

*Instructor:* Dr. Deanna L. Zubris  
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*Office hours:* T 3:30–4:30 pm, W 2:30–3:30 pm and by appointment

*Text:* *Descriptive Inorganic Chemistry*, 4<sup>th</sup> Edition, Geoff Rayner-Canham, Tina Overton, W. H. Freeman and Co., 2006. ISBN: 978-0-7167-8963-5. *Required.*  
*Solutions:* Same title and authors as above. ISBN: 978-0-7167-6177-8. *Optional.*  
*Website:* <http://bcs.whfreeman.com/rayner4e/>  
*Lectures:* MWF 12:30–1:20 pm, Mendel 256  
*Recitations:* Section 001: W 8:30–9:20 am, Mendel 256  
Section 002: F 8:30–9:20 am, Mendel 256

#### *Contents:*

Inorganic chemists investigate every element of the periodic table. Understandably, inorganic chemistry plays an increasingly important role in many aspects of modern-day life. Materials science, polymer science, agriculture, and pharmaceuticals all benefit from advances in the field of inorganic chemistry. This course will provide a foundation for understanding many practical applications of inorganic chemistry. Topics such as atomic structure, ionic compounds and their solutions, acids and bases, electrochemistry, thermochemistry, periodic trends, Lewis dot structures and VSEPR theory, molecular orbital theory, bonding in solids, and coordination compounds will be discussed. Throughout the course, there will be an emphasis on chemical bonding. This class is designed to reinforce experiments from the companion laboratory course, CHM 1301 (Inorganic Chemistry Laboratory I).

*Attendance policy:* Attendance is mandatory for all students.

- Attendance in lectures and recitations is compulsory for freshmen. A student will fail a course (receive a grade of Y) whenever he/she has been absent unexcused once more than double the number of weekly meetings for the course. A student who misses nine class periods for CHM 1311 will receive a failing grade.
- Excused absences will be granted for the following reasons: approved athletic participation or participation in approved academic events, official university business, approved field trips, certified serious illness, death in the immediate family, or approved placement activities. The Student Absence Card, available from the Dean's Office, must be presented to the Dean no later than 4:30 pm on the day the student returns to classes. In the event of an excused absence, it is the student's responsibility to meet with the instructor to make up the work that was missed during the excused absence.

#### *Grading:*

Final grades will be assigned according to the following scale:

- 90–100% A<sup>-</sup> / A
- 75–89% B<sup>-</sup> / B / B+
- 60–74% C<sup>-</sup> / C / C+
- 45–59% D<sup>-</sup> / D / D+
- < 45% F

*Grading:*

Midterm Examination:	20%
Final Examination:	35%
In-class Quizzes:	45%

*General Policies:*

1. There will be one in-class 50-minute exam (midterm exam) held on Friday, October 9. The final exam will be cumulative and will be held during final exam period on Monday, December 14, from 1:30 pm – 4:00 pm.
2. Quizzes will be held during the first 25 minutes of class on the following days: September 4<sup>th</sup>, September 18<sup>th</sup>, October 2<sup>nd</sup>, October 30<sup>th</sup>, November 13<sup>th</sup>, and December 4<sup>th</sup>. The quiz problems will be similar in difficulty and content to exam problems. At the end of the semester, I will drop your lowest quiz grade. Your quiz average will be calculated using your remaining quiz grades.
3. Answer keys for quizzes and exams will be distributed electronically, as announced in class.
4. Extra credit assignments will be distributed periodically; completion of these assignments is encouraged.
5. A student who misses class due to an unexcused absence will not be given the opportunity to make up a quiz, exam, or an extra credit assignment distributed during their absence. In the event of an excused absence, it is the student's responsibility to meet with the instructor *as soon as possible* to make up the work that was missed during the excused absence.
6. Homework problems and reading assignments will be distributed periodically throughout the course. While homework problems will not be collected and graded, they are intended to reinforce concepts from class so I suggest that you give them your best effort. During recitations, we will go over homework problems and discuss your questions regarding the class material. It is to your advantage to complete homework and extra credit assignments since you may see these problems again on quizzes and examinations.
7. Please be respectful of your peers: arrive promptly for class and turn off all electronic devices (such as cell phones). If your laptop computer is needed for a specific class session, I will inform you in advance.
8. It is the policy of Villanova University to make reasonable academic accommodations for qualified individuals with disabilities. If you are a person with a disability, please make arrangements to register with Nancy Mott at the Office of Learning Support Services (610-519-5636, [nancy.mott@villanova.edu](mailto:nancy.mott@villanova.edu)) as soon as possible. Registration is needed in order to receive accommodations.

*Important dates:* .....

Last day for drop/add:	August 30	<i>Quiz 1:</i>	September 4
Labor Day:	September 7	<i>Quiz 2:</i>	September 18
Semester recess:	October 12-16	<i>Quiz 3:</i>	October 2
Midterm grades submitted:	October 21	<i>Midterm exam:</i>	October 9
Advising begins for Spring 2010:	October 23	<i>Quiz 4:</i>	October 30
Last day for authorized withdrawal:	November 11	<i>Quiz 5:</i>	November 13
Thanksgiving recess:	November 25–27	<i>Quiz 6:</i>	December 4
Friday UG class day	December 8	<i>Final exam:</i>	December 14
Final day of this class:	December 9		