

SC/CHEM 2030 3.0
Basic Inorganic Chemistry
Winter 2015

Lecturer

Dr. M.R. Hempstead

102 Life Sciences Building
736-2100, local 33523
mikey@yorku.ca

Course Description

The descriptive chemistry of the more common elements is discussed within the context of qualitative inorganic analysis. Principles of ionic equilibria in aqueous solution, elementary coordination chemistry and electrochemical potentials are presented.

Lectures

Lassonde Building room B

Time: Monday, Wednesday, Friday
10:30 - 11:20 a.m.

Tutorial

Lassonde Building room C

Time: Wednesdays
11:30 a.m. - 12:20 p.m.

Note: Tests are scheduled during the tutorial period and these are mandatory.

Office Hours

Tuesdays, 1:30-3:30.

Quizzes

Quizzes will be held during the tutorial period (Wednesdays from 11:30 a.m. to 12:20 p.m.). The dates of the quizzes will be announced in class. Absence from quizzes due to illness or other legitimate cause should be reported to Dr. Hempstead immediately. ***Supporting documentation for an illness must be completed by a physician within three business days of the absence. The physician must be able to confirm you were too ill to attend the quiz; the documentation cannot be based simply upon your description of the illness. Acceptable supporting documentation include the "Attending Physician's statement" from the Registrar petitions package (http://www.registrar.yorku.ca/pdf/attend_physician_statement.pdf) or a note of similar detail. Any documentation presented more than one week after an absence will not be accepted for consideration. Failure to meet any of these guidelines will require additional documentation for assessment for an extension.***

Grading Policy

The grade for this course will be calculated as follows:

Quizzes60%
Final Exam40%

Required Reference Material

"General Chemistry", Custom Edition (Basic Inorganic Chemistry).
R.H. Petrucci, F.G. Herring, J.D. Madura and C. Bissonnette
Publisher: Pearson

Several items are also on reserve at the Steacie Science and Engineering Library that are useful for various topics in this course. The following textbook is probably the most beneficial:

“Inorganic Chemistry”, second edition.

Catherine E. Housecroft and Alan G. Sharpe.

Publisher: Prentice Hall, 2005.

Moodle Site

The Moodle site for this course is an essential reference for notes, problem sets and solutions, announcements and administration of the course; ***the site should be checked regularly.***

Course Content

- | | |
|---|-------------------------------|
| 1. Ionic Equilibria in Aqueous Solutions | - Petrucci* chapters 15 - 18 |
| 2. Main-Group Chemistry: Groups 1 & 2, 13 & 14 | - Petrucci chapter 21 |
| 3. Oxidation Numbers, Reduction Potentials and Electrochemistry | - Petrucci* chapters 5 and 20 |
| 4. Main-Group Chemistry: Groups 15 through 18 plus Hydrogen | - Petrucci chapter 22 |
| 5. The Transition Elements | - Petrucci chapter 23 |
| 6. Complex Ions and Coordination Compounds | - Petrucci chapter 24 |
| 7. Molecular Symmetry, Structure and Bonding | - Shriver & Atkins, Chapter 6 |

References listed above give an overview of the content of the course. Additional material from other sources will be included; content will NOT be limited to that found in the textbook.

* Material in these sections will emphasize topics NOT covered extensively in CHEM 1001.

Important Course Information

All students are expected to familiarize themselves with the university policies on [Academic Honesty and Integrity](#), [Services for Students with Disabilities](#), [Religious Observance Accommodation](#), and the [Code of Student Rights and Responsibilities](#).

Breaches of academic honesty will not be tolerated. Students who breaches York's Academic Honesty Policy will be charged. Here are some examples relevant to this course:¹

- students who submit any material for remarking that has been modified in any manner to misrepresent the original assessment will be charged²
- students who misrepresent themselves during a quiz or examination or provide documentation for absence from either of these that is not legitimate will be charged

¹This is not intended to be an all-inclusive list.

²A selection of marked quizzes will be photocopied before they are returned.