

**Instructor:** Dr. K. Walters  
SC 348  
572-5315  
walterske@nku.edu  
<http://www.nku.edu/~walterske>

**Office Hours:** I have an open office policy, so stop by whenever you have a question (I will not always be in my office but will always indicate where I can be found or when I will return). My formal office hours are as follows: M 1:00 – 2:00, TR 9:30 – 10:30, W 1:00 – 1:30, F 9:00 – 10:00. Feel free to make an appointment for any other time. I will also schedule “online” office hours on Blackboard from time to time.

**Prerequisite:** High school chemistry and an ACT math score of 20 or greater, C or better in CHE 102(formerly 110), or placement

**Corequisite:** CHE 120L (any section) – **Should you drop CHE 120 you will be also dropped from CHE 120L**

**Objectives:** The NKU General Chemistry faculty have agreed on the following common learning objectives for CHE 120. A more comprehensive list of learning objectives is available on the course blackboard site.

1. Perform calculations involving chemical and physical processes, use the factor label method, record numerical answers with proper units, and attain proficiency in the proper use of scientific notation and significant figures, including the concept of uncertainty in scientific measurements.
2. Name compounds and ions, write their chemical formulas, calculate their molar masses and percent composition, and determine the empirical and molecular formulas of compounds.
3. Classify substances, reactions, and processes according to various classification schemes.
4. Complete and balance chemical equations, determine whether or not a reaction actually occurs based on chemical and physical properties of the reactants and products, and solve stoichiometry problems.
5. Describe and calculate the energy changes involved in chemical reactions and physical processes.
6. Describe the atomic and electronic structure of the elements.
7. Predict the relative magnitudes of physical properties of elements on their electronic structures.
8. Describe the intramolecular and intermolecular bonding of substances, determine the structures of compounds, and relate the bonding type and/or structures of substances to their chemical and physical properties.
9. Describe properties of real and ideal gases using the Kinetic Molecular Theory and perform calculations based on ideal gas laws.

**The Student:**

1. ...should always come to lecture on time.
2. ...should stay *ahead* of the lecture in the textbook.
3. ...should come to lecture already having read the anticipated material to be covered.
4. ...should participate in lecture at every opportunity to demonstrate comprehension.
5. ...should complete all assignments on time.
6. ...should try to have at least a little fun learning chemistry.

**The Instructor:**

1. ...should always be on time for lecture and be prepared to teach.
2. ...should present material in a clear, organized manner at a speed necessary to cover all topics.
3. ...should encourage the student to think about the presented material creatively.
4. ...should assign appropriate problems to help the student master the material.
5. ...should prepare fair, thorough exams that cover the presented material.
6. ...should be absolutely impartial in all matters grading.
7. ...should have lots of fun teaching chemistry.

**Required Text:** *Chemistry: The Molecular Science*, by Moore, Stanitski and Jurs (2<sup>nd</sup> Edition), Thomson/Brooks-Cole, 2004.

**Course Content:** Chapters 1–10

**Web Enhanced:** This is a web enhanced course. Students meet at regularly scheduled class time and will need access to the internet to fulfill course requirements. All sections of CHE 120 are web enhanced.

- Blackboard:** The NKU Blackboard website is used extensively in this course (<http://learnonline.nku.edu>). Course announcements, grades, online supplementary materials, discussion boards, and online quizzes are available *only* through the site, and you are responsible for all posted information. Take advantage of all the presented material (especially the discussion board), and please post questions to me on the discussion boards if possible rather than sending me email. You should also utilize the NKU General Chemistry website ([http://www.nku.edu/~chemistry/general\\_chem/](http://www.nku.edu/~chemistry/general_chem/)), where you will find helpful handouts and old exams.
- Attendance:** Attendance will be taken in lecture via CPS at the beginning of class. If you arrive late you must let me know that you attended lecture at the end of the period, or **you will be counted absent**. You get 2 “free” absences (no excuse necessary) during the term. Any additional absences will result in the **deduction of 5 points** from your final course grade. If you have a legitimate reason to be absent, it can be excused if you provide me with appropriate documentation. Even if you are absent, you are responsible for all information, material, and assignments presented in lecture in addition to any material posted on Blackboard. Tardiness is also not tolerated in this class, since it is disruptive to both me and your fellow students. **For every four tardy lectures, you will receive one absence on your attendance record.** I go by the clock in SC 308, not your watch!
- Participation:** During lecture you will be asked to answer questions in class to determine mastery of the different topics that we are currently discussing. You will answer these multiple-choice questions via CPS, which keeps a record of your participation and right/wrong answers. I use this information to see who needs additional help on particular topics as well as who is actively participating in the lecture. Even if you are present but choose not to participate, you risk losing points from the participation portion of your course grade.
- Studying:** It has been said that students should spend 2-3 hours studying for each hour of lecture. Science courses tend to err on the high side of this estimate, so you should commit yourself to studying **7-10 hours each week** during the course. Cramming the last night or two before exams will not be sufficient to comprehend the material.
- OWL:** A requirement of this course is for you to participate in OWL (Online Web-Assisted Learning), an online homework system that gives you the opportunity to master the concepts of this course through repetition (including answering selected end of chapter problems from your textbook in OWL). You will be assigned modules to complete by posted due dates (normally midnight Thursday and Monday, see the course calendar). Failure to complete modules in a timely manner will adversely affect your homework grade. A tutorial session for OWL will be held during your first lab section. I tend to take questions directly from assigned homework problems when I write quizzes and exams, so it is in your best interest to do your best on these problems!
- Quizzes:** There will be eleven quizzes conducted online in Blackboard during the term. Each quiz is worth 10 points and will consist of five or six true/false, multiple choice, and/or short answer questions. Quizzes will be available to take from midnight on selected Wednesdays and Fridays to 2AM the next day as indicated on the course calendar. You will have 45 minutes to complete each quiz. Each student will not receive the same quiz, as each is a random combination of similar questions covering recent topics presented in lecture. You are expected to take your quiz individually and not work together (the NKU Honor Code applies). **There will be no makeup quizzes under any circumstance (including network problems), and missed quizzes will be assigned a zero grade.** Note further that **unannounced quizzes** may be conducted in lecture during the term. You can expect at least three or four in-class quizzes. Only your ten highest quiz scores will count towards your final grade.
- Exams:** There will be three exams during the semester (9/12, 10/10, and 11/16) in addition to the comprehensive final exam (Thursday 12/14, 10:10 – 12:10). Each student who misses any exams will be allowed **one makeup exam** during the semester **only if they personally contact me within 24 hours of the original exam date.** The makeup exam must normally be taken **within three weekdays** of the original test date. You will be required to provide an appropriate reason (and documentation) to qualify for a makeup exam. Note also that makeup exams are usually more challenging than the original exam.
- Honor Code:** The work you will do in this course is subject to the Student Honor Code. The Honor Code is a commitment to the highest degree of ethical integrity in academic conduct, a commitment that, individually and collectively, the students of NKU will not lie, cheat, or plagiarize to gain an academic advantage over fellow students or avoid academic requirements. You should familiarize yourself with the Honor Code at the following website: [http://www.nku.edu/~deanstudents/student\\_rights/honor\\_code.htm](http://www.nku.edu/~deanstudents/student_rights/honor_code.htm)
- Cheating:** Cheating will not be tolerated in this course. In accordance with the Code of Student Rights and Responsibilities, faculty members have the right to determine actions to be taken when a student is caught cheating. In this course, students caught cheating and/or plagiarizing is grounds for immediate dismissal and an F course grade, along with a report filed with Dean of Students.

**Calculators:** **Programmable and graphing calculators are not permitted during exams.** Calculators should be brought to class **every day**, as they will be needed during lecture examples and will be necessary for taking the quizzes and exams. Under no circumstances may calculators be shared during exams, and the lack of an operable calculator will not excuse you from completing the problems! You should also **practice** with this calculator before you use it in an exam!

**Cell Phones:** Cell phones, pagers, and all watch alarms should be turned off (or placed on silent) during class. Furthermore, cell phones and pagers must be put away during class. Should you receive a phone call that you must answer, please quietly leave the lecture room to do so (do not abuse this privilege or it will be taken away). Should your device audibly ring during class, you will be asked to leave with no further discussion and receive an unexcused absence for the day. **Use of a cell phone or pager during an in-class quiz or exam will be considered cheating**, and appropriate actions will be taken by the instructor.

<b>Grade Breakdown:</b> Quizzes (10 pts. each, highest 10 count)	= 100 points
Homework and Participation (100 pts total)	= 100 points
3 Exams (200 pts. each)	= 600 points
Final Exam (200 pts.)	= 200 points
<b>Total possible points</b>	<b>= 1,000 points</b>

<u>Point Total</u>	<u>Grade</u>
900 – 1000	A
800 – 899	B
700 – 799	C
600 – 699	D
0 – 599	F

**A C or better is needed in this course to enroll in CHE 121!**

**Other Items:**

- All items on this syllabus are subject to change by the instructor. Check the NKU Blackboard website regularly for updates.
- Students are responsible for reading and understanding all items on the syllabus. Any items not understood must be brought to the attention of the instructor within the first two weeks of class.
- Faculty members reserve the right to dismiss or to have removed a disruptive student from their classrooms.
- No smelly, messy, or loud food is allowed in class. Violators will be asked to leave.
- Students with disabilities who require accommodations (academic adjustments, auxiliary aids or services) for this course must register with the Disability Services Office. Please contact the Disability Service Office immediately in the University Center, Suite 320 or call 859-572-6373 for more information. Verification of your disability is required in the Disability Services Office for you to receive reasonable academic accommodations. Visit the Disability Services website at [www.nku.edu/~disability/](http://www.nku.edu/~disability/).

## CHE 120-N04 (Walters) Fall 2006

MONTH (WEEK #)	MON	TUES Lecture 10:50 – 12:05	WED	THUR Lecture 10:50 – 12:05	FRI
August (1)	21 Classes Begin	22 1	23	24 1/2	25 BB Quiz 1
(2)	28	29 2	30 BB Quiz 2	31 3	1
September (3)	4 No Classes	5 3	6 BB Quiz 3	7 3/Review	8
(4)	11 Last Day to "X"	12 Exam 1 (1-3)	13	14 3/4	15
(5)	18	19 4	20 BB Quiz 4	21 4/5	22
(6)	25	26 5	27 BB Quiz 5	28 5	29
October (7)	2	3 5	4 BB Quiz 6	5 5/Review	6
(8)	9	10 Exam 2 (3-5)	11	12 6	13
(9)	16 No Classes	17 No Classes	18	19 6	20 BB Quiz 7
(10-NCW)	23	24 6/7	25	26 7	27 BB Quiz 8
November (11)	30 Last Day to "W"	31 7	1	2 7	3 BB Quiz 9
(12)	6	7 8	8	9 8/9	10 BB Quiz 10
(13)	13	14 Review	15	16 Exam 3 (6-8)	17
(14)	20	21 9	22 No Classes	23 No Classes	24 No Classes
December (15)	27	28 9	29	30 9/10	1 BB Quiz 11
(16)	4	5 10	6	7 10	8 Classes End
(17)	11	12	13	14 Final Exam 10:10 – 12:10	15

- Notes:**
- This schedule is subject to change by the instructor. Please check Blackboard regularly for updates.
  - Numbers indicate chapter content to be covered each class period.
  - Blackboard (BB) quizzes are available online from midnight of the indicated day until 2AM the following morning. Students have 45 minutes to complete the quiz during that time window.
  - Bold borders indicate OWL midnight homework deadlines. See your syllabus and the OWL website for more details.