

KINGSBOROUGH



Chemistry 01 Preview of General
Chemistry Dept. of Physical Sciences
Kingsborough Community College
City University of New York

Spring 2007

Instructor: _____

Phone: _____ E-mail: _____

Office: _____ Office Hours: _____

Course Rationale

Preview of General Chemistry is a two-equated credit course intended as a preparation for the two-semester course in General Chemistry. General Chemistry is intended for students of chemistry, biology, physics, engineering, physical therapy, occupational therapy, and related disciplines. The co-requisite for this course are successful completion of MAT 009 or the equivalent.

Required Materials

1. **Textbook:** Chemistry, 9th edition, Raymond Chang, 2007, ISBN 0-073-50153-0 from the bookstore. This purchase includes the textbook, Student Solutions Manual, and ARIS Access Card.
2. Scientific calculator
3. USB flash drive or 3-1/2 inch diskette

Grading: This course is graded on a P/R basis. Students who pass the course will receive a grade of "P." Students who do not meet the minimum level of proficiency for the course will receive a grade of "R." In either case, the grade from this course does not count toward your cumulative grade point average.

To pass this course you must receive a score of 70% or better on the final exam. There will be several practice exams given during the semester. While these exams do not count toward your grade, they consist of questions much like those in the final exam. Your instructor will announce the dates of the practice exams in class.

Warning: Since the grade for this course is based solely on your final exam performance you must take care to ensure that you will pass this course. Do not wait until the end of the course to start working hard. If you do not pass the final exam you must repeat this course to continue in General Chemistry.

Homework

Assigned homework exercises will not be collected. However, you should complete each of them and check your answers against the posted key. Success in general chemistry

courses depends highly on your ability to solve problems. The best way to develop the skill of problem-solving is through practice. The textbook also has two versions of past final exams. You should use these as practice for the final exam.

Tentative Course Schedule

Chapter 1 Chemistry: The Study of Change pages 2-31. Sections 1.1 – 1.9.

Examples: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8.

Memorize tables 1.2 (page 16), 1.3 (page 17),

Questions and Problems (pages 31-36): 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50.

Chapter 2 Atoms, Molecules, and Ions pages 40-70. Sections 2.1-2.8.

Examples: 1, 2, 3, 4, 5, 6, 7, 8, 9.

Memorize figure 2.11 on page 54, and tables 2.2 (page 60), 2.3 (page 60), 2.4 (page 62), 2.5 (page 65), 2.6 (page 67), table 2.7 (page 68), 2.8 (page 69).

Questions and Problems (pages 70-75): 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25 (use the internet), 26, 27, 28, 30, 31, 32, 33, 34, 35, 36, 37, 39, 40, 43, 44, 45, 46, 47, 48, 49, 50, 51, 55, 56, 57, 58, 59, 60.

Chapter 3 Mass Relationships in Chemical Reactions pages 76-107. Sections 3.1-3.10.

Examples: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16.

Memorize figures 3.2 (page 81), 3.5 (page 89), figure 3.8 (page 89), and table 3.1 (page 93).

Questions and Problems (pages 107-116): 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 33, 34, 35, 39, 40, 41, 42, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 59, 60, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 89, 90, 91, 92, 93, 94.