INFORMATION FOR CHEMISTRY 102

Chemistry 102 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 Chemistry 101 and college algebra with a minimum grade of "C". Chemistry 102 is a second semester 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.

Required Texts:……....see instructor
……General Chemistry 102 Lab Manual (bookstore)

Required Materials:…….. Lecture and Lab: Scientific calculator
…… Lab only: Lab notebook Book (carbon copy paper), and Safety goggles
OFFICE HOURS:…….…. TBA on first day of class
CONTACT:…… boanta@lacitycollege.edu

Attendance:

Attendance will be taken during each class period. Regular attendance is absolutely mandatory in order to pass this course. See Important Dates below. I do not drop students once you have attended class; therefore it is your responsibility to withdraw from this course. Student's who have not dropped this class and have stopped attending, will be assigned a letter grade of "F". **The deadline to drop without a "W" is the last day of Week 2 (of the semester), See dates & deadlines: http://www.lacitycollege.edu/services/admissions/dates.html. 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 . If you have any questions, please don't hesitate to talk to me. You may also see a counselor in the Counseling Center. If you are interested in adding the class, you MUST attend every class period to completion in order to be considered for the lottery.**

Course Work and Grading Policy:

One grade will be assigned for Chem. 102. 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".

HOMEWORK: Homework assignments consist of doing online problems from the text (Mastering Chemistry) and are graded by the program. Homework points are scaled down to a maximum of 100 points (10% of your grade).
QUIZZES: Quizzes will be given randomly. Other quizzes are also possible and may not be pre-announced. No quiz can be taken at any other time. There will be no make-up quizzes. The quizzes are composed of short essay, multiple choice and word problems based on lecture notes and homework problems. No sharing of calculators.
EXAMS: There will be a minimum of 2 exams during the semester. There will be no make-up exams. The exams are 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: A comprehensive final exam will be given during finals week. The final will cover everything. **Everyone, regardless of grade at the time, is required to take the final examination. Failure to take the final will result in an automatic fail in this course, regardless of your grade prior to the final.**

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 will be dropped from the course. **Make sure you have put away all equipment and locked your drawer before leaving!!!**
LAB REPORTS: Formal lab reports are due one lab period after the completion date of the experiment. Qualitative Analysis 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 downloading experiments in advance of doing the experiments; no hardcopies will be distributed.**
LAB NOTEBOOK: The lab notebook is used for your raw data and any information that you feel is important. Anyone who does not have the appropriate notebook by the fourth day of class will be excused from the laboratory. All notes must be taken down in the notebook. Pre-labs will be checked at the beginning of each lab. A copy of the lab notes must be stapled to the lab reports for full credit. Below is an explanation of how to write up the lab notebook.

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.

Late labs will be accepted for two weeks after the due date with a late penalty of 1-point per day it is late. After two weeks, the lab report will no longer be accepted.

The tentative point breakdown in the lecture:

EXAMS	*300 pts*	
Quizzes & Homework	*150 pts*	
FINAL	*200 pts*	
LECTURE TOTAL	**650 pts**	
LABORATORY TOTAL	**350 pts**	*including lab final & formal reports*
TOTAL	**1000 pts**	

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.

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.

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

Student Learning Outcome Statement:

The student analyzes, provides the steps to solution, and solves given problems from a variety of chemical systems and situations including kinetics, equilibrium, thermodynamics and electrochemistry.
AND
The student will perform proper laboratory skills and techniques exhibited in second semester chemistry potentiometric titration laboratory experiment, demonstrate correct analysis of data, and graphing skills.

ADDENDUM

Course: CHEM 102

Title: GENERAL CHEMISTRY II

Course Description

The students receive in lectures the theory and application of chemical kinetics, general and aqueous equilibria, thermodynamics, electrochemistry, nuclear chemistry, descriptive chemistry, structure and bonding in transition metal complexes and carbon compounds. In the laboratory students apply what is learned in lecture to experiments in reaction kinetics, chemical qualitative analysis, chemical and spectroscopic quantitative analysis, potentiometric titration techniques, and electrochemistry.

Units/Transferability

Transferrable to UC and CSU

Prerequisites/Co-requisites/Advisories

Prerequisite:Chemistry 101 No Corequisites. Advisory:English 028 or English 031 and English 067

Course Student Learning Outcomes

(1) The student analyzes and solves given problems from a variety of chemical systems and situations. (2) The student will perform proper laboratory skills and techniques exhibited in general college chemistry laboratory.

Grading Scale or Criteria

A - Excellent
B - Good
C - Satisfactory
D - Less than satisfactory
F - Failing
P - Pass; at least equivalent to a “C” grade or better
NP - Not Pass; equal to “D” or “F” grade

Drop and Repeats

Effective July 1, 2012 students are allowed three (3) attempts to pass a single class within the Los Angeles Community College District. If a student gets a “W”, “D”, “F”, or “NP” as a grade in a class, that counts as an attempt. If you think you will not be able to complete this course with a C or better, please drop by the due date.

For all important dates make sure to visit http://www.lacitycollege.edu/services/admissions/dates.html

Attendance Policy

Students who are registered and miss the first time the class meets may lose their right to a place in the class. Whenever students are absent more than 10% of the total meeting days of the class, the instructor may exclude them from class. If the instructor determines that there are no mitigating circumstances that may justify the absences, the instructor may exclude a student from the class. Students are responsible for officially dropping a class that they stop attending.

Financial Aid

If you need help paying for books and other college expenses, call the Financial Aid Office at (323) 953-4000 ext.2010 or email finaid@lacitycollege.edu.

Accommodations

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 or email oss@lacitycollege.edu) as soon as possible, and at least two weeks before any exam or quiz. All information will remain confidential.

Student Code of Conduct

Violations of academic integrity include, but are not limited to, the following actions: cheating on an exam, plagiarism, working together on an assignment, paper or project when the instructor has specifically stated students should not do so, submitting the same term paper to more than one instructor, or allowing another individual to assume one’s identity for the purpose of enhancing one’s grade (see LACCD Board Rule 9803.28). Penalties may include a grade of zero or "F" on an exam or paper, or even suspension from the College.