4	Dec. 6	Dec. 6	Dec. 7

Aid Sheets: Formula sheets **will not be permitted when writing quizzes**. A two-sided, 8.5" x 11", formula sheet **is allowed on the Midterm Exam and Final Exam**. Both exams will be closed book. You may bring (i) a calculator, and (ii) one sheet (8.5" x 11", using both sides of the sheet) with notes and formulas. **These notes will exclude definitions, generic interpretations, and either completed in partial or in whole, questions or examples either appearing on assignments or done in class. It is as it states, a sheet of formulas! NO PROGRAMMABLE CALCULATORS ARE ALLOWED!**

Midterm: The midterm exam will be written on Friday, October 26th, in the lecture. It is recommended that you be early, as you will start writing the exam on the top of the hour.

Missed Quizzes Missed quizzes are extremely rare. Any student missing a quiz for reasons beyond the student's control will have a final grade assessed by reweighting the quizzes in which the student has completed. To be consistent and fair to all, this will apply to all students in the course. **There will be no makeup quizzes!** Also, **all deferred final exams will be oral.**

Grades: A distribution of final grades will be described in more detail as the course progresses. However, it should be noted that a **final grade of less than 50% is considered sub-standard and will result in a letter grade of F.**

Behaving: Academic misconduct is a serious offence. Any student exhibiting behavior which is characterized as academic misconduct will be dealt with promptly and with great severity. See pages 50 - 52 of the 2001/2002 Calender.

Tentative Course Syllabus

The following is a rough course syllabus. If you wish to read ahead and prepare for the lectures, the following is an approximate course syllabus of the textbook sections that will correspond to the lecture material. Please note there is certain to be some flexibility here. I will notify you in class what sections of the text we are currently covering at that time. Please note: This does not mean that you can "blow-off" class.

WEEK OF:

September 10: Introduction to Statistics; Populations and Samples; Data Types. Sampling Techniques.
Chapter 1: § 1.1, 1.3, 1.4

September 17: Sampling Techniques (Con't) and Sampling Biases.
Chapter 1: § 1.4, Chapter 2: § 2.1 (note: some of the material is not presented in the text!)

September 23: Summarizing Data: Stem-and-Leaf Diagram, Histograms; Distribution Shapes. Descriptive Statistics; Percentiles and Quartiles.
Chapter 3: § 3.1 - 3.3

September 30: Descriptive Statistics (Con't): Box-Whisker Plots; Bivariate Quantitative Variables, Regression and Correlation.
Chapter 3: § 3.3 - 3.5, Chapter 12: § 12.1 - 12.2

October 1: Regression and Correlation (Con't); Experiments, Sample Spaces, Events, and Probability. Counting Techniques. **Chapter 12; § 12.2; Chapter 4: § 4.1**

October 8: Compound Events; Addition Law; DeMorgan's Laws;
Chapter 4: § 4.2

October 15: Compound Events (Con't): Mutually Exclusiveness.
Chapter 4: § 4.2; (note: lecture material will be deeper than material covered in the text!

October 22: Indepedent Events and Conditional Probability; Bayes Theorem.
Chapter 4: § 4.2, 4.3

November 1: Discrete Random Variables, Probability Distributions, Mean and Variance of.
Chapter 4: § 4.3

November 12: Reading Day on November 12. November 14th and 16th, Bernoulli Trials and the Binomial Distribution.
Chapter 5: § 5.1 - 5.2

November 19: The Poisson Distribution. Continuous Random Variables and the Normal Distribution. The Central Limit Theorem.
Chapter 5: § 5.3 - 5.4; Chapter 6 §: 6.1 - 6.3

November 26: The Central Limit Theorem (Con't); Confidence Interval Estimation of μ and p.
Chapter 6: § 6.3; Chapter 7: § 7.1 - 7.4, 7.6

December 3: Introduction to Hypothesis Testing.
Chapter 8: § 8.1 - 8.3