

California State University, Dominguez Hills
Department of Chemistry
INTRODUCTION TO COLLEGE CHEMISTRY LABORATORY
General Information–Spring 2011

Course

CHE 108L

Meeting:

Tuesdays 1:00-4:00 p.m. in NSM C-315

Materials:

- *Chemistry 108 Laboratory Manual*, 1998 ed., by Chemistry Department CSUDH
- data notebook with 100 carbonless duplicates for recording experimental data.
- three-ring binder for storing pre-laboratory lecture notes, handouts, and graded reports/quizzes
- calculator with logarithm and exponent keys
- 6-inch and 12-inch clear, plastic, flat rulers
- mechanical pencil
- click-type eraser
- safety glasses
- laboratory apron or coat (recommended)

Instructor

Name

Dr. Sofia Papatheodorou

Office Hours

Mondays 11:30 a.m.-12:15 p.m., Wednesdays 11:15 a.m.-12:15 p.m., Thursdays 10:00 a.m. to noon, and by request

Faculty Office

NSM B-316, 310-243-3384

Research Laboratory

NSM B-324, 310-243-3425

Department Office

NSM B-202, 310-243-3376

E-mail

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Policy

Objectives and Regulations

This course is the laboratory component of Chemistry 108, which will be graded as C/NC for a total of 5 units. Chemistry 108 has no prerequisite and is intended to prepare the student for the study of chemistry at the college level. The laboratory will familiarize the student with chemical experimental procedures and with recording and reporting this work. Attendance is mandatory for full credit.

Certain practices will help you to be safe while in the laboratory:

- wear protective goggles (available from the bookstore)
- do not wear open-toed shoes or sandals
- do not eat, drink or smoke
- do not be messy
- immediately report any injury, spilt chemical, or broken glass to the instructor, who will provide guidance about dealing with the mishap
- do not put debris such as matches, paper towels or broken glass in the sinks
- if you forget how to use the safety equipment or where it is, ask the instructor
- before leaving, clean up your work area with a damp rag

Course Description and Assignments

The accompanying schedule sheets list the laboratory experiments, the graphing exercises and the quizzes. All work intended for the laboratory should be done during the scheduled periods. For justifiable absences, the instructor may allow the student to use the data of his partner to write a laboratory report on the missed experiment.

All assigned experiments are to be read before class. At the beginning of the laboratory period, the instructor will explain the principal concepts and give instructions regarding the laboratory exercise, the format of the data and the lab report. Notes taken on this information, and handouts that are distributed should be kept in a loose-leaf binder for reference.

Data Notebook

Each experiment should be written on a new page with your name, the title of the experiment and the date. All data collected in the lab are to be recorded in this book. Any eliminated data should be crossed out neatly but should remain legible. The copies must be turned in to the instructor at the end of each lab period and will be checked for completeness and accuracy.

Laboratory Reports

A report should be submitted one week after the completion of each experiment. Late reports are subject to a penalty. The reports are to be written or typed on composition paper and should follow the format given previously for each experiment in class. All graded reports should be stored in the binder together with the lab notes for that experiment.

Exams and Grading

The laboratory grade is 20% of the total course grade. The maximum points that can be earned for each experiment and quiz are listed on the schedule sheets: a total of 110 points for the doing the experiments and reports (10 point bonus), and a total of 60 points (10 point bonus) for the quizzes. At the end of the semester the total points up to a maximum of 150 will be turned in to the lecture instructor to be added to the lecture score (up to 600 points), forming your course grade (out of 750 points).

Academic Integrity and Plagiarism

Please refer to page 15 and 16 of the 2009-2011 University Catalog for a description of the CSUDH policy on academic integrity, and for the disciplinary options available in the event of violations. All members of the University Community are expected to abide by the highest standards of academic integrity as expressed in this code

Quiz Schedule

Day	Quiz	Points
February 8	Significant Figures	5
February 15	Equilibrium in the Balance	5
March 1	Graph V: Volume/Pressure	5
March 22	Mass, Volume, Density	5
April 5	Nine-Solution Problem	5
April 12	Properties of Matter	5
April 19	Elements and Atomic Masses	5
April 26	Water of Hydration	5
May 3	Temperature, Heat and Specific Heat	5
May 10	Changes of State, Heating & Cooling Curves	5
May 17	Graph VI: Rate Constant/Temperature	10

Activity Schedule

Day	Activity	Page	Points
February 1	Check-in and film "Starting with Safety"		-
	Notes on Experimental Measurements		-
February 8	Equilibrium in the Balance	5-8	10
February 15	Graphing Exercises: Graph I: Lighting	9-14	5
	Graphing Exercises: Graph II: Temperature	9-14	5
February 22	Graphing Exercises: Graph III: Chirps/Temperature	9-15	5
	Graphing Exercises: Graph IV: Volume/Temperature	9-15	5
March 1	Density by Graphical Method	17-20	10
	Graphing Exercises: Graph V: Volume/Pressure	1-4	*
March 8	Mass, Volume and Density Measurement	21-24	10
March 15	Nine Solution Problem Part I	1-4	
March 22	Nine Solution Problem Part II	1-4	10
March 28 April 1	Spring Break - No Lab		-
April 5	Properties of Matter	32-35	10
April 12	Elements and Atomic Masses	39-41	10
April 19	Water of Hydration	42-44	10
April 26	Temperature, Heat and Specific Heat	25-27	10
May 3	Changes of State, Heating & Cooling Curves	28-31	10
May 10	Lab Practicum and Check-Out Graph VI: Rate Constant/Temperature		*

* See quiz schedule.