

JAN 18 2001

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What
course?

GRANDE PRAIRIE REGIONAL COLLEGE
DEPARTMENT OF SCIENCE AND TECHNOLOGY
DIVISION OF CHEMISTRY

CH 2130

WINTER 2001

Instructor: Barry Ramaswamy
Office: J218
Phone: Office: 539 2072 Home: 539 6239
Prerequisite: Chemistry 2110 or equivalent courses
Transfer Credits: U of Alberta, CH213 3 Credits
Lectures: Monday, Friday 1.00 – 2.20 pm
Laboratory: Friday 1.00 – 5.50 pm
Text Book: Quantitative Chemical Analysis, 5th Edition
Daniel C. Harris, WH Freeman and Company, 1998
Laboratory: Chemistry 213, Quantitative Analysis
B. Kratochvil and W.E Harris
University of Alberta, 2000

COURSE EVALUATION

| | |
|-------------------|------|
| Quizzes | 15% |
| Lab Work | 40% |
| Midterm | 15% |
| Final Examination | 30% |
| Total | 100% |

Note:

Quizzes: There will be a quiz every week during the term. The first Quiz will be on Friday, January 19, 2001. The Quiz will include Laboratory work and Lectures done in class. Attendance to the quizzes is compulsory. Absence due to illness has to be substantiated with a report from the nurse or the physician. Attendance to the Laboratory is Compulsory. Absence should be substantiated with a letter from the nurse or the physician.

SYLLABUS

1 Spectrophotometry.

A first look at Spectrophotometry. Simple spectrophotometer and Analysis using Spectrophotometers.

19-1, 19-2, 19-3, 19-4, 19-5,
20-1, 20-2, 20-3, 20-4, 20-6,

2 Electrochemistry

Electrochemistry, Redox Titrations, Polarography and Ion Selective Electrodes

15-1, 15-2, 15-3, 15-4, 15-5, 15-6, 15-7
16-1, 16-2, 16-3, 16-4, 16-5, 16-6, 16-7,
17-1, 17-2, 17-3, 17-4, 17-5
18-1, 18-2, 18-3, 18-6, 18-8

3 Atomic Spectroscopy and Spectrometers

Instrumentation and Simple Analysis

21-1, 21-2, 21-3, 21-4, 21-5,
22-1, 22-2, 22-3, 22-4, 22-5

4 Introduction to Analytical Separations

Solvent Extraction and Analysis

23-1, 23-2, 23-3, 23-4, 23-5

5 Chromatography

Gas Chromatography, High performance Liquid Chromatography, Ion Exchange Chromatography

24-1, 24-2, 24-3, 24-5, 24-7
25-1, 25-2, 25-3, 25-4, 25-5,
26-1, 26-2, 26-4,

6 Literature Search