

# Chem 102, General Chemistry B Lec/Disc Summer 2014 Syllabus



Preparing people to lead extraordinary lives

**Chem 102–005:** General Chemistry B Lecture  
Monday/Wednesday/Friday 9:00–11:40 am  
Mundelein Center Room 507

*Required Text:* Chemistry: The Central Science (12<sup>th</sup> Edition) by Brown, Lemay, Bursten, Murphy, Woodward (w/Mastering Chemistry Access Card)

*Sakai:* Course grades and other materials will be posted in Sakai. If you are unfamiliar with Sakai it is your responsibility to contact the Instructor immediately.

**Instructor:** Katrina Binaku

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Email: [kbinaku@luc.edu](mailto:kbinaku@luc.edu) When sending emails please put “Chem 102–005” in the subject. I try to answer emails as quickly as possible, even on weekends. Any emails after 9 pm likely will not be answered until the following morning. Do respect that email replies may be a longer wait time over the weekend as I am not at a computer 24/7.

**Office Hours:** Tuesdays/Thursdays 10:00–11:00 am, Wednesdays 4:00–5:00 pm, and by appointments scheduled in advance.

**Course Description:** This course is a lecture and discussion, a continuation of Chem 101. Specific areas addressed are properties of solutions, kinetics, equilibrium, chemical thermodynamics, and electrochemistry. Use/read the textbook as a supplement to what is covered in class. There is a lot of material and major points will be discussed during lecture; the textbook enhances the information presented. Historical and current events in chemistry, including real-world problems, may be mentioned. The emphasis of this course is understanding the material, not memorization.

**Exams:** There will be a total of three one-hour exams given during the semester and a cumulative final exam. Exams begin promptly at 9:00 am; students who are late to class lose time, as extended exam time for late students is not granted, due to a lecture following exams. Students must take all exams on the assigned dates noted in the syllabus. **No make-up exams will be given under any circumstances.** The lowest grade out of the three one-hour exam grades will be dropped. If you are absent for one of the three one-hour exams, that is the exam grade that will be dropped. The final exam is cumulative and its grade cannot be dropped. No make-up exams will be granted for the final exam. If a student does not show up on final exam day to take the final exam, they receive a grade of zero for the final exam and that grade cannot be dropped.

All exams will be closed book, closed note unless otherwise specified. Graphing and scientific calculators *are* allowed. However, calculators cannot be shared between students. The cover of the calculator must be removed and not be in plain view. A periodic table will be provided to you.

Exam materials *must be handed directly* to the Instructor after completion of an exam. The student will then show their Student ID or Driver's License to the Instructor and sign-in on an attendance form. This signature verifies the student's attendance and completion of the exam. Exams will be graded as soon as possible. Exam answer sheets will be photocopied. Any discrepancies or questions about grading on any one-hour exams must be discussed with the Instructor no later than one week after the graded exam has been returned to the student. After one week of students having a graded exam in their possession, no issues or grading changes will be made on exams. No exceptions.

**Exam Dates:** Monday, July 14, 2014      Exam #1, Chapt 11, 13, 14 (one hour, 9–10:00 am)  
 Friday, July 25, 2014      Exam #2, Chapt. 15–17 (one hour, 9–10:00 am)  
 Friday, August 1, 2014      Exam #3, Chapt. 19, 20 (one hour, 9–10:00 am)  
 Friday, August 8, 2014      Cumulative Final Exam (2 hours, 9–11:00 am)

**Tutoring:** The Tutoring Center at Loyola University offers free tutoring to students! This summer tutoring includes the following subjects: Biology, Chemistry, Math, Physics, and Statistics. To see the complete tutoring schedule and find additional information, visit the Tutoring Center webpage at [www.luc.edu/tutoring](http://www.luc.edu/tutoring)

Chemistry is a fascinating subject and quite challenging. Summer courses are rigorous in their own right. A conscious, daily effort of studying must be made to master the fundamental principles taught in this course. Please contact me if persistent troubles arise. Use my office hours and the tutoring center to help clarify subject matter or other questions. Work on end of chapter problems in the textbook for practice/study!

**Grading:** The established grading scale is subject to change at the Instructor's discretion. Please note Loyola University uses a +/- grading scale system and it is implemented in this course.

<b>Grading Category</b>	<b>Points</b>
Mastering Chemistry Homework	<b>100</b>
Exam (one hour)	<b>100</b>
Exam (one hour)	<b>100</b>
Exam (one hour)*	<b>n/a</b>
Cumulative Final Exam	<b>150</b>
<b>Total</b>	<b>450</b>

\*Lowest Exam (one hour) grade will be dropped. i.e. the best of two one-hour exam grades will count towards the final grade.

**Grading Scale:** The scale to determine the letter grade earned in the course is as follows:  
**A** 100–93%, **A-** 92–87%, **B+** 86–82%, **B** 81–77%, **B-** 76–73%, **C+** 72–69%, **C** 68–65%, **C-** 64–61%, **D** 60–53%, **F** ≤ 52%

**Mastering Chemistry (online) Homework:** The course ID is MCBINAKUSU2014. There will be Mastering Chemistry homework problems assigned for each chapter covered in this course. *These homework problems are required and will be graded.* Late homework submissions will not be accepted.

<b>Chapters</b>	<b>Due Date</b>
11, 13, 14	Monday, July 14 <sup>th</sup>
15, 16, 17	Friday, July 25 <sup>th</sup>
19, 20	Friday, August 1 <sup>st</sup>
21	Friday, August 8 <sup>th</sup>

**Academic Honesty:** Academic dishonesty in this course will not be tolerated. The Instructor encourages students to converse with each other about chemistry outside of the classroom. Group study sessions as well as practicing end of chapter questions in the textbook with others is appropriate and encouraged. However, the Mastering Chemistry homework is to be completed individually; it is not group work.

There is a difference between sharing knowledge and cheating. Copying others work and presenting that work as one's own is an example of academic dishonesty. Cheating and plagiarism take many forms. Academic dishonesty during an exam can take many forms, including but not limited to: sharing materials/information with another student during the exam, looking at another student's quiz/exam sheet, talking, sharing a calculator, using a cell phone, using lecture notes, etc. This list is not meant to be exhaustive but highlights several dishonest situations. Academic dishonesty on any material in the course may result in failure of that assignment. Incidences of academic dishonesty will be reported to the Department Chair and Dean. Cases will be handled according to University policy and guidelines. Please review Loyola University Chicago's policy on Academic Integrity via this link:

[http://www.luc.edu/academics/catalog/undergrad/reg\\_academicintegrity.shtml](http://www.luc.edu/academics/catalog/undergrad/reg_academicintegrity.shtml)

**Services for Students with Disabilities (SSWD) Policy:** Necessary accommodations for students with disabilities who procure a SSWD letter will be made. Do discuss your academic needs with the Instructor as soon as possible. However, to receive any accommodations self-disclosure, proper documentation, and registration with the SSWD office at Loyola University Chicago is required. Accommodations cannot be made until the Instructor receives proper documentation. Furthermore, accommodations are not retro-active and begin only once the appropriate documentation has been received by the Instructor in a timely manner. Only those accommodations that are specifically listed in the formal SSWD letter will be provided. Policies and procedures for SSWD can be found here: <http://www.luc.edu/sswd/>

**Cell Phones:** We all have them thanks to science! Yet, they are a distraction. Out of respect for the Instructor and fellow students in the course, keep phones on silent during lecture. During exams, cell phones and other personal electronic devices are not permitted to be used nor be in view. They must be stored inside purses, backpacks, etc. If it is found that cellphones/personal electronic devices are out in plain view during an exam, automatic failure of that exam results. No exceptions.

**Norms of Course Proceedings:** The classroom is a safe place to question and explore ideas involving chemistry! Student and Instructor voices are important to this work. Feel comfortable asking questions during lecture and discussion, during office hours, etc. If disagreements arise with respect to an exercise answer or a topic of discussion, remember to respect fellow peers when proceeding to offer explanations or points of view.

Class sessions will begin and end promptly on time. Students should attend all class sessions and actively participate in group work, discussions. Summer courses are intensive and missing even one class will put a student significantly behind in terms of knowledge. If an absence is anticipated over the course of the semester, discuss this with the Instructor as soon as possible. Proper documentation may be required/requested to verify the reasoning for an anticipated or spontaneous absence from class. Remember, no make-up examinations are offered and there are absolutely no exceptions to this rule.

Envision the following for class sessions: class will promptly begin at 9:00 am, starting with an approximately 55 minute lecture, followed by a 10 minute break, then a 30 or so minute discussion/group work (sample problems, students ask questions, group work on practice problems, etc.), a 5 minute break, and finally a 60 minute lecture. Of course, this plan is not guaranteed under any circumstances and may fluctuate depending on the topic at hand and the pace of the class.

#### **Chem 102-005 Tentative Lecture Schedule (subject to change\*)**

<u>Date</u>	<u>Chapter</u>	<u>Lecture Topics</u>
6/30	11	First Day of Class; Syllabus talk; Liquids & Intermolecular Forces
7/2	11, 13	Liquids & Intermolecular Forces; Properties of Solutions
7/4	N/A	NO CLASS; Happy 4 <sup>th</sup> of July!
7/7	13, 14	Properties of Solutions; Chemical Kinetics
7/9	14	Chemical Kinetics
7/11	14, 15	Chemical Kinetics; Chemical Equilibrium
7/14	15	<b>EXAM I</b> (Chapt. 11, 13, 14); Lecture on Chemical Equilibrium
7/16	15	Chemical Equilibrium
7/18	16	Acid-Base Equilibria
7/21	16, 17	Acid-Base Equilibria; Additional Aspects of Aqueous Equilibria
7/23	17	Additional Aspects of Aqueous Equilibria
7/25	19	<b>EXAM II</b> (Chapt. 15–17); Lecture on Chemical Thermodynamics
7/28	19, 20	Chemical Thermodynamics; Electrochemistry
7/30	20	Electrochemistry
8/1	21	<b>EXAM III</b> (Chapt. 19–20); Lecture on Nuclear Chemistry
8/4	21	Nuclear Chemistry
8/6	N/A	Wrap up Nuclear Chemistry if necessary; Q/A; Study time
8/8	N/A	<b>FINAL EXAM</b> (cumulative); Last class!

\*This schedule is a general guideline of what to expect during each course lecture. The schedule herein is subject to alteration at the discretion of the Instructor based on the pace of the course.

**IDEA (Individual Development and Educational Assessment):** This is a course/instructor evaluation system that Loyola University Chicago utilizes. *Essential* and *Important* objectives have been selected by the Instructor which represent the goals and development to be achieved throughout and as a result of completing the course.

*Essential objectives:*

1. Gaining factual knowledge (terminology, classifications, methods, trends, etc.)
2. Learning fundamental principles, generalizations, or theories
3. Learning to apply course material (improve thinking, problem solving, making decisions, completing the homework, etc.)

*Important objectives:*

7. Gaining a broader understanding and appreciation of intellectual/cultural activity
12. Acquiring an interest in learning more by asking questions and seeking answers

Towards the end of the semester, an email will be sent to you requesting the completion of the IDEA course/instructor evaluation for Chem 102–005. More on the objectives will be discussed the first day of class.