Chemistry 300 – Inorganic Chemistry I

Fall 2015, MWF 1:00-1:50am (SL102)

Dr. Jeffrey J. Bodwin Hagen 103E/407H

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Office hours subject to change, check web page

Required Material:

Office hours:

"Inorganic Chemistry" Gary Wulfsberg

CHEM 300 Inorganic Chemistry I (3) Aspects of bond theory, periodicity, acid-base chemistry, redox chemistry, reaction kinetics, energetics and chemistry of the elements.

Grading:

Grades will be based upon 3 exams (100pts. each), 1 written and 1 oral review of a journal article (30pts each), and a final exam(200pts, Dec. 11, 11:30am). Tentative grade assignments are: A = 100-90%, B = 89-80%, C = 79-70%, D = 69-60%. These cutoffs *may* be lowered, but will not be raised.

Written review: The ability to critically read scientific literature requires practice. A written review and critique of a recent article will be due by the beginning of class on October 30th.

- 1. You must select a recent full article related to inorganic chemistry. Communications, Notes and other short-form publications are not acceptable. A "recent" article is one that has been published in the last 6 months (April 2015 to current issues).
- 2. Your article must come from the Journal of the American Chemical Society, Inorganic Chemistry, or Organometallics. These are all American Chemical Society journals {http://pubs.acs.org/about.html} and are available on-line from any campus computer. If you find an exceptional article in a different journal that you would prefer, talk to me about it.
- 3. Your summary must include the following sections:
 - a. Summary of the article.
 - b. Critique of the science presented in the article. Is there a clearly stated (or at least implied) hypothesis? Are all hypotheses supported by data? Is the data interpretation reasonable? Are the data complete, or have key points/experiments been omitted? Are there additional experiments you would like to see to support the hypotheses presented in the article?
 - c. Specific description of the *inorganic* chemistry as related to Chem 300 topics when possible.
 - d. Critique of the stylistic presentation of the article. Was it written clearly? Was the science presented in a clear and understandable manner? Given the procedure(s) presented in the article, do you feel that you could repeat the experiment? (Assume you have a fully supplied lab and instrumental facility.) Were the figures, tables and data presented clearly? How could the article have been improved?

Oral review: At some point in November, each person will present an oral review and critique of a recent article to the class. The article must be supplied 1 week in advance to the class and should follow the same guidelines as the written review. Schedules and topics will be determined mid-semester.

Attendance: Regular and punctual attendance is expected and may be recorded. Late arrival on exam days is not acceptable as it disturbs those who arrive on time; therefore, no exams will be distributed after the test period has begun. If you anticipate that this will be a problem, let me know BEFORE the exam. There will be no make-up exams. If you will miss an exam, let me know as soon as possible.

Academic Honesty

Cheating will not be tolerated and will be reported to all relevant offices. For a full description of the MSUM Academic Honesty Policy, please see the Student Handbook.

{http://www.mnstate.edu/sthandbook/POLICY/index.htm}

Disability Access Statement: Students with disabilities who believe they may need an accommodation in this class are encouraged to contact Greg Toutges, Director of Disability Services at 477-4318 (Voice) or 1-800-627-3529 (MRS/TTY), Flora Frick 154 as soon as possible to ensure that accommodations are implemented in a timely fashion."