CHEMISTRY 2120 1992 - 93

GRANDE PRAIRIE REGIONAL COLLEGE

DEPARTMENT OF SCIENCE

INSTRUCTOR:	*Dr. Barry Ramaswamy* *J218 Science Wing*
TELEPHONE:	*Bus:539 - 2072* *Home:539 - 6239*
PREREQUISITE	*CHEM 200/202/302* *CHEM 1000/1040/2040*
TRANSFER CREDITS	*University of Alberta* *6 Credits*
TEXT BOOK	*QUANTITATIVE CHEMICAL ANALYSIS* *3rd Edition*
AUTHOR	*Daniel Harris*
	W. H. Freeman and Co. New York *1991*
LABORATORY MANUAL	*University of Alberta* *Chem 212 Laboratory Manual*

GRADING

ITEM	TERM	MARKS
QUIZ	FALL (Every Week)	10
XMAS EXAM	FALL	10
QUIZ	WINTER (Every Week)	10
FINAL EXAM	FULL YEAR	30
LABORATORY	FULL YEAR	40
	TOTAL	100

QUIZZES There will be a QUIZ every Monday for 20 minutes during the lecture period. The first Quiz will be on September 21 and will be part of the Practical Test. Quizzes will cover assigned readings, lectures, experiments and problems.

Excused Absence

Absence from a QUIZ or the LAB needs a valid reasoning. Only a written excuse from the Doctor or the College Health Nurse or the Registrar will be accepted. If you miss a Lab please consult the Instructor to make it up.

Homework Assignments

Assignments will be given out each Monday and are due the Monday after. Answers are available with the Instructor. Expect to see a slightly altered quiz from the assignments.

SYLLABUS

FALL SEMESTER *Sept 3 to December 8, 1992*

1. *Analytical Balance*
2. *Volumetric Equipment*
3. *Statistics of Small Numbers*
4. *Sampling and Sample Preparation*
5. *Ionic Equilibria*
6. *Volumetric Analysis*
7. *Precipitatiopn Analysis*
8. *Acid Base Equilibria*
9. *Titration of Strong and Weak Monoprotic Acids and Bases*
10. *Buffers and Acid Base Indicators*
11. *Titration of Polyprotic Acids and Bases and Mixtures*
12. *Non Aqueous Titrations*
13. *Complexation in Analysis*
14. *Oxidation Reduction in Analysis*
15. *Discussion of Experiments*

WINTER SEMESTER *Jan 5 to April 16, 1993*

1. *Analytical Problem Solving*
2. *Potentiometry and Ion Selective Electrodes*
3. *U.V. - Visible Molecular Absorption Spectroscopy*
4. *Molecular Fluorescence Spectroscopy*
5. *Flame Atomic Absorption Spectroscopy*
6. *Liquid Liquid Extraction*
7. *Theory of Chromatography*
8. *Ion Exchange Chromatography*
9. *Adsorption and Partition*
10. *Chromatography*
11. *Discussion of Experiments*