

INFORMATION FOR CHEMISTRY 101

Chemistry 101 is a 5 unit course in general college chemistry. The course combines about 3 hours of lecture with two 2 hour laboratory sessions and 2 hours of conference per week. Students should have knowledge of college algebra with a minimum grade of "C". Chemistry 101 is a college level course in general inorganic chemistry. The course is designed primarily for students who have had previous chemistry training either in high school or an elementary course at a community college. A minimum grade of "C" in this course is necessary in order to enroll in Chemistry 102.

Required Texts:.....CHEMISTRY, by BROWN & LEMAY (latest edition in the bookstore)
General Chemistry 101 Lab Manual (in bookstore)

Required Materials:.....Lecture and Lab : Scientific calculator
Lab only : Lab notebook Book (carbon copy paper), and Safety goggles

OFFICE HOURS:..... before class

CONTACT:..... boanta@lacitycollege.edu or webpage: <http://lacc-terryb.com/>

Attendance:

Attendance will be taken during each class period. Regular attendance is absolutely mandatory in order to pass this course. Drop Date Information: The deadline to drop without a "W" is the last day of Week 2 (of the semester), which is (<http://www.lacitycollege.edu/services/admissions/dates.html#spring>). If you must drop a course, drop before the specified deadline for dropping a class without a grade of "W." Dropping *after* Week 2 will result in a "W" on your transcript.

Effective since July 1, 2012 students now have just 3 attempts to pass a class. If a student gets a "W" or grade of "D", "F", "I", or "NP" in a class, that will count as an attempt. *A student's past record of course attempts district wide will also be considered.* Therefore, before the end of Week 2 you should carefully consider if you can reasonably manage this course with the other factors in your life (e.g. work, family, course load). **If you think you will not be able to complete this course with a C or better, drop by** (<http://www.lacitycollege.edu/services/admissions/dates.html#spring>). If you have any questions, please don't hesitate to talk to me. You may also see a counselor in the Counseling Center in AD 108.

Course Work and Grading Policy:

One grade will be assigned for Chem. 101. The grade will include both lecture work and laboratory work. Grades will be assigned on the basis of overall percentage of total points earned in both the lecture and the laboratory. If you fail either the lecture or lab portion of the course, the highest grade you may earn is a "D". The testing percentage is factored to be 60% of the total grade and the activities/labs/homework are 40%.

Homework: The homework is usually given via Mastering Chemistry and will be worth only 10 to 15% of the overall grade. (<https://www.pearsonmylabandmastering.com/northamerica/masteringchemistry>)

WEEKLY Activities: Every week will be an activity/lab/WS covering the material of that week, both lab and lecture. Other activities/quizzes/WS are also possible and may not be pre-announced. No activity or quiz or workshop can be taken at any other time. There will be no make-up activity, workshop, or quizzes. The activities/quizzes/workshops are composed of short essay, multiple choice and word problems based on lecture notes and homework problems.

MIDTERM EXAMS: (200 points) There will be two exams given during the semester. There will be no make-up exams. The exam is composed of short essay, multiple choice and word problems based on lecture notes and homework problems. You must also bring your own charged calculator with you for each quiz and exam, no borrowing or sharing is allowed.

FINAL EXAM: (200 pts), last class day. The final will cover the information and skills necessary to begin Chem. 102 & Lab experiments (chapter 5 through 13). (<http://www.lacitycollege.edu/services/admissions/dates.html#spring>).

The approximate point break down in the lecture:

<i>Workshops/activities/HW</i>	<i>200 pts</i>
<i>Exams/Final</i>	<i>600 pts</i>
LECTURE TOTAL	800 pts

LABORATORY TOTAL	225 pts
TOTAL	1025 pts

See the lab section

A letter grade will be assigned based on the total percentage as follows:

A - 88% and above B - 76 to 87% C - 60 to 75% D - 50 to 59% F - below 50%

If you are interested in your class standing, add your scores up, divide by total possible points, then use the above scale.

LABORATORY SECTION

Safety is of the utmost importance, you must always comply with the safety rules found in the SAFETY RULES AND REGULATIONS section of your lab manual. Failure to obey these rules will result in your dismissal from this class. Safety goggles are **REQUIRED** at all times in the lab unless otherwise stated by the instructor. If you have not acquired safety goggles by the second week of class then you will not be allowed in the lab until you have them. Attendance is also mandatory for the lab. Laboratory experience can only be attained by actually being present in the lab and actually performing the experiment. If you miss more than 4 labs (12 hours) you may be dropped from the course. **Make sure you have put away all equipment and locked your drawer before leaving!!!**

WORKSHOPS: There are required workshops. Workshops are due as noted in the syllabus and late workshops are subjected to very heavy late penalties and may not be returned.

LAB REPORTS: Lab reports are due THAT lab period. Late reports will be subjected to very heavy late penalties and may not be returned. **You are responsible for purchasing the lab manual in advance of doing the experiments; no hardcopies will be distributed.**

FORMAL REPORT: A formal lab report (on one of the experiments, instructor's choice) will be due at the discretion of the instructor.

******A video will be shown and a test will be given on the first day covering safety issues. Although most of the information is common sense, it is imperative that everyone understands and complies with safety regulations.**

Lab Course Requirements in detail:

Before Lab begins

- 1) Record Name/Title/Purpose /procedure in notebook (checked at the beginning of lab, 5 pts, & the carbon copy turned in with the lab report)

During Lab

- 2) Collect and record all primary data directly in notebook, you must have the lab notebook signed at the end of each lab day.

After all primary data is collected

- 3) Calculations (neatly written in you lab notebook, the carbon copy turned in)
- 4) Discussion/Conclusion (neatly written in you lab notebook, the carbon copy turned in)
- 5) Post-Lab Questions: (neatly written on the sheet)

To do before the lab begins: (you will not be allowed to start the lab if all are not complete)

1. Record the following in your lab notebook:

The second part of the pre-lab consists of filling out the Name/Title/Purpose /procedure in notebook prior to class time. A brief (2 or 3 sentence max) introduction to the experiment that includes the goal of the experiment and the method(s) used must be written neatly in the lab notebook. Do not copy the purpose straight from the lab book!

Example: Purpose: To determine the percent water in an unknown hydrate salt by repeated heating and weighting a sample.

Procedure: A step-by-step version written in your own words. This should be detailed enough that someone else could use it to replicate the experiment. Complete sentences are not necessary and diagrams can and should be used where appropriate. Tables are often useful for procedural descriptions and can dramatically reduce the length of the procedure section. In this section, you should only mention any changes in the procedure that I told you to make or that were necessary to make due to difficulties

Example: Procedure: Clean crucible

dry to const wt. w/heating

add about 5g unknown

heat gently 1st, then strongly for 10-15 min

cool-weigh-reheat-cool-weigh-repeat to const wt.

During Lab

- 2) **Collect and record all primary data directly in notebook**

Before you leave lab, all relevant measurements and observations must be recorded directly in your laboratory notebook. Include anything noteworthy that you observe such as color and temperature changes, formation of a precipitate, etc. Large collections of data should be organized into tables for clarity. All numerical entries must have appropriate units. Since data sheets tend to be "works in progress" and to be information recorded as the experiment is preformed, they do not need to be perfectly neat, but they should be readable with data always recorded to the correct number of significant figures and with **units**. If you make a mistake recording data cross it out with ONE line. If you have to cross out an entire trial use a large X, and include a brief note as to why you did not include the data. **Don't forget to record the numbers of any unknowns.**

After the lab in complete

- 3) **Sample Calculations**

For any and all calculations involved in the experiment, a sample calculation must be show. The sample calculations should clearly show the formula used (if any), the numeric values that were plugged into the formula including units, and the final answer obtained including units. The use of tables for data and calculations is always recommended. This provides a quick and easy way for the grader to find the appropriate information.

- 4) **Discussion/Conclusion**

The conclusion should be a paragraph in which you describe the results of the experiment. You should also include any major errors that might have affected your results and any other problems that you encountered during the lab. Keep in mind that the errors you should identify should not only be any mistakes that you know you made (like I spilled the beaker) but also errors due to the limitations of the chemicals or equipment (such as certain solutions might decompose in sunlight). Discuss what you have learned, and what trends the data may show. If there were no trends, but you thought there should have been, discuss that also. Reflect back to the purpose of the lab -- did the lab accomplish what it set out to do? Why or why not? How could the techniques used be applied to other situations?

Example-Discussion/Conclusion: The theory involves the neutralization of acids and bases where the moles of acidic hydrogens are equal to the moles of the base used to neutralize it at the equivalence point. Since phenolphthalein was used as an indicator, the end point and the equivalence point are fairly close to each other. All volumes were to measured .01 ml, and the standardized NaOH solution was .1102 M leading to an accuracy for the concentration of acetic acid of .001 M. Our results were slightly higher than the class average, which stands to reason considering many of the end point of other students were flaming red making their results too low. We are therefore confident that our results are accurate since all end points were the slightest pink perceivable.

5) **Post-Lab Questions:** Frequently, additional questions will be assigned. Answer these on the sheet provided in your lab packet and turn in with your lab report. The answers to post lab questions should be in complete sentences.

NOTE: ANYONE FOUND CHEATING WILL RECIEVE AN "F" GRADE FOR THE QUIZ/EXAM AND WILL BE RECOMMENDED TO THE DEAN OF STUDENTS FOR EXPLUSION FROM THE COLLEGE. NO ELECTRONIC DEVICES DURING EXAMS, QUIZZES, OR ACTIVITIES.

Student Learning Outcome Statement:

By the end of this course you will be able to solve a stoichiometry problem in which the limiting reactant is not identified in the problem. Given a stoichiometry problem in which the limiting reactant is not identified in the problem, the student will be able to correctly interpret the problem, develop a correct solution, and generate a correct answer to the correct number of significant figures. Also a lab practical, showing lab technique, will be given during the final weeks of the course.

STUDENTS WITH DISABILITIES: Students with a verified disability who may need authorized accommodation(s) for this class are encouraged to notify the instructor and the Office of Special Services (323-953-4000, ext. 2270) as soon as possible, at least two weeks before any exam or quiz. All information will remain confidential.

Student Services Building, 1st Floor
(323) 953-4000 ext. 2270 (TTY/TDD)
oss@lacitycollege.edu

Mailing Address:

Los Angeles City College
Office of Special Services
855 N. Vermont Avenue, SSB 1st Floor
Los Angeles, CA 90029

Financial Aid Information: If you need help paying for books and other college expenses, call the Financial Aid Office at (323) 953-4000 extension 2010, or see them at Student Services Building, 1st Floor

(323) 953-4000 ext. 2010

Fax: (323) 953-4029

finaid@lacitycollege.edu