

## Syllabus; Fall 2016

**Course number:** 204-1-3411

**Course Title:** Inorganic Chemistry

**Instructor:** Prof. Ira A. Weinstock, Building 62, room 216

### Texts for required reading:

(1) "Inorganic Chemistry", Gary L. Meissler & Donald A. Tarr, 4<sup>th</sup> Edition, Pearson Prentice Hall

(2) "Inorganic Chemistry" Shriver; D. F.; Atkins, P. W., Fourth Edition, Oxford University Press.

### Topics covered and required reading (from Meissler & Tarr unless indicated):

Chapter 1	(Introduction):	1.1, 1.2, 1.5, 1.6
Chapter 2	(Atomic structure):	All (not covered in lecture)
Chapter 3	(Simple bonding):	All (not covered in lecture)
Chapter 4	(Symmetry):	Shriver & Atkins: 7.1-7.8
Chapter 5	(Molecular orbitals)	5.1-5.3; Shriver & Atkins 2.11-2.12
Chapter 6	(Acid-base)	All
Chapter 7	(Solid state)	All
Chapter 9	(Coordination chem I)	All
Chapter 10	(Coordination chem II)	Shriver & Atkins, 19.1-19.2 (pages 459-472)
Chapter 12	(Reaction mechanisms)	To be assigned

These above topics are pre-requisites to modern inorganic chemistry, catalysis, organometallic chemistry, biological-inorganic chemistry, materials chemistry and nanoscience.

### Grades:

Grades are based on an exam at the end of the semester.