

*Instructor:* Professor Craig P. Jasperse, Ph.D.

*Office:* 250 Dunbar Hall: Office is through the door in the back of the lab!

*Office Phone:* 231-6249 (don't leave messages, the message thing doesn't really work well)

*e-mail:* [Craig.Jasperse@ndsu.nodak.edu](mailto:Craig.Jasperse@ndsu.nodak.edu) or [jasperse@mnstate.edu](mailto:jasperse@mnstate.edu)

*Office Hours:* Tuesdays and Thursdays, 1-2:30 p.m. But I will normally be in my lab/office from 8:30-5:30 any time other than class time, so feel free to visit.

*Text:* "Chemistry: A World of Choices"

*Authors:* Kelter, Carr, and Scott; McGraw-Hill Publishing 2003

*Lectures:* MWF 2:00 - 2:50 p.m. Sudro 27

*Websites:* <http://www.mnstate.edu/jasperse/> (Jasperse's site)  
<http://genchem.chem.ndsu.nodak.edu/chem117/> (Oswald's site)

***Please Note:* Students are required to have completed Math 103 (college algebra) or an algebra equivalent from another institution prior to enrolling in this course. Drop this course if you have not completed this requirement.**

***Course Description/Objectives:*** To provide a one-term introduction to the concepts in general and organic chemistry, with applications drawn from the human body, our environment, and the materials we use.

Selected end-of-chapter practice problems will be delivered in-class as the chapters are covered.

Prelude: On the Need to Know

Chapter 1: Origins

Chapter 2: Connections

Chapter 14: The Power of the Nucleus

***Exam 1: Wednesday, October 6<sup>th</sup> during class, Prelude, Chapters 1, 2, 14, and 3***

Chapter 3: Bonding

Chapter 4: Recycling and Chemical Mathematics

Chapter 7: Properties of Water

Chapter 8: Acids and Bases

***Exam 2: Wednesday, November 3<sup>rd</sup> during class, Chapters 3, 4, 7, & 8***

Chapter 6: Creating With Carbon: The Importance of Molecular Structure

Chapter 16: The Chemistry of Life

The instructor reserves the right to select other topics of interest related to our world.

***Final Exam: Monday, December 13<sup>th</sup>, 8:00-10:00 a.m. in Regular Classroom.***

1) **Required Student Resources.** Our text is *Chemistry: A World of Choices*, by Kelter, Carr, and Scott, 2<sup>nd</sup> Ed., McGraw-Hill Publishing, 2003. You will also need a simple, math calculator. Visit the Varsity Mart for these items. A **solutions manual** for the textbook, with answers and explanations for all the book problems, is strongly recommended.

2) **Evaluation procedures and criteria** are based upon performance on homework and examinations.

Grading Summary:

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Tests	200 points (2 x 100)	A	88%
Final exam	100 points (1 x 100)	B	76%
Takehome Quizzes	??? (maybe around 100 points?)	C	62%
+10 points extra credit possible for perfect attendance		D	50%

**The instructor may lower but will not raise the percentage required for a Letter Grade.**

3) **Attendance:** Faithful attendance is important (and I do care if you come!) To reinforce your self-discipline, perfect attendance will be rewarded with 10 points of extra credit and a single absence with 5 points of extra credit. I will excuse absences at my discretion if the reason is good and I am notified. Be sure to sign the attendance sheet each day!

4) **Make-up exams are not provided for absences from a scheduled exam.** Emergency situations are handled on a case-by-case basis. Please contact Dr. Jasperse to discuss other options if you are absent.

5) **Special Needs.** Every effort will be made to accommodate students with disabilities. Please share these concerns or requests with the instructor as soon as possible.

6) **Academic Responsibility.** All work in this course must be completed in a manner consistent with NDSU University Senate Policy, Section 335, *Code of Academic Responsibility and Conduct*: (<http://www.ndsu.nodak.edu/policy/335.htm>)

7) **A few more words about the course.** Kelter's text was selected because it utilizes us and the world around us as the context for learning basic chemistry. *You must read the book!*

8) **Recitation section: Tuesdays 5-6:15, Minard 138.** These are sections led by Gregory Oswald, who teaches the huge Chem 117 section. Worksheets are used routinely with problems geared toward critical thinking skills and problem-solving. These exercises are very important as they encourage group learning in and outside the classroom. The worksheets will normally be available for printing from the Oswald's website. (I'll have that linked from my website).

9) **Notes:** I will be essentially working from the same notes as have been developed for the giant section of Chem 117. Mr. Oswald will be posting links to the notes on his website.

10) Learning chemistry is, in many ways, like learning a new language. There will be plenty of vocabulary (e.g., element, compound names, and symbols), syntax (e.g., compound formulas and structures) and grammar (e.g., writing chemical reactions) to learn. **Make some memorization and drill part of every study session** so the new language does not become too overwhelming later as we start "talking chemically."

11) *Note on Gen Ed. Requirements:* This course is approved for Category 3, Science and Technology, because it emphasizes the use of methods of inquiry to analyze gathered information from the world around us to understand physical phenomenon and the impact they have on our society, health, and well-being. Students will meet these educational outcomes by effective evaluation via homework and hour examinations.