

**Instructor**

Prof. Matt Liptak  
Cook A116  
(802) 656 0161  
[matthew.liptak@uvm.edu](mailto:matthew.liptak@uvm.edu)

**Lecture**

MWF 12:00 - 12:50, Lafayette L302

**Office Hours**

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## Course Outline

### ***Unit #1 Fundamentals of Inorganic Chemistry***

- I. Atomic Theory
- II. Molecular Symmetry
- III. Vibrational Spectroscopy
- IV. Main Group Bonding

### ***Unit #2 Structure and Bonding in Inorganic Systems***

- V. Main Group Reactivity
- VI. Solid State Chemistry
- VII. Transition Metal Bonding
- VIII. Transition Metal Electronic Structure

### ***Unit #3 Spectra and Reactivity of Inorganic Complexes***

- IX. Electronic Spectroscopy
- X. Transition Metal Reactivity
- XI. Organometallic Reactivity
- XII. Bioinorganic Chemistry

## Problem Sets

Problem sets will be handed out approximately once a week throughout the course of the semester. These problem sets are intended to solidify your understanding of the major course concepts and challenge you to think critically using your new-found knowledge. Please

Problem sets are due at the ***beginning*** of class. Late Problem sets will not be accepted, but the two lowest scores will be dropped.

## Exams

Three exams are scheduled for Chemistry 231, which will cover units 1–3 separately. In other words, the exams will not be cumulative. Exams #1 and #2 are scheduled for 7 PM on **October 4** and **November 3**. Exam #3 will use our final exam time: **December 12** at 7:30 AM.

## Grading

Your grade will be based upon problem sets (25%) and three exams (25% each). I strive to be as accurate as possible when grading problem sets and exams, but will occasionally make a mistake. You may request a complete regrade of an assignment, plus a clear explanation for any lost points, at any point prior to administration of the final exam.