

CHEM 633 Principles of Inorganic Chemistry

Fall 2019

MWF 9:10 – 10.00 am

Room 2122

Instructor: Michael Nippe, R320 ('32 wing);

Contact: Email for course related subjects: nippe@tamu.edu

Office Hours: by appointment

Description: The course is intended for first year graduate students. However, any student with interest in the area is welcome (after approval of the instructor). Principles and concepts of inorganic chemistry including electronic structure and bonding, periodic trends, thermodynamics, and reactivity will be discussed.

Learning Outcomes or Course Objectives: Students will develop: 1) a general understanding of electronic structure periodic trends in the chemistry of the elements; 2) a firm knowledge of inorganic transition metal chemistry and reactivity.

Recommended Texts:

DeKock and Gray, Chemical structure and Bonding, 2nd Edition, University Science Books

Housecroft and Sharp, Inorganic Chemistry, 3rd Edition, Pearson

Other Texts:

Cotton, Wilkinson, Murillo, and Bochmann, Advanced Inorganic Chemistry, 6th Edition, John Wiley & Sons

Shriver and Atkins, Inorganic Chemistry, 5th Edition, W. H. Freeman

Drago, Physical Methods in Chemistry, 2nd Edition, Saunders

Cotton, Chemical Applications of Group Theory, 3rd Edition, John Wiley & Sons

Harris and Bertolucci, Symmetry and Spectroscopy, Dover

Albright, Burdett, and Whangbo, Orbital Interactions in Chemistry, John Wiley & Sons

Evaluation: Assignments and grading procedure:

- Exams 1 - 3: 15% each
- Final exam: 30%
- Assignments: 25%

Americans with Disabilities Act (ADA)

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Texas A&M University and the College of Science are committed to fostering a learning environment that is safe and productive for all. University policies and federal and state laws provide guidance for achieving such an environment. Although class materials are generally

considered confidential pursuant to student record policies and laws, University employees — including instructors — cannot maintain confidentiality when it conflicts with their responsibility to report certain issues that jeopardize the health and safety of our community. As the instructor, I must report (per Texas A&M System Regulation 08.01.01) the following information to other University offices if you share it with me, even if you do not want the disclosed information to be shared:

- Allegations of sexual assault, sexual discrimination, or sexual harassment when they involve TAMU students, faculty, or staff, or third parties visiting campus.

These reports may trigger contact from a campus official who will want to talk with you about the incident that you have shared. In many cases, it will be your decision whether or not you wish to speak with that individual. If you would like to talk about these events in a more confidential setting, you are encouraged to make an appointment with the Student Counseling Service (<https://scs.tamu.edu/>).

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Academic Integrity

For additional information please visit: <http://aggiehonor.tamu.edu>

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