

# **CHEM 4100 Advanced Inorganic Chemistry**

## **Course Description:**

This course aims to provide students a deeper understanding of modern inorganic chemistry. The concept of molecular symmetry as well as the elements and applications of group theory will be introduced. Two or more of the following topics will also be covered: metal clusters, advanced main group chemistry, inorganic catalysis, bioinorganic chemistry, and inorganic materials.

## **Main Course Outline (for reference only):**

1. Molecular Symmetry and Group Theory
2. Chemical Bonding
3. Molecular Vibrations
4. Selected Topics in Transition-Metal Chemistry
5. Selected Topics in Bioinorganic Chemistry