

## Chemistry 101 Fall 2018 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: MWTh 12:30 – 1:30 PM, or by arrangement.

Class Hours: MWF 8:15 – 9:05 AM, Cuneo Hall 109

Discussion Sections: F 9:20 – 10:10, Mundelein Center 520  
F 10:25 – 11:15, Mundelein Center 520

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

The course will cover essential material of Chapters 1 – 11 of the textbook with a brief excursion into the chapter on nuclear chemistry. 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 and nuclear 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 as scheduled. There is also a two-hour cumulative final reserved for Thursday morning 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 non-cell-phone 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 failure of the course and 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:

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. The following scale will be used:

A: 88 – 100, A-: 87, B+: 81 – 86, B: 75 – 80, B-: 71 – 74, C+: 67 – 70, C: 60 – 66, C-: 59, D+: 55 – 58, D: 50 – 54, F < 50.

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 lectures. 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.

**Sakai Materials:** There will be multiple postings throughout the semester. Please check the course 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. Friday discussions will feature informal chalk-talks, Q & A, and quizzes.

M	082718	First Class Meeting. We will begin discussing Chapter I.
M	090318	Labor Day Holiday ☺ 🎵
F	092818	<b>Exam I</b>
M	100818	Fall Break ☺ 🎵
F	102618	<b>Exam II</b>
F	111618	<b>Exam III</b>
W	112118	<b>Day before Thanksgiving</b> ☺ 🎵
F	120718	Last Day of Class
Th	121318	<b>Final Exam 9:00 – 11: 00 AM in Cuneo Hall 109</b>

