

SEP . . 1995

GRANDE PRAIRIE REGIONAL COLLEGE
ACADEMIC UPGRADING DEPARTMENT

CHEMISTRY 0110
COURSE OUTLINE

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COURSE

GOALS: This course is designed to provide the student with an understanding of some basic chemical concepts; atomic theory, the periodic table, bonding, nomenclature, and chemical equations, as well as developing laboratory and problem solving skills.

ATTENDANCE
POLICY:

Regular attendance is expected. If a student misses SIX classes he/she maybe barred from the final exam. Also if a student fails to attend THREE labs or fails to submit THREE lab reports he/she WILL be barred from the final. Arrangements will be made for ONE missed lab or test, if a student presents a doctor certificate or some other legitimate reason (death in the family). The doctor's certificate must be specifically for the hours of the missed class. Lab reports must be handed in on the required date and at the required time. Late lab reports will NOT be marked.

Late penalties for assignments are as follows:

1 day late - 25%; 2 days late -50%;
3 days late -100%.

There will be FREQUENT surprise quizzes. These quizzes cannot be made up if missed.

EVALUATE:

Lab reports:	15%
Assignments:	15%
Chapter tests:	20%
Surprise quizzes:	10%
Final exam:	<u>40%</u>
Total:	100%

CHEMISTRY 0110

CONTENTS

Only read sections of the text indicated here (remainder of text Ch 120 & 130).

Topics	Text Section(s)
- Scientific Method	1-1, 1-2, 1-3
- SI Units	2-1, 2-2, 2-3, 2-4 & workbook
- Uncertainty in Measurement	2-9
- Distinguish between Accuracy and Precision	2-10
- Significant Figures and Scientific Notation	2-11, 2-12, 2-13 (pg 34 35), 3-4 & workbook
- Density??	3-5, 4-5
- Heat and Temperature ??	5-5, 5-6
- Define Matter Distinguish between Mass and Weight	4-1
- Define Mixtures (Homogeneous, Leterogeneous & solutions)	4-3, 16-1, 16-2, 16-3
- Physical States	4-6
- Physical and Chemical Properties	4-7
- Physical and Chemical Changes	4-8
- Atoms - Subatomic Particles	6-1, 6-6, 6-16
- Historical Background	6-2, 6-5, 6-7, 6-8, 6-10 6-11
- Dalton's Theory (Law of Definite Proportions) (Law of Multiple Proportions)	6-3, 6-4
- Atomic Number (Z)	6-16 (pg 132 para 2)
- Atomic Mass Number (A)	6-19

- Atomic Mass Units	6-20, 6-21
- Isotopes	6-16 (pg 132 para 4)
- Atomic Structure Diagrams	
- Chemical Symbols	4-11
- Origin of the Periodic Table and Periodic Law	14-1
- Reading the Periodic Table and Valence Electrons	14-2 (omit yellow boxes)
- Metals, Nonmetals and semi-metals (Metalloid)	14-12, 7-3
- Lewis Dot Diagram	15-2 (fig 15-4, para 1 pg 393)
- Bonding	15-1
- Ionic Bonding (Ions)	15-2 (para 1 only)
- Covalent Bonding	15-3 (para 1 only)
- Octet rule	
- Nomenclature (Naming Compounds)	No organic compounds
- Single Valence Metals - Nonmetals (cations, anions and formula units)	7-4, 7-5 * workbook
- 2 - Nonmetals (molecules)	7-7 * workbook
- Variable Valence Metals - Nonmetals	7-6, 7-8 * workbook
- Polyatomic Ions	7-5, 7-6 * workbook
- Binary Acids	7-9 * workbook
- Ternary or Oxy-Acids	7-9 * workbook
- Conservation of Mass	4-9, 6-2, 6-4
- Balancing Equations	9-1, 9-3, 9-4, 9-8, 9-9, 9-10, 9-11, 9-12

* We will work mainly out of the workbook.