GRANDE PRAIRIE REGIONAL COLLEGE
MANAGEMENT SCIENCE 3010
COURSE OUTLINE
FALL 199

TITLE: MS 3010 Probability and Statistics for Business - Part 1

INSTRUCTOR: Dr. Eric Chislett
C 409
Phone: 539-2003

TIME: Class: Mon, Wed, Fri, 1:00-1:50 p.m. in J202
Seminar : Monday 3:00 - 4:50 pm. - J201

MARKING:

Final	35%
Mid-Term	25%
Reports	15%
Quizzes	15%
Assignments	10%

TEXT: (i) Keller, Warrack, Bartel:
Statistics for Management and Economics,
Third edition, Wadsworth.
(ii) Students workbook to accompany the above.

PREREQUISITE: MA1130 or MA1140

DATES TO NOTE: Quiz #1, Friday, Oct 1, 1:00 - 1:50 pm.
Mid-Term, Monday, Oct 25, 3:00 - 4:50 pm.
Quiz #2, Friday, Nov 26, 1:00 - 2:50 pm.

MANAGEMENT SCIENCE 3010
MS 3010 PROBABILITY AND STATISTICS FOR BUSINESS, PART 1
3(3-3) UT(3) Fall

INTRODUCTION: MS 3010 - Probability and Statistics for Business, Part 1 is an introductory course in statistical methods. It requires an elementary calculus course as a prerequisite. The emphasis in this course will be mainly on concepts, problem solving and applications and there will be no rigorous derivations and proofs.

There are approximately 36 lecture hours scheduled for MS 3010, and they will be devoted to covering the course material and to review periods as appropriate. Most of the material in the first 9 chapters of the textbook will be covered. Adequate notes will be given to cover topics which are not sufficiently treated in the text.

COURSE OUTLINE: The various topics in the course and appropriate allocation of the lectures are as follows:

Lecture	Topics	Reference
1	What is Statistics?	Chapter 1
2-7	Descriptive Statistics Organization and presentation of data; measures of location and dispersion.	Chapter 2, 3
8-13	Introduction to Probability Experiments, counting techniques, probability laws, conditional probability, Baye's rule.	Chapter 4
14-16	Discrete Probability Distributions Random variables and probability distributions; binomial and poisson distributions.	Chapter 5
17-19	Continuous Probability Distributions The uniform, normal and exponential distributions.	Chapter 5

Lecture	Topics	Reference
20-22	Sampling and Sampling Distributions The central limit theorem; sampling from finite populations; sampling distributions of means and proportions.	Chapter 6
23-24	Statistical Inference: Introduction	Chapter 7
25-29	Statistical Inference I: Inference about the description of a single population.	Chapter 8
30-34	Statistical Inference II: Inference about the comparison of two populations.	Chapter 9
35-36	Statistical Inference: A review.	Chapter 10

ASSIGNMENTS/
QUIZZES: A list of recommended problems will be given in class. The student workbook is excellent and you are strongly recommended to do the problems in it. There will be two formal assignments to be handed in during the term. There will also be two quizzes given during the term.

LABORATORY
REPORTS: Laboratory projects are given out on Mondays and are due on Friday of the same week. They are usually completed during the scheduled laboratory period, but may be started there and completed later. In writing laboratory reports, the following points must be carefully noted:

1. Reports must be neatly written in ink or typewritten.
2. Papers must be pinned or stapled together (no paper clips or folded corners).
3. A cover sheet must be used giving name and number, laboratory report number, student's name and I.D. number and date submitted.

4. A ruler and pencil must be used for constructing tables, charts and graphs.

5. A concluding or summary section must accompany each report.

6. Marks are awarded for neatness, format and presentation as well as for correct answers.

The schedule for Laboratory Reports is as follows:

Week No.	Due Date	Rep. No.	Title
1	Sept 10	Classes start	
2	Sept 17	1	Frequency Distributions
3	Sept 23	2	Descriptive Statistics
4	Oct 1	3	Probability I
5	Oct 8	4	Probability II
6	Oct 15	Thanksgiving Holiday	
7	Oct 22	Mid-Term week	
8	Oct 29	5	Discrete Probability Dists.
9	Nov 5	6	Binomial Distributions
10	Nov 12	7	Normal Distributions
11	Nov 19	8	Sampling Distributions
12	Nov 26	9	Confidence Intervals
13	Dec 3	10	Hypothesis Testing
14	Dec 10	Classes End	

* **Although there will be 10 reports/assignments in total, the titles may <u>not</u> follow exactly the above schedule.**