Los Angeles City College **Chemistry 51** *Section 3093*

Syllabus

Instructor: Dr. Paul Shin

Time: Tuesday & Thursday 6:15-7:40 PM Lecture SCI 305 7:55-10:00 PM Lab SCI 305

Office hours: *By appointment*

Phone: 818-677-6887 (CSUN)

E-mail: alchemy@csun.edu (Subject line must include "C51 F09: *write subject info here*")

Course website: http://www.AlchemEDU.org/Chem51-LACC/Chem51.html

What you should bring every day***!***:

Text: *Chemistry for Changing Times* Hill, McCreary & Kolb, 12th Edition
Laboratory Notebook
Safety goggles
Basic scientific calculator

Homework: There are no assigned problem sets. I strongly suggest you be able to do all odd numbered problems at the end of each chapter as these (and any other problem I cover in class) are all fair game for a quiz or an exam! There is a weekly internet homework assignment.

Labs: Laboratory work is essential in this course! Grading will be based on performance and submitted work. Proper conduct, good reporting of data and insightful data evaluation will form the basis of your lab grade. Proper lab report format will be covered in the first day of lab. Each lab report is due one week following the lab itself. If you are absent without a verifiable excuse for a lab, you will receive zero (0) point credit.

Quizzes: There will be seven (7) unannounced quizzes given during this semester. If you are absent without a verifiable excuse for a quiz, you will receive zero (0) points credit.

Projects: Since chemistry is an applied science, you will submit three (3) projects that reflect how well you understand and use what you are learning toward separate applications. The submission of these projects can be written or multimedia/electronic based (*e.g.* PowerPoint/Keystone presentation). Content will be graded as well as format and style. Remember that quality is more important, not quantity! Working in pairs or groups is NOT permitted. All references used must be cited properly and I must be able to check them. You may present reports on three of the four following topics: 1) pseudoscience, 2) health & medicine, 3) environment & 4) technology.

Exams: As scheduled in class except for the final (which is based on the final exam schedule).

Midterm Exams	3 x	100 pts	=	300 pts
Quizzes	7 x	5 pts	=	35 pts
Labs	14 x	20 pts	=	280 pts
Homework	15 x	5 pts	=	75 pts
Workshops	6 x	10 pts	=	60 pts
Projects	3 x	50 pts	=	150 pts
Final Exam	1 x	100 pts	=	100 pts
Total				**1,000** pts

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Welcome to the world of chemistry!

In this course I hope you discover the importance a knowledge of chemistry is to understanding your reality. The ability to create, understand, predict and control your environment is absolutely necessary to do well in Life. Here, I will guide you through the facts that chemistry presents about what things are made up of and how you can use this data to make important choices in your life. Ultimately, your ability to control your own health and welfare as well as for those around you is what I hope you achieve with this course.

To this end, I have several suggestions. First, **NEVER GO PAST A WORD YOU DO NOT UNDERSTAND**! This will make you lose an understanding of any data that follows- not a good thing for sure! Always use a dictionary to fully understand a word and how it is used (especially in the context used). Second, **NEVER BE AFRAID TO ASK A QUESTION**! Chances are good someone else has the same question- you can ask outside of the classroom, but just ask! Lastly, **BE RESPONSIBLE AND ETHICAL**! You are responsible for your actions and ethics. You will earn the grade you receive in this course. If you work hard and I can see this, then you may get the benefit of the doubt. If you do not put effort into this course, then you will not get the benefit of the doubt. Additionally, any unethical behavior will be dealt with to the furthest extent I have authority to use. I do not tolerate cheating of any sort and will make sure those caught will be reprimanded appropriately. **DO NOT CHEAT**!

Please contact me if you have any questions at all! I try to respond to phone messages and e-mail as promptly as possible.

I sincerely hope you enjoy the course!

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Lecture & Lab Schedule

Week	Date	Chapter	Subject	Lab or Workshop
1	Tu Sep 1 Th Sep 3	1 2	CHEMISTRY ATOMS	
2	Tu Sep 8 Th Sep 10[1]	3 3	ATOMIC STRUCTURE ATOMIC STRUCTURE	Safety Video
3	Tu Sep 15 Th Sep 17	11 4	NUCLEAR CHEMISTRY CHEMICAL BONDS	Lab check-in DATA ANALYSIS WORKSHOP Lab 2: *Measurements*
4	Tu Sep 22 Th Sep 24[2]	4 5	CHEMICAL BONDS CHEMICAL ACCOUNTING	Lab 3: *Density* Lab 4: *Physical & Chemical Changes*
5	Tu Sep 29 Th Oct 1	5	CHEMICAL ACCOUNTING REVIEW	Lab 5: *Molecular Modeling* WORKSHOP: PSEUDOSCIENCE
6	Tu Oct 6 Th Oct 8	**Exam 1** 6	 PHASES OF MATTER	 Lab 6: Nomenclature
7	Tu Oct 13 Th Oct 15	 7	EQUILIBRIUM ACID BASE CHEM	WORKSHOP: EQUILIBRIUM Lab 7: Properties of *Solutions*
8	Tu Oct 20 Th Oct 22	7 8	ACID BASE CHEM REDOX	Lab 8a: *Quantitative Analysis of Water* Lab 8b: *Qualitative Analysis of Water*
9	Tu Oct 27 Th Oct 29	8	REDOX REVIEW	Lab 9: *Cabbage & pH*
10	Tu Nov 3 Th Nov 5	**Exam 2** 9	 ORGANIC CHEMISTRY	**<u>Project 1 due</u>** WORKSHOP: THERMODYNAMICS
11	Tu Nov 10 Th Nov 12	9 10	ORGANIC CHEMISTRY POLYMERS	Lab 10: *The Energy Content of Fuels* WORKSHOP: CHEMICAL REPETITION
12	Tu Nov 17 Th Nov 19[3]	 16	THERMOCHEMISTRY BIOCHEMISTRY	Lab 11: *Fingerprints* WORKSHOP: FORENSIC SCIENCES & REVIEW
13	Tu Nov 24 Th Nov 26	**Exam 3**		**<u>Project 2 due</u>** THANKSGIVING HOLIDAY
14	Tu Dec 1 Th Dec 3	17 17/18	FOOD FOOD & DRUGS	Lab 12: *Analysis of Fat in Food* Lab 13: *Making Aspirin I*
15	Tu Dec 8 Th Dec 10	18 21 & 22	DRUGS HOUSEHOLD & POISONS	Lab 13: *Making Aspirin II* Lab Checkout
16	Tu Dec 15 Th Dec 17	 **Final**	FINAL EXAM REVIEW (Comprehensive)	Deadline for all submitted work! ↳<u>Including **Project 3 due**</u>

Note: This tentative schedule is subject to instructor modification. You, as the student, are responsible for knowing about and keeping up with this schedule.

1. Mon, Sep 14: Drop class with a refund and not owe a fee
2. Fri, Sep 25: Drop class without a "W"
3. Fri, Nov 20: Drop class with a "W"

Dr. Paul Shin