

Chemistry C430
INORGANIC CHEMISTRY
Indiana University Northwest

Textbook: Inorganic Chemistry, Miessler, Fischer, and Tarr, 2010, 5th ed.

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| <u>Grading:</u> | 3 Exams | 600 Points |
| | Final Exam | 300 Points |
| | <u>Homework</u> | <u>100 Points</u> |
| | Total | 1000 Points |

Exams are scheduled in lecture for September 22, October 22, and November 19. A comprehensive Final exam will be given on Thursday December 17.

Listed below are the guaranteed cut-offs for grades. These point cut-offs may be decreased at a later date, but they will not be increased under any circumstances.

Grade | Maximum Cutoff

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|----|----------|
| A | 830-1000 |
| A- | 800-829 |
| B+ | 770-799 |
| B | 730-769 |
| B- | 700-729 |
| C+ | 670-699 |
| C | 630-669 |
| C- | 600-629 |
| D | 500-599 |
| F | 000-499 |

Homework: Homework will be assigned from a combination of textbook problems and additional problems provided through announcements in Canvas. There will be ten 10-point assignments in all. Solutions will be made available after the due date.

General Requirements: Students are responsible for all lecture material, all reading material, and homework assignments. Students are expected to read material before it is covered in lecture.

Discussion: Discussion section is for going over homework problems and answering questions about lecture. No new material will be presented in discussion.

Withdrawal Policy: A student may withdraw at any time through Friday, October 25th without the consent of the instructor and receive the grade of W. Any student who decides to drop the course must fill out a withdrawal form or they will receive the grade of an F. After October 25th, a student may withdraw only with the permission of his or her Dean. The approval is given only for urgent reasons related to extended illness or equivalent distress. To then qualify for a grade of W, a student must be passing the course on the day of withdrawal. If the student is failing, the grade recorded on the withdrawal date will be an F. This

paragraph is University policy. Please make sure you understand this paragraph since no exceptions can be made.

General Outline: Material covered in Chapters 2 through 7 (excluding Chapter 4, Sec. 3), 9-10, 12-14, and selected topics, as time permits, will be covered in lecture. Following is a tentative course outline. Exam dates are not subject to change unless the University is closed on a scheduled exam date due to weather. The exam would then be given on the next scheduled lecture date.

| <u>DATE</u> | | <u>CHAPTER</u> | <u>MATERIAL COVERED</u> |
|-------------|----|--------------------------------------|----------------------------------|
| AUGUST | 25 | 2 | Review, Atomic Structure |
| | 27 | 2 | Atomic Structure |
| SEPTEMBER | 1 | 2 | Atomic Structure |
| | 3 | 3 | Lewis Structures, VSEPR |
| | 8 | 5.1-5.3 | Molecular Orbitals: Diatomics |
| | 10 | 4.1-4.2 | Symmetry |
| | 15 | 4.1-4.2, 4.4 | Symmetry, IR |
| | 17 | 4.4, 5 | Molecular Orbitals: Polyatomics |
| | 22 | Exam I (Chapters 2-5, excluding 4.3) | |
| | 24 | 9 | Coordination Compounds |
| | 29 | 9, 13.3 | Coordination Compounds |
| OCTOBER | 1 | 7 | Solids |
| | 6 | 7 | Solids |
| | 8 | 7 | Solids |
| | 13 | 6 | Acids and Bases |
| | 15 | 6, *Special* | Acids and Bases, Redox Reactions |
| | 20 | *Special* | Redox Reactions |
| | 22 | Exam II (Ch. 6, 7, 9, 13.3, Redox) | |

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| | 27 | 10 | Transition Metal Complexes |
| | 29 | 10 | Transition Metal Complexes |
| NOVEMBER | 3 | 10 | Transition Metal Complexes |
| | 5 | 12 | Reactions of Complexes |
| | 10 | 12 | Reactions of Complexes |
| | 12 | 13 | Organometallic Chemistry |
| | 17 | 13 | Organometallic Chemistry |
| | 19 | Exam III (Chapters 10, 12, 13) | |
| | 24, 26 | Thanksgiving (No Class) | |
| DECEMBER | 1 | 14 | Reactions and Catalysis |
| | 3 | 14 | Reactions and Catalysis |
| | 8 | *Special* | Bioinorganic Chemistry |
| | 10 | *Special* | Bioinorganic Chemistry |
| | 17 | Final Exam (Cumulative) | |