

Chem 1212 – MTWR 9:20 – 11:00 a.m. Summer, 2009

Instructor: Dr. Aimée Tomlinson
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Office Hours: MTWR 11:00 – 12:00 p.m.,
and by appt

Prerequisites: A passing grade in 1211 lecture and lab.

Corequisites: 1212 lab must be taken at the same time as this lecture unless you can prove you have already successfully completed this class.

Course Objective: This course is the second semester of a two-semester general chemistry sequence. It is intended for students who plan on majoring in the sciences. We will examine gases, liquids, solids, properties of solutions, kinetics, chemical equilibrium, acids, bases, buffers, titrations, solubility, thermodynamics, and electrochemistry.

Required Text: *Chemistry* by McMurry and Fay; Pearson Prentice Hall, 2008
(ISBN-13: 978-0-13-199323-5)

Web Sites: <http://www.masteringchemistry.com> – MCTOMLINSON93862
<http://radar.ngcsu.edu/~altomlinson/index.htm>
<http://www.facebook.com>

Also Required: Calculator with exponential and logarithmic functions (if it is programmable I will make you erase the memory prior to a test), a functioning writing tool, paper, and enough caffeine to make sure you stay awake from 9:20 – 11:00 a.m on Monday through Thursday.

Exams:

Four exams will be given over the course of the semester. Makeup exams are given only by previous consent. The final will be comprehensive over both semesters and will be the ACS general chemistry exam.

Assignments:

You will be given a problem set(s) from each chapter which must be completed on the Mastering Chemistry website. These exercises were chosen to prepare you for exams.

Course Evaluation: Final course grades will computed/evaluated according to the allocations below.

Four Exams (16% each)	64%
Homework	16%
Final Exam	20%

I will be giving final grades based on a straight 90, 80, 70, 60 percentage. As such you must obtain a score of at least 60% in order to pass this course.

Extra Credit: There is none so don't ask.

Schedule: Some material may be either deleted or supplemented from the chapters below.

- I. *Chapters 10, 11* — Gases and gas laws, intermolecular forces, solid structures, vapor pressure, phase diagrams, solution chemistry, boiling and freezing points, osmotic pressure and colligative properties

Exam #1 (Tuesday, June 30)

- II. *Chapters 12, 13* Chemical kinetics, rate laws, reaction mechanisms, catalysis, chemical equilibrium, homogeneous and heterogeneous equilibria, and Le Châtelier's Principle

Exam #2 (Thursday, July 9)

- III. *Chapters 14, 15* — Acids, bases, pH, salts, common ion effect, buffers, titrations, indicators, precipitation, and equilibria involving complex ions

Exam #3 (Monday, July 20)

- IV. *Chapter 16, 17* — Spontaneity, entropy, thermodynamic laws, free energy, redox reactions, galvanic and voltaic cells, batteries and electrolysis

Exam #4 (Tuesday, July 28)

- V. **Cumulative (Thursday, July 30 from 7:30 – 9:30)**

Academic Integrity Code:

North Georgia College and State University is dedicated to providing an educational climate characterized by integrity. Academic integrity, in particular, must be the cornerstone of an institution of higher learning and must pervade all segments of the University community. Furthermore, academic integrity is the mutual responsibility of the various constituencies (students, faculty, staff, and administration) which comprise the University.

Academic Integrity Defined

The following regulations define the concept of academic integrity and should be useful in determining standards and attitudes appropriate for optimal intellectual functioning.

1. No student shall receive or give assistance not authorized by the instructor in the preparation of any essay, laboratory report, examination, or other assignment included in an academic course.
2. No student shall take or attempt to take, or otherwise procure in an unauthorized manner, any material pertaining to the conduct of a class, including but not limited to tests, examinations, laboratory equipment, and roll book.
3. No student shall sell, give, lend, or otherwise furnish to any unauthorized person material which can be shown to contain the questions or answers to any examinations scheduled to be given at any subsequent date in any course of study offered by the university, without authorization from the instructor.
4. No student shall plagiarize. Themes, essays, term papers, tests, and other similar requirements must be the work of the student submitting them. When direct quotations are used, they must be so indicated and when ideas of another are incorporated in the paper, they must be appropriately acknowledged.
5. No student shall resubmit her/his graded material from other courses or from previous assignments for a current assignment without permission of the instructor.
6. No student shall sign class rolls for another student.

Integrity Code

The integrity code, on my honor, "I will not lie, cheat, steal, plagiarize, evade the truth or tolerate those that do," symbolizes NGCSU's commitment to academic integrity.

Class Evaluations:

Class evaluations at NGCSU are now conducted on-line through Banner. Evaluation of the class is considered a component of the course and students will not be permitted to access their course grade until the evaluation has been completed. The evaluations will be accessible beginning one week prior to Final Exam week.

Disabilities and Accommodations:

North Georgia College and State University is committed to equal access to its programs, services and activities for people with disabilities. If you believe that you have a disability requiring an accommodation, reasonable prior notice needs to be given to the instructor and the Office of Student Disability Resources. In this case, contact Elizabeth McIntosh, Coordinator, Student Disability Resources at 122 Barnes Hall, 867-2782, emcintosh@ngcsu.edu.

My Pet Peeves:

- any form of cheating
- cell phones
- any disrespectful behavior be it towards me or your peers
- ipods or anything that would distract you from class
- wining – I absolutely hate it!

Ways to reach me:

- email
- by phone (if I am in the office)
- facebook
- during my office hours

My Website will include:

- lecture notes
- in class exercises with solutions
- practice exams
- test solutions