

General Chemistry 101 - Spring 2017

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Lecture M/W/F 1:40 – 2:30 p.m. Flanner Hall-Auditorium (Sect 001)

Discussion Fri 9:20 – 10:10 a.m. Flanner Hall-105 (Sect 002)
 Fri 10:25 – 11:15 a.m. Flanner Hall-105 (Sect 003)

Office Hours Mon & Wed 12:00 – 1:30 p.m.

Required Text: Brown, LeMay, Bursten, Murphy, Woodward Chemistry-The Central Science 13th Ed.
 ISBN 978-0321910417

1. *Quizzes, Exams, and Grading:*

A total of five 20-minute quizzes will be given at the end of the discussion section. Each quiz will consist of 4 free response questions for a total of 20 points per quiz. The lowest of your five quiz grades will be dropped. If you miss a quiz, that is the quiz that will be dropped. **No make-up quizzes will be given under any circumstances.**

There are three 50-minute mid-term exams and one 2-hour final exam. The lowest of the three mid-term exams will be dropped. If you miss an hourly exam, that is the exam that will be dropped. **No make-up mid-term exams will be given under any circumstances.** The final exam is cumulative and cannot be dropped. A calculator may be used on all exams and quizzes. However, all memory will be cleared from the calculator before each exam.

MasteringChemistry Homework	50 points	
Discussion	20 points	
Quiz	20 points	(Best four out of five quizzes)
Quiz	20 points	
Quiz	20 points	
Quiz	20 points	
Mid-term exam	100 points	(Best two out of three mid-term exams)
Mid-term exam	100 points	
<u>Final Exam</u>	<u>150 points</u>	
TOTAL	500 points	

You must bring a form of photo identification, such as your Loyola Student ID or your driver's license, with you to the exam. During exams, you will be required to leave your books, backpacks, notebooks, etc. at the front of the room. All exams are closed book and closed notes unless otherwise noted. When you are finished with your exam, please bring your completed exam to the front, and leave the room quietly without disturbing the other students.

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

The grading scale used to determine letter grades are as follows: **A** 100 – 93, **A-** 92 – 86, **B+** 85 – 82, **B** 81 – 78, **B-** 77 – 74, **C+** 73 – 70, **C** 69 – 65, **C-** 64 – 62, **D** 61 – 50, **F** < 50.

IMPORTANT: Students wanting to drop lecture after midterm may stay in the co-req lab:

*Only if the midterm grade, in lecture, posted in LOCUS, is a D or better.

*Students must continue to attend lecture until the week of the drop date to gain as much background knowledge as possible.

*For Spring 2017 students wishing to drop lecture, and have a mid-term grade of D or better, can seek assistance from the Department of Chemistry & Biochemistry office beginning Monday March 20th at 9:00am through Monday March 27 - 4:00pm.

* Students with a midterm grade of F who decide to withdraw from lecture must also withdraw from lab.

*NO EXCEPTIONS.

2. *Exam Dates (subject to change):*

Wednesday, February 8, 2017:

Mid-term Exam 1

Wednesday, March 22, 2017:

Mid-term Exam 2

Friday, April 21, 2017:

Mid-term Exam 3

Thursday, May 4, 2017:

Final Exam, 1:00-3:00 p.m.

3. *Quiz Dates (subject to change):*

Friday, January 27, 2017

Quiz 1

Friday, February 17, 2017

Quiz 2

Friday, March 3, 2017

Quiz 3

Friday, April 7, 2017

Quiz 4

Friday, April 28, 2017

Quiz 5

4. *MasteringChemistry Homework (ZOSNERCHEM101SPRING2017):* There will be MasteringChemistry homework sets assigned on Sundays at 12:00 p.m. for each week of material that we cover. The assigned homework will be due the following week on Sunday at 11:59 p.m. Each week's assignment will be worth 4 points for a total of 56 points. Only 50 points will count towards your final grade. Any points earned over 50 will be counted as extra credit. Late assignments will not be counted for credit.

5. *Norms of Course Proceedings:* The classroom is to be a safe place to question and explore ideas. Student and teacher voices are important to this work. Collegial disagreement can be a healthy part of this process, but must always include respect for all members of the class.

Course activities will be designed to help students reach the goal of learning chemistry content and developing critical thinking skills. This will more often be driven by the use of data and reasoning to discover concepts and solutions rather than the identification and exchange of chemical facts and algorithms.

Students are expected to read individually on their own time outside of class.

Class sessions will begin and end on time. All students should attend class regularly and participate in class discussions. Absences could affect one's ability to learn chemistry during this session. Anticipated absences should be discussed with the instructor two class days before the absence. Proper documents may be requested to verify the reason for any absence. No make-up exams or quizzes will be granted for any absence during an exam or quiz day, **no matter what the excuse.**

6. *Discussion:* The discussion section will be devoted to working on discussion hand-outs. At the beginning of the semester, students will be paired off into permanent discussion groups of two. At the beginning of every discussion class, a worksheet with questions relevant to the topics covered in class will be handed out. Discussion groups will be chosen at random and then have an opportunity to explain to the class their answer for a question, and earn 4 participation points. When chosen, a group will have the option to “pass” on a question. If a group is called and is not available to answer the question assigned, this will also count as a “pass” for the group. The answer to the question does not have to be the correct answer to earn the participation points. A total of 20 participation points can be earned throughout the semester.

7. *Sakai Materials:* Handouts given in class will be mirrored on Sakai.

8. *Academic Honesty:* All students in this course are expected to have read and abide by the demanding standard of personal honesty, drafted by the College of Arts & Sciences, that can be viewed at:

http://www.luc.edu/cas/pdfs/CAS_Academic_Integrity_Statement_December_07.pdf

Anything that you submit that is incorporated as part of your grade in this course (*e.g.* quiz, examination, homework, lab report) must represent your own work. Any students caught cheating will, at the very minimum, receive a grade of “zero” for the exam that was submitted and this grade cannot be dropped. If the cheating occurred during a course exam, the incident will be reported to the Chemistry Department Chair and the Office of the CAS Dean. Depending on the seriousness of the incident, additional sanctions may be imposed.

9. *Strategies and Suggestions:*

- The best method of learning chemistry is to work the assigned problems and write out the answers. Then check your answers versus the Answer Key.
- Study at least 10 hours per week and maintain a steady pace of studying. Chemistry continually builds, like a language, so studying some every day is most effective.
- Skim the current chapter before the corresponding lecture, so that you will be aware of the topics to be covered.

10. *Practices for Success:* Supporting claims with evidence, making applications, solving and analyzing problems, and using chemical principles to explain phenomena are critical skills in the field of chemistry. The development of these skills is not without some frustration, but it carries the reward of deepening one’s ability to think critically and solve problems in any field. The use of targeted, guiding questions, regularly scheduled work, and strategic study plans can greatly assist the learning of chemistry. With such a focus, hopefully any frustration will quickly turn to appreciation and fascination for the relevance and connectedness of chemistry in your life and within the world around you. Solving and analyzing problems is the most important feature of this work. If, at any time, you need assistance framing such plans for your work in chemistry, please do not hesitate to ask the instructor.

11. *Tutoring:* The tutoring Center at the university offers free tutoring to students. To see the complete tutoring schedule and find additional information, visit the Tutoring Center webpage at www.luc.edu/tutoring

12. *Office Hours:* My office door will be open per the times listed. Please use this time to if you have extra questions regarding this course. If you are unavailable to meet at the listed times, please feel free to email me with any questions. However, you **MUST** email me from your Loyola University Chicago email account, and if you email me at night (after 6:00 p.m.) on weekends, or during holiday breaks I will respond to your email as soon as possible.

13. *Students with Disabilities Policy:* Eligibility for services is determined on an individual basis based on documented need. Self-disclosure and the submission of documentation can be initiated anytime during the

year. However, reasonable time must be allowed before the student can expect accommodations to be in place. Self-disclosure and documentation are required only if students plan to request accommodations. Students should provide information and documentation at a reasonably early date to allow time for the development and arrangement of appropriate accommodations. In some cases, several weeks' advance arrangement is needed. Accommodations cannot be retroactive. Accommodations begin only after documentation is received and reasonable time for accommodation development has been allowed. <http://www.luc.edu/sswd/index.shtml>

14. Harassment (Bias Reporting): It is unacceptable and a violation of university policy to harass, discriminate against or abuse any person because of his or her race, color, national origin, gender, sexual orientation, disability, religion, age or any other characteristic protected by applicable law. Such behavior threatens to destroy the environment of tolerance and mutual respect that must prevail for this university to fulfill its educational and health care mission. For this reason, every incident of harassment, discrimination or abuse undermines the aspirations and attacks the ideals of our community. The university qualifies these incidents as incidents of bias.

In order to uphold our mission of being Chicago's Jesuit Catholic University-- a diverse community seeking God in all things and working to expand knowledge in the service of humanity through learning, justice and faith, any incident(s) of bias must be reported and appropriately addressed. Therefore, the Bias Response (BR) Team was created to assist members of the Loyola University Chicago community in bringing incidents of bias to the attention of the university. If you believe you are subject to such bias, you should notify the Bias Response Team at this link: <http://webapps.luc.edu/biasreporting/>

General Chemistry 101 Tentative Lecture Schedule (subject to change)

1-16	--	<i>Martin Luther King Day</i>
1-18	1	Introduction: Matter and Measurement
1-20	1	Introduction: Matter and Measurement
1-23	2	Atoms, Molecules, and Ions
1-25	2	Atoms, Molecules, and Ions
1-27	2	Atoms, Molecules, and Ions
1-30	3	Stoichiometry: Calculations with Chemical Formulas and Equations
2-1	3	Stoichiometry: Calculations with Chemical Formulas and Equations
2-3	3	Stoichiometry: Calculations with Chemical Formulas and Equations
2-6	3	Stoichiometry: Calculations with Chemical Formulas and Equations
2-8	--	EXAM I (Chapters 1-3 or as announced)
2-10	4	Reactions in aqueous media
2-13	4	Reactions in aqueous media
2-15	4	Reactions in aqueous media
2-17	4	Reactions in aqueous media
2-20	5	Thermochemistry
2-22	5	Thermochemistry
2-24	5	Thermochemistry
2-27	5	Thermochemistry
3-1	6	Electronic Structure of Atoms
3-3	6	Electronic Structure of Atoms
3-6	--	<i>Spring Break</i>
3-8	--	<i>Spring Break</i>
3-10	--	<i>Spring Break</i>
3-13	6	Electronic Structure of Atoms
3-15	21	Nuclear Chemistry
3-17	21	Nuclear Chemistry
3-20	21	Nuclear Chemistry
3-22	--	EXAM II (Chapters 4-6 & 21 or as announced, cumulative)
3-24	7	Periodic Properties of the Elements
3-27	7	Periodic Properties of the Elements
3-29	7	Periodic Properties of the Elements
3-31	8	Basic Concepts of Chemical Bonding
4-3	8	Basic Concepts of Chemical Bonding
4-5	8	Basic Concepts of Chemical Bonding
4-7	9	Molecular Geometry and Bonding Theories
4-10	9	Molecular Geometry and Bonding Theories
4-12	9	Molecular Geometry and Bonding Theories
4-14	--	<i>Easter Holiday</i>
4-17	--	<i>Easter Holiday</i>
4-19	10	Gases
4-21	--	EXAM III (Chapters 7-9 or as announced, cumulative)
4-24	10	Gases
4-26	10	Gases
4-28	10	Gases
5-4	--	FINAL EXAM CUMULATIVE 1:00-3:00 p.m.