## **Course Outline**

Course: CHMD39 Topics in Inorganic Chemistry

Term: Winter 2009

Lectures:

Monday 9:00 am -11:00 am (BV 264)

Instructors: Dr. Andrew Baer

#### **Contact Information:**

Dr. Andrew Baer: Office: SW 511A

Office hours: Tuesday 11:00 am - 12:00 pm

Thursday 11:00 am – 12:00 pm Email: abaer@utsc.utoronto.ca

### Course Overview:

Nature is full of complex self-replicating chemical systems built from simple building blocks. Supramolecular chemistry attempts to produce complex self-replicating systems synthetically. Inorganic supramolecular chemistry will be examined with an emphasis on the construction of model systems for biological systems. The various spectroscopic techniques used in the study of metals in synthetic, biological and environmental systems will also be studied. In addition, the role metals play in toxicity and the environment will be examined.

#### Required Texts:

Selected readings from the chemical literature will be given.

#### **Evaluation:**

2 Assignments 15% (7.5% each)

Term Paper: 15%

Class Presentation (Same topic as term paper): 10%

Midterm Test: 20% Final Exam: 40%

# Schedule:

Week	Topic	Notes	Room
January 5th	Supramolecular Chemistry		BV 264
January 12th	Supramolecular Chemistry		BV 264
January 19th	Supramolecular Chemistry	Assignment 1 Set	BV 264
January 26th	Supramolecular Chemistry	Assignment 1 Due	BV 264
February 2nd	Inorganic Spectroscopy		BV 264
February 9th	Midterm Test		BV 264
February 16th	Reading Week		BV 264
February 23rd	Inorganic Spectroscopy		BV 264
March 2nd	Inorganic Spectroscopy	Assignment 2 Set	BV 264
March 9th	Inorganic Spectroscopy	Assignment 2 Due	BV 264
March 16th	Presentations		BV 264
March 23rd	Inorganic Chemistry and the Environment		BV 264
March 30th	Inorganic Chemistry and the Environment	Term Paper Due	BV 264
TBA	Final Exam		