Course Syllabus
General Chemistry 1B (5 Units)

Course Information

Course Number & Name:	**CHEM-001B**
Section Number:	53799
Semester & Year:	Spring 2017
Lecture(days, time, location):	MW, 5:25 PM - 6:50 PM, GC-203
Lab (days, time, location):	MW, 7:00 PM - 10:10 PM, SCI-270
Final Date and Time:	05/22/17, 5:25 PM - 7:25 PM, GC-203
Drop Policy:	Drop deadline without a "W" – **February 12, 2017** Drop deadline with a "W" – **April 27, 2017**
Prerequisites:	Chem001A, Advisory: ENGL 905 and READ 961.

Instructor Information

Name:	Ashok Sinha, PhD
Office (days, time, location):	M, 4:45PM – 5:15PM, Teaching & Learning Center SE2-101
Phone:	408-712-0261
E-mail:	asinha071@yahoo.com
	Web page: http://www.sinhainstitute.com/MC_Chem1B.php

Required Course Materials

Textbook Title:	Chemistry: Structure and Properties, 1st Edition
Author:	N. Tro
Publisher:	Prentice Hall
Lab Manual Title:	Lab procedures and worksheets need to be downloaded from Canvas

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: Chemistry 1B is the last of the two quarter length General Chemistry course. Topics covered in this quarter include solution properties, chemical kinetics, chemical equilibria, acid base chemistry, aqueous ionic equilibrium of buffers, solubility product constants, entropy and free energy change, electrochemistry including the thermodynamics of voltaic cells, chemistry of transition elements and nuclear chemistry. Laboratory parallels lecture topics with an emphasis on qualitative inorganic analysis.

Student Learning Outcomes: Students will be able to:

1. Demonstrate the ability to perform thermodynamic calculations including "Entropy Change (ΔS)", "Gibs Free Energy Change (ΔG)", "Enthalpy Change (ΔH)" , "Standard Free Energy of Formation (ΔG°)", "Spontaneity and Energy Transfer as Heat"
2. Demonstrate the ability to perform calculations pertaining to "Equilibrium Constants for Acids and Bases", "Acids", "Bases", "Conjugate Acids/Bases", "pH", "Buffers", and "Acid-Base Titrations".

Points to be earned: Points will be earned based on three integrated exams and a comprehensive final. There will be no makeup exams under any circumstances. Absence from the final will result in a failing grade in the class. Exams will be, if not mentioned otherwise with short questions, multiple choice (on scantron form 882E) and/or True/False format. Students will lose one (1) point per absence from the next midterm exam if they are late to attend a class within 5 minutes of the start time.

Grade Computation: Grading will be based upon three integrated exams and a comprehensive final. When computing course grades, each student's overall percentage will be determined from the following:

3 midterm exams (20% each)	60 %
Comprehensive Final	25 %
Lab Reports	13 %
Lab Techniques, Participation	2%
Total	100%

If your 2nd midterm score is better than your 1st midterm, then the 2nd midterm score will be used as 1st midterm score. Same rule will be used for 2nd and 3rd midterm scores and 3rd and the final exam score. But not reverse way.

Letter grades will be assigned on a percentage scale:
A: ≥ 90 % B: ≥ 80 % C: ≥ 70 % D: ≥ 60 % F: < 60 %

If you fail (< 60 %) either the lecture or laboratory portion of the course you will not receive a passing grade.

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.
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.

Canvas Information:
Canvas is a course learning management system adopted by the WVMCCD for all classes. When you log into the system, you will see a listing of classes that you are taking. https://wvm.instructure.com/login/canvas

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 dsps@missioncollege.edu) to coordinate reasonable accommodations for students with verifiable documentation.

Safety/Emergency Information:
1. Emergency procedures can be found in the orange colored flip chart posted 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 270
   Nearest fire extinguisher: SCI 270 (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 statues, 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.

Chem1B Schedule (Tentative); Spring 2017: Dr. Sinha

		Monday		Wednesday	
Week	Date Begins	**Lecture (MW) 05:25 pm - 06:50pm Room GC-203**	**Lab (MW) 07:00 pm - 10:10pm Room SCI 270**	**Lecture (MW) 05:25 pm - 06:50pm Room GC-203**	**Lab (MW) 07:00 pm - 10:10pm Room SCI 270**
1	Jan 30	Introduction, CH-22: Organic Chemistry	Orientation, safety videos, Check-in drawers	CH-22 (cont.)	Rev. Session: Chem. Formulas & Nomenclature
2	Feb 6	CH-22 (cont.) & CH-12: Liquids, and Intermolecular Forces	Work Session & Discussion # 22: Organic Chemistry	CH-12 (cont.) & CH-13.2: Phase Diagram	**Exp A: Synthesis & Character. of Aspirin**
3	Feb 13	CH-14: Solutions	**Exp A: Aspirin (cont.) &** *WS-12: Liquids, and Intermolecular Forces*	CH-14 (cont.)	**Exp B: Freezing Point Depression**
4	Feb 20	President's Day; No Lecture	President's Day; No Lab**.**	CH-15: Chemical Kinetics & Review Test # 1 (CH-22, 12, 13.2, & 14)	WS-14: Solutions & **WS-Using Excel (Standard Curve, etc.)**
5	Feb 27	**Test # 1 (CH-22, 12, 13.2, & CH-14)**	**Exp C": Preparation of Glue from Milk**	CH-15 (cont.)	WS-15: Chemical Kinetics
6	Mar 6	CH-16: Chemical Equilibrium	**Exp D: Rate Law**	CH-16 (cont.)	WS-16: Chemical Equilibria
7	Mar 13	CH-17: Acid-Base Equilibria	**Exp E: Activation Energy**	CH-17 (cont.) & Review Stoichiometry and Limiting Reactants	WS-17: Chemistry of Acids and Bases
8	Mar 20	CH-18: Ionic Equilibria in Aq. Systems	**Exp F: Le Chatelier's Principle**	CH-18 (cont.)	**Exp G: Equilibrium**
9	Mar 27	**Spring Break; No Class; No Lab**			
10	Apr 3	**Test # 2 (CH-15, 16 & 17)**	WS-Videos/Essay: Making Stuff Wilder and Making Stuff Cleaner	CH-18 (cont.)	WS-18: Other Aspects of Aqueous Equilibria
11	Apr 10	CH-19: Thermodynamics	**Exp. H: Buffers and pH**	CH-19 (cont.)	**Exp. I: Solubility Product**
12	Apr 17	CH-19 (cont.)	WS: Video/Essay: Hunting for Elements	CH-20: Electrochemistry	**Exp. J: Vitamin C**
13	Apr 24	CH-20: Electrochemistry	WS-19: Entropy and Gibbs Free	CH-20 (cont.)	WS-20B: Battery Design & Voltaic

			Energy		Cell Demo &
14	May 1	CH-21: Nuclear Reactions & Their Applications	**Exp. K: Oxidation-Reduction &** WS-20A: Electrochemistry	CH-23: Coordination Compounds & Review Test # 3 (CH-18, 19, 20 & 21)	WS-20A: Electrochemistry (cont.) WS 21: Nuclear Chemistry
15	May 8	**Test # 3 (CH-18, 19, 20, and 21)**	**Exp. L: Coordination Compounds**	CH-23: Coordination Compounds (cont.)	**Presentations**
16	May 15	CH-23 (cont.) & **Review Final Exam**	WS-23: Coordination Chemistry	Review Final Exam and Lab Checkout	Review Final Exam
17	May 22	**Final Exam (CH-12, CH-13.2, CH-14, CH-16 to CH-23) Mon, 5/22/17 (05:25 PM - 07:27 PM), GC-203 The Final Exam will neither be given early, nor will it be given late.**			