

*Chemistry 4610/5560, Inorganic Chemistry*  
*Fall 2018*  
*Department of Chemistry*  
*University of North Texas*

**Lecture:** Chemistry 106, Mondays and Wednesdays 2:00-3:20PM

**Instructor:** Dr. Mohammad A. Omary

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**Office hours:** 9:30-10:30 AM Mondays and 12:30-1:30 PM Wednesdays; available other times on a drop-in or appointment basis.

**Text:** Miessler, G. L.; Fischer, P. J.; Tarr, D. A., "Inorganic Chemistry", 5<sup>th</sup> Edition, Prentice Hall: Upper Saddle River, 2014. ISBN-13: 978-0321811059; ISBN-10: 0321811054. Previous editions are also OK but please follow the instructor's instructions regarding the end-of-chapter problems.

**Optional but highly recommended:** Any inorganic model set.

**TENTATIVE TOPICS BREAKDOWN BY EXAM MATERIAL**

**Exam 1 Material:**

- Atomic Structure (Chapter 2)
- Simple Bonding Theory (Chapter 3)
- Symmetry and Group Theory (Chapter 4)

**Exam 2 Material:**

- Molecular Orbitals (Chapter 5)
- Coordination Chemistry I: Structures and Isomers (Chapter 9)
- Coordination Chemistry II: Bonding (Chapter 10)
- Coordination Chemistry III: Electronic Spectra (Chapter 11)

**Final Exam Material (in addition to above material):**

- Organometallic Chemistry (Chapter 13)
- Organometallic Reactions and Catalysis (Chapter 14)

**Grading policy:** Grading depends on whether you are enrolled in CHEM4610 or CHEM5560:

**CHEM 4610 students:** There will be two mid-term exams (2 x 20 = 40 points), quizzes (20 points), and a final exam (40 points). The final letter grade for the course will be based on the total points of the exams.

**CHEM 5560 students:** There will be two mid-term exams (2 x 20 = 40 points), quizzes (20 points), and a final exam (40 points). A term paper about a topic approved by the instructor will be mandatory and will be graded as "satisfactory" or "unsatisfactory". The final letter grade for the course will be based on the total points of the exams and term paper. A "satisfactory" grade in the term paper will not affect your course grade while an "unsatisfactory" grade will discount 10 points from the course grade.

**Disability Accommodations:** All reasonable accommodation will be made to facilitate special needs. However, it is the student's responsibility to make any special needs known to the instructor. It is recommended that students with special needs first meet with the staff of the Office of Disability Accommodation (ODA), Sage Hall, 167, Tel. (940) 565-4323, then meet with the instructor. For more information, see ODA website (<http://disability.unt.edu/>).