

Course Syllabus

Introductory Chemistry Laboratory

Course Information

Course Number & Name: CHEM-002L
Section Number: 50218
Semester & Year: Summer 2017
Lab (days, time, location): TWTh, 08:10AM – 11:10PM, SCI 280
Final Date and Time: 07/27/17, 08:10AM – 10:10PM, SCI 280
Drop Policy: Last day to drop classes **without a W (with a refund)** = 06/25/2017.
Last day to drop classes **with a W (no refund)** = 07/16/2017.
Prerequisites: Co-or Prerequisite: CHEM 02
MATH 000C, or any MATH course higher than MATH 00C.
Advisory: Eligibility for ENGL 001A and READ 054.

Instructor Information

Name: Ashok Sinha, PhD
Office (days, time, location): TTh, 2:20PM – 2:50PM, GC 227
Phone: 408 712-0261
E-mail: Asinha071@yahoo.com

Required Course Materials

Lab Manual Title: Catalyst Custom Laboratory Manual, available at Mission College Bookstore only.
Author: Dr. Salaam Baker, Mission College
Publisher: Prentice Hall
Scientific type Calculator

Safety Gear Requirements:

Students are required to purchase safety goggles, 100% cotton lab coats and nitrile gloves for use during the lab sessions. These items can be obtained from the Mission College Bookstore, or they can be purchased outside of the bookstore but they must meet the department's requirements (check with your instructor if you are unsure). Students must bring these items to every lab session, beginning with the second class meeting. Failure to do so may result in being excused from the lab activity for the day and/or losing points from your course grade. Department-owned goggles and coats may be available for you to borrow once during the semester; however these items are not regularly cleaned so you will be using at your own risk.

Course Description: This course is a laboratory component to accompany CHEM 002: Introductory Chemistry.

Student Learning Outcomes:

1. Perform laboratory experiments in a safe and purposeful manner. In the Laboratory a report for every Lab experiment performed is required. For every lab, students should write in their own words its objective, procedure and safety precautions.
2. Demonstrate competence in the use of technology to measure, analyze and present experimental data.

Course Website

Canvas is a course management system adopted by the WVMCCD for all classes.

To log into Canvas, use a compatible browser and go to: <https://wvm.instructure.com/login/canvas>

Your username is your seven-digit college ID; the default password is your birthdate in MMDDYY format.

When you log into the system, you will see a menu in the left margin. Click on 'Courses' and find the link to the Chem 02L course page. All course materials and assignments will be posted under the "Files" tab. Hard copies of these materials will not be provided for you, so you must have access to a printer. To avoid formatting issues, download the documents to your desktop first, rather than printing directly from Canvas. Please check into the course website regularly for class announcements and messages.

Grades

Lab work must be completed in the lab room to get credits. Working in the lab requires Lab Coat and Safety Glasses. ***Do not wear shorts and/or open toed shoes to any chemistry lab rooms. No food or drink is allowed in the lab.*** You are expected to read the experiment and complete the Prelab questions BEFORE coming to the lab for the assigned experiment. You should submit the Prelab section of the experiment right after entering the lab room. Please bring the lab manual and your calculator to the lab. Also you may find it helpful to have your textbook with you.

Lab Quizzes: Brief quizzes (5 – 10 minutes) relating to current *and previous* topics will be given in almost every lab meeting, and they will be given only to those students who are present when the quizzes are distributed. There will be no make-up quizzes.

Lab experiments: You should complete the experiments, calculations, and lab questions during the assigned lab time. ***Points will be taken off for messy or incomplete work, either while you are doing the experiment or in your write-up.*** You should write your lab reports on your own, even when you share experimental data and discuss the results with your lab partner. Copying other student's work is considered cheating and can get you zero point for the lab report. Please submit the original pages of your lab manual to receive credit. If you photocopy any pages of the lab manual, you will get zero point for that experiment and be considered as a missed lab. Lab reports are due at the end of each lab session, unless instructed otherwise. Late submission will NOT be accepted or graded.

Worksheets: They are given to supplement the materials in lab experiments. You may work on them individually or in groups but each of you should submit your own worksheet to get credit. Worksheets are due at the end of each lab session, unless instructed otherwise.

- Lab Safety & Evaluation: ***You should follow the safety regulations listed in the lab manual. These include information on goggles and body covers, as well as the disposal of excess reagents, chemical waste, and broken glass.*** Evaluation points are decided by the instructor based on the following student qualities: lab technique, lab cleanness, attention to safety, preparation for class, and mental alertness. Your participation score may be reduced if you do not observe the safety rules and/or leave a mess at your lab area as well as at any public areas such as fume hoods, balances, reagent counters, equipment and instrument lockers.

PLEASE NOTE: The instructor will not provide any extra-credit work to students who do not do well in class. But bonus points will be given in all your works, including quizzes and exams.

Points to be earned: Points will be earned based on quizzes, lab reports, worksheets, comprehensive final exam. Please bring scantron (form 882E), calculator, pencil and eraser.

Grade Computation:

Chem2L the grading will be based on:

Quizzes	15 %
Comprehensive Final	15 %
Lab Reports	35 %
Worksheets	25%
Lab Techniques, Participation	<u>10%</u>
Total	100%

When computing course grades, each student's overall percentage will be determined from the following:

Letter grades will be assigned on a percentage scale:

A: ≥ 90 % B: ≥ 80 % C: ≥ 70 % D: ≥ 60 % F: < 60 %

Final cut-off percentages will be determined after all points for lecture and laboratory have been totaled.

Policy on Attendance:

Students are expected to attend all sessions of each class. Instructors may drop students from the class if they fail to attend the first class meeting, or do not attend at least one class meeting during the first two weeks. Moreover, instructors may drop students when accumulated unexcused hours of absence exceed 10% of the total number of hours the class meets during the semester.

If your observation of a religious holiday may prevent you from attending class or completing an assignment during the semester, please notify the instructor **AT LEAST TWO WEEKS AHEAD**. Otherwise, you may not be accommodated. You must notify the instructor immediately if you have an absence due to other unavoidable circumstances (e.g., emergency medical care. You may be asked to provide appropriate documentation (i.e., physician's note). Unexplained or unexcused absences for class or any other assignment will result in a grade of zero (0).

Please note that, if you decide to drop, it is **YOUR RESPONSIBILITY** to log onto MC Portal to drop yourself online. If this is not done, you may be carried in the class till the end of the semester and receive an "F" grade.

FACULTY ABSENCE: If the instructor is not in attendance after 20 minutes from the scheduled start time of class, the class is cancelled and the students may leave.

Policy on Cheating:

Cheating and plagiarism are not tolerated on any class assignment, quiz or exam. Students found cheating will receive an "F" on the exam/quiz/practical/activity. You may also be referred to the Vice President of Student Services. Cheating is the act of obtaining or attempting to obtain credit for academic work through the use of dishonest, deceptive or fraudulent means. Examples of cheating include copying from someone else's exam or quiz, consulting with others during exams or quizzes, or using materials like dictionaries or notes during exams or quizzes. If two students are involved, both will be penalized since it is impossible prove who copied from whom. Please review the principles of academic honesty, which are defined in the Student Handbook and Catalog.

Policy on Student Conduct:

It is my responsibility to ensure that all students enjoy a supportive, respectful learning environment. I have a zero-tolerance policy toward any speech or behavior that disrupts the learning environment or prevents any

student from achieving their educational goals. This includes, but is not limited to, disruptive behavior in the classroom such as speaking over the instructor, interrupting other students, monopolizing the instructor's attention such that other students cannot be served, disrespectful, demeaning, or discriminatory remarks of any kind, and any form of coercive behavior toward the instructor or other students. **Any student who engages in such speech or behavior will be told to leave the class for the day, and if the behavior occurs a second time the student will be referred to the Vice President of Mission College for disciplinary action.**

Disability Statement:

Any student who feels s/he may need an accommodation based on the impact of a disability should contact me privately to discuss your specific needs. Please contact DSPS (Disability Support Programs and Services) located in CC 240 (second floor of Campus Center) (408-855-5085 or 408-727-9243 TTY or dsp@missioncollege.edu) to coordinate reasonable accommodations for students with verifiable documentation.

Safety/Emergency Information:

1. Emergency procedures can be found on the poster hanging in your classrooms. Each classroom is also equipped with a phone that any student or faculty member can use to call for help during an emergency. Emergency numbers can be called via speed-dial buttons programmed on the phone.
2. Evacuation plan: In the event of an evacuation, the emergency assembly area for this classroom is Parking Lot C. When directed to evacuate the classroom, be sure to take all or your belongings when you leave and remain with your class in the assembly area until you receive further directions from me or another responsible official (college administrator, police, fire, etc.). In case of emergency, CALL 911.
3. Additional emergency information
 - Student health services: 408-855-5140 (5140 if dialing from campus phone)
 - Safety escort: 408-855-5435 (5435 if dialing from campus phone)
 - Nearest campus phone: 408-855-5140 (5140 if dialing from campus phone)
 - Nearest fire alarm: SCI 280
 - Nearest fire extinguisher: SCI 280 (next to the door)
 - Nearest first aid kit: SCI 270 (next to the door)

Fees:

All fees are due and payable at the time of registration. Mission College will be enforcing the Pay-to-Stay registration payment policy effective Fall Semester 2011. This is the policy that allows Admission and Records to drop students for non-payment of fees. If the payment is not made at the due date, the student will be dropped from all classes for which they are currently registered. Holds will be placed on students' records for fees and any other financial obligations owed to the college. Mission College will not allow a student to re-register in the college nor will the college forward transcripts or any other records to other institutions when those students have holds on their records. Degrees and certificates will also be held until all outstanding fees have been paid or cleared.

Tutoring Information:

Upon referral by an instructor or a counselor, students can enroll in the Supervised Tutoring course, IS 947, where they can receive assistance on the basis of a learning need. Tutoring is available for all subjects. Tutoring is provided at no charge by qualified, trained tutors. Tutors can give students feedback on their course work, help them understand assignments and provide students strategies for improving their learning skills.

The Family Educational Rights and Privacy Act (FERPA)

(20 U.S.C. § 1232g; 34 CFR Part 99) is a Federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. For additional information, you may call 1-800-USA-LEARN (1-800-872-5327) (voice). Individuals who use TDD may call 1-800-437-0833.

Harassment Information:

If you have a complaint or someone has shared information with you as a student or employee that is unlawful discrimination or sexual harassment, contact the Director of Human Resources at West Valley-Mission Community College District, Human Resources Department, 408-741-2060. If the Director of Human Resources is not available, contact the President of the college at 408-855-5123.

Mission College is a No-Smoking and Drug-Free Campus

The West Valley-Mission Community College District policy 5.18.1 prohibits “the unlawful use, distribution, sale, or possession of alcohol, narcotics, dangerous or illegal drugs, or other controlled substances, as defined in California statutes, on District property or at any function sponsored by the District or colleges.” Also, the campus community voted it’s preference for a non-smoking environment, and the decision is reflected in District policy: The College’s non-smoking policy is enforced in all areas except for campus parking lots.

Grievance Process:

The grievance process is a formalized process to ensure the timely resolution of conflict at the lowest possible level. The first step is the informal resolution stage which involves the student who has a complaint and the staff member or specific group who is the other party in the grievance. The student must notify the staff person or representative of a group that she/he wishes to make an appointment for an informal meeting to review an action within ten (10) days of its occurrence. In the absence of the instructor or staff person and after a good faith effort to make contact, the grievant may directly contact the department chair. Additional information is available from the Vice President of Student Services.

Policy for Course Repetition:

Title 5 code 55040: District Policy for Course Repetition. A student may repeat any course in which a substandard final grade (D F, NP, or W) was earned. A course may be repeated only once under this policy for a total of two attempts. A student wishing to repeat a course for a 3rd attempt will be required to submit a Student Petition Form.

CHEM-2L, Summer 2017, (Room: SCI-280) 8:10 AM- 11:10 AM Dr. Sinha	
Week #	Labs: Tuesday's, Wednesday's, & Thursday's
1	06/20 Lab Orientation, Video, Working Safety in the Lab , and Lab Check-in
	06/21 Lab Quiz Experiment: Atomic Structure (Sections A, B, C, and D); CH-1, pp 45-51 & Work Session
	06/22 Lab Quiz Experiment: Electron Configuration and Periodic Properties (Sections A, B, and C); (CH-2, pp 93-101) & Work Session
2	06/27 Lab Quiz Experiment: Densities of Liquids and Solids(Sections A, B, and C only) (CH-4.4, pp 37-44) & Work Session
	06/28 Lab Quiz Experiment: Measurement and Significant Figures (A, B, and C); CH-4, pp 13-21)
	06/29 Lab Quiz Experiment: Conversion Factors (Sections A, B, C, D, E, and G); (section F: calculations only); (CH-4, pp 23-36)
3	07/04 No Lab, Independence Day
	07/05 Lab Quiz Experiment: Dialysis (Handout, download from Canvas)
	07/06 Lab Quiz Experiment: Moles and Chemical Formulas (Section A only), (B: Calculations only) (CH-5, pp 53-62) & Work Session
4	07/11 Lab Quiz Structure & Shape (CH-6,Handout) (Using Model Kits: Balls and Sticks) & Work Session # 8: Molecular Geometry.
	07/12 Lab Quiz Experiment: Aspirin Analysis, Day one (Handout, please download it from Canvas)
	7/13 Experiment: Aspirin Analysis (cont.), Day two. Melting Point, TLC and FeCl₃
5	7/18 Experiment: Chemical Reactions and Equations (All sections); (CH-10, pp 63-71) & Work Session
	7/19 (Instructor: Part A of "Solutions, Electrolytes, and Concentrations" has different waste bottle than Part B & C) Lab Quiz & Experiment: Solutions, Electrolytes, and Concentrations, (A and B Demo by the Instructor), & C, (D: Calculations only): (CH-11, pp 73-83) & Comprehensive Chemistry (Solutions and Solubility).
	7/20 Lab Quiz Experiment: Soluble and Insoluble Salts (Start with D first, then A, and B); (CH-11, pp 85-92). & Work Session
6	7/25 Lab Quiz & Experiment: Energy & Specific Heat (Section B: Demo by the Instructor), do sections A & C (CH-6, pp 109-118) & Work Session # 6: Specific Heat Capacity (Handout, please download it from Canvas).
	07/26 Lab Quiz & Experiment: Acid-Base Titration (part A only): (CH-12, pp 119-128), Work Session & Lab Check out (Please keep your lab coat and goggles in your drawer for the "Lab Final Exam").
	07/27 Lab Final Exam (Air Bag Exploration), 8:10 AM - 10:10 AM in SCI-280 The Final Exam will neither be given early, nor it be given late.