Chemistry 101 Spring, 2013 Course Guidelines

Instructor: Daniel Graham, Flanner Hall Room 401 (office and voice-mail, 773 508-3169); Loyola

Chemistry Office: 773 508-3100; FAX: 773 508-3086; email: dgraha1@luc.edu

Office Hours: MTW 1:30 – 2:30 PM, or by arrangement.

Class Hours: MWF 8:15 – 9:05 AM, Cuneo Hall 210

Discussion Sections: T 11:30 – 12:45, Cuneo Hall 302

T 2:30 – 3:45, Cuneo Hall 218

Textbook: *Chemistry, the Central Science*, by Brown, LeMay, Bursten, Murphy, and Woodward, Twelfth Edition. This text will also be used in Chemistry 102.

The course will cover essential material of Chapters 1 - 11 of BLBMW. The topics will include:

- 1. Matter, measurements, physical and chemical properties.
- 2. Atomic theory and the elements; molecules, ions, and compounds.
- 3. Stoichiometry and chemical formulas.
- 4. Reactions in Aqueous Solution
- 5. Thermochemistry
- 6. The electronic structure of atoms
- 7. More electronic structure: periodic law.
- 8. Chemical bonding and molecular structure.
- 9. More molecular structure
- 10. Gas Laws
- 11. The forces between molecules and phase behavior

Exams:

There are three sixty-minute exams scheduled. There is also a two-hour cumulative final scheduled for the second Monday of finals week. Each exam will consist of questions and problems representative of the text and lecture material. All calculations and proper units will be entered in a standard blue book provided by the instructor. A calculator, periodic table, and a single page of notes (normal paper, both sides OK) may be used during each exam.

The single page of notes must be included with the blue book prior to hand-in. Blue books must be signed on the front, upper right-hand corner. Each signature will be taken as a statement of honest, independent work. Instances of academic dishonesty will warrant immediate failure of the course plus referral to the Arts and Sciences Dean's office. Please review the College's policy on academic integrity via the Loyola University website.

Exams will be graded and returned as soon as possible. All grading questions, errors, and points of clarification must be brought to the instructor's attention during office hours no later than one week after return of the exam.

If special provisions are needed for the exams and other aspects of Chemistry 101, please consult with DG during the first week.

Assignment of Grades:

The following scale will be used: 87% - 100% A-, A; 72% - 86% B-, B, B+; 59% - 71% C-, C, C+; 50% - 58% D, D+; < 50% F. Grades will be assigned by weighting the sixty-minute exams 0.55, problem assignments 0.10, and the final exam 0.35, with account given to improvement during the semester.

An aim of the grading policy is to allow time and incentive for improvement. Chemistry is not easy to learn, but the process can be rewarding if necessary effort is made to master fundamentals as they appear. Students are urged to contact DG to discuss problems before they become serious.

Assignments: Multiple problems will be assigned based on the textbook and lecture materials. Students are urged to work as many problems as possible with the help of each other and the instructor. Please turn in work on the assignment due-date.

Quizzes: Quizzes will be featured during the discussion periods. Discussion participation plus completion and hand-in of each quiz will warrant one point of credit applied to the up-coming exam.

Blackboard Materials: There will be multiple postings on *Blackboard*. Please check the website every day or two for the latest additions. Errors should be brought to the instructor's attention as soon as possible.

Schedule:

The typical week will feature Monday, Wednesday, and Friday lectures at 8:15 AM. Tuesday discussions will feature informal chalk-talks, Q & A, and a quiz.

M	011413	First Class Meeting. We will begin discussing Chapter I.
M	012113	Martin Luther King Holiday
F	020813	Exam I
M	030413	Spring Break Begins ⊚ Д
F	031513	Exam II
F	032913	Easter Break Holiday
M	040113	Easter Break Holiday
F	041213	Exam III
F	042613	Last Day of Class
M	050613	Final Exam 9:00 – 11: 00 AM