CHEMISTRY 1B Lab & Seminar

Spring 2022

Continuation of Chem 1B Greensheet

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BOOKS/SUPPLIES/COURSES

Required

1) **Lab Manual/Handouts for Chemistry 1B** - Sold by Maple Press. http://www.maplepress.net
2) Hand-held scientific calculator - **Must be non-programmable** and should have log x, 10^x, ln x, e^x and x^y keys. - **You will not be allowed to use your programmable calculator during a lab exam or quiz!**

Not Required (But useful)

1) **Academic Excellence Workshops** to help you study for Chem. 1B. These are 3 hour a week organized study sessions.
2) **Suggested items to purchase for lab**: small notebook to keep in your drawer (you can staple together 15 sheets of lined paper?), safety glasses (side and top shields) and a china marker (sold at bookstore). The notebook is to keep a set of data in your locker in case you lose your lab manual. The safety glasses are in case you don't want to use the goggles provided in your locker and the china marker writes on glass to label things quickly. Note though the china marker will not label things that go in the oven!

THINGS YOU MUST DO THIS FIRST WEEK OF CLASS

1) Attend your first lab meeting. (At the time I am writing this we are still set for in person lab.)
2) Read this greensheet thoroughly. It is the rules of the game. Best to know the rules before you start. There is a greensheet quiz covering this greensheet and the one for lecture on Canvas for your seminar that you must complete. Don't forget to get it done by the due date.
3) Attend your seminar on Jan 28thh. Before coming to seminar view the videos below
   Safety - https://youtu.be/mMUgpExXUcU https://youtu.be/sInkkTNer1k
4) If you decide to drop the course, you need to do it on MySJSU.
5) Do the calculator practice in your lab manual. **It is your responsibility to know how to use your calculator. Instructors will not assist you during an exam or quiz!**
6) **Start working on Exp. 13 problems on concentration and stoichiometry found at the end of the experiment in your lab manual.**

ATTENDANCE/WORKLOAD

Regular attendance to lab are required. Absences to lab can and will result in an F grade for the FULL course (two unexcused absences from lab are sufficient for me to drop or fail you!!). Please remember this is a 5 unit course, it will require a great deal of your time. Seldom does a student who works and carries a full course load succeed in this class. Make arrangements now, don't wait until you are behind. SJSU classes are designed such that in order to be successful, it is expected that students will spend a minimum of forty-five hours for each unit of credit (normally three hours per unit per week), including preparing for class, participating in course activities, completing assignments, and so on. More details about student workload can be found in University Policy S12-3 at http://www.sjsu.edu/senate/docs/S12-3.pdf.

To attend another lab section so as to complete work, you will need the consent of the section's lab instructor. They are not required to accept you in their lab, particularly if their lab is full or if we have COVID restrictions in place! I strongly encourage you to not be absent from lab.

MISCONDUCT

Students are to do only those laboratory experiments assigned. Certain chemicals when improperly used are very dangerous. You are responsible for disposing chemical wastes safely; the lab instructor will inform you on particular waste disposal issues for each experiment. If they forget to inform you, ASK THEM!! Any student found preparing anything that may in any way endanger her/his safety or the safety of others will be immediately dropped from the course with an F grade. Any student found disposing of wastes incorrectly is also in danger of being dropped from the course or failed. Students are expected to behave maturely and honorably in the lab and lecture course.

While taking exams or quizzes, the student should keep his/her eyes down on his/her own paper. No whispering or talking is allowed. You are not allowed to share a calculator or periodic table during exams or quizzes. If your calculator fails inform the instructor. They can then decide a course of action. You may not use your cell phone or PDA as a calculator; these should be stored in your backpack or on the floor beneath your seat. You may not answer the phone during a test. You cannot have headphones/earphones in your ears irrelevant of what you are listening to. All printed or written material (notebooks, textbooks, etc.) should be placed under the seat, left outside the room or placed near the lecturer's table, at the front of the room. Failure to comply will cause the instructor to pick up the exam and give a grade of F for the exam and/or course. Willful solicitation, procurement or conveyance of exams/quizzes/unknowns will also result in failure of the course. The instructor can and will bring the person caught cheating to the attention of the university committee in charge of student misconduct.

EMERGENCIES/EVACUATIONS

If you hear a continuously sounding alarm, or are told to evacuate by Emergency Coordinators (colored badge identities), walk quickly to the nearest stairway (end of each hall). Take your personal belongings with you as you may not be immediately allowed to return. Follow instructions of Coordinators. Be quiet so you can hear. Once outside, move away from the building. Do not return to the building unless the Police or Coordinators announce that it is permissible. If an alarm should occur during an exam or quiz, please attempt to give your instructor the paper.

MISCELLANEOUS

1) You must bring the lab manual to each lab class.

2) Safety glasses must be worn at all times during the lab experiments; if they fog up, take them off outside the room!! SJSU provides you with goggles in your lab drawer but you might consider buying your own. Ms. Serrano might have some to sell from the Chemistry Club.

3) Keep track of your scores. At the end of the semester compare your grade sheet with the lecturer and lab instructor's grade sheets to make sure we have transcribed and adjusted you grades correctly. **You have only 9 days from the day a quiz or exam is returned to ask for a regrade of your exam or quiz. I will not do regrades after nine days have passed.**

4) **If a fire alarm were to interrupt an exam please do the following: Leave the room via the door closest to the instructor and give the instructor your quiz or exam. Provide assistance to any disabled students. Take your books with you since there is some chance you might need to go to your next class before you are allowed in the room. If a fire alarm interrupts lab, please turn off any gas line.**

5) **Any student with a disability requiring special testing conditions must let Dr. Singmaster now within the first two weeks of class so as to determine times for lab exams.**

6) It might be useful to purchase a small, inexpensive bound notebook to keep in you lab locker. You can keep a **second** copy of your raw data for each experiment in that notebook. (First copy of data goes on the data section of an experiment in your lab manual.) That way, if you lose you lab manual or misplace the data, you have a safe copy in your drawer and you do not need to start the experiment over. All you need to copy is the raw data, you can always redo the calculations. Some labs take two periods and would require you redoing everything to get a final result.

Laboratory

It is your responsibility to complete the experiment on time, particularly if you don't come prepared! Chem. 1B experiments require that you come to class with a clear idea of what you have to do and in what order. Also they often require that you process more than one run at a time or you won't have enough lab time to complete the experiment. You must pay attention to the lab instructor when they say "Start cleaning up". This will usually be said 15 minutes before the end of lab. There will be times when the instructor might say that you cannot start X part of the experiment because there isn't enough time to complete it. Follow those instructions or you will damage experimental runs and you will get to start over!

Credit for doing a lab comes from attending the lab, physically doing the lab and then handing in the necessary reports/worksheets. These report sheets get graded for accuracy and precision. Thus doing the experiment will not get you through the course. You have to do it WELL. Without the reports, you will not get any credit for the lab. If you hand in a report without having attended the lab, you will be dropped from the course and reported to the University's Disciplinary Committee.

Extra time in lab will be used to either work out data and the report sheet, or to practice doing problems. You have an instructor in the room who can help you study! Don't waste the opportunity.

Please do not be absent from lab! We might not be able to offer make-ups due to COVID..

Friday Seminar

This is when we discuss the following week's lab, do the lab quizzes and lab exams. The quizzes will be given during seminar, whether the course is in person or online. This is essential to reduce cheating.

Lockers

You will not be sharing lockers with a student from another lab section. You will probably have a check book to check out items from the stockroom. Return those items at the end of the lab or you will be billed for them at the end of the semester.

Grading

The total lab grade constitutes 40% of the final grade. **Failing lab (55.0% or less) or lack of attendance to lab will result in an F grade for the FULL COURSE, irrelevant of how well you are doing in lecture.** Do not miss labs!! **PLEASE note we do NOT provide extra credit work at the end of the semester for students who are doing poorly.**

The grade for lab is forwarded to your lecture professor. He/She will combine that with your lecture grade to give a grade for the full course. The grading is based on quizzes, lab exams, lab reports and evaluations points. **These points do not have the same weight**! Quiz and lab exam point weigh more than lab report points!

Quizzes

We expect that you will have about 9 or 10 lab quizzes which includes a Canvas quiz on the greensheet. Most will be 10 points. You must get 80% or better in the safety quiz to remain enrolled in the course. You will have a maximum of two chances to pass the safety quiz. We will NOT be deleting quiz scores. Rather we will add all your quiz scores and divide by the sum of the quizzes MINUS 10 points. This would be equivalent to deleting one quiz score.

Lab Reports/Unknowns/Worksheets

Typically you must submit a lab report at the end of every experiment. Some of the experiments have unknowns. Point value for the reports varies greatly depending on the nature of the experiment. ***Report sheets have due dates that are listed at the end of this greensheet.*** You are strongly encouraged to hand in the report sheets well before the due date and prior to the quiz on the experiment. **Report sheets handed in after the due date will have points deducted from the score at a rate of 20% per week late!** This hopefully forces students to keep up with the workload and minimizes last minute grading by the lab

instructors.

Exams

One 100-point exam will be given during the last Friday of the semester.

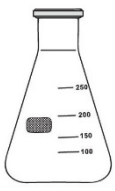
Total Lab score is made up by 25% lab exam, 40% lab quizzes and 35% lab reports. You must complete the lab with a 55% or you will fail the FULL course irrelevant of how well you did in lecture!

Students' biggest mistakes in Chem 1B lab - Very honest comments from Dr. Singmaster, in case you are interested

1) **Not taking the time to do and understand all the problems in Study Assignment 13**. Those problems will *haunt* you all semester because all semester you are doing concentration and stoichiometry.
2) **Being in a hurry in lab.** You have 4.25 hours to get it done right and to get help with the report sheet. Don't waste points because you were cutting corners, not checking your calculations, etc. For experiment 16 we often have as many as 50% of the students handing in calculations that are wrong. Take advantage of the fact that the lab instructor is there to see if you are doing the calculations correctly, etc.
3) **Not being ready for lab.** Read the experiment, attend seminar and create a summary (recipe) so that you know what to do. Do not expect others to have this for you. They might be lost and you do the wrong thing, wasting time, etc. Sometime many mess up because they followed the mistakes one person made.
4) **Expecting others to do the work for you when working in groups**. This is particularly a problem in Exp. 23.
5) Not taking advantage of the FREE Sci 1 workshops and of office hours with instructors.
6) **Waiting for magic to fix it all**... If you are lost, don't wait for your score in Lecture Exam I to prove it to you. By that time you can't fix it and the material gets tougher.
7) **Forgetting material learned in Chem 1A**. For example, you learned how to draw a graph in Chem 1A. Use that knowledge in Chem 1B or we just take the points away and wonder why we passed you in Chem 1A. Even for Exp. 23 final report I get graphs that are so wrong in terms of axis choices, correct plotting that it is depressing for me to grade.
8) **Doing poorly on the Safety Quiz and Greensheet Quiz on Canvas**. You should get at least 90% in both of these so that you start with two GOOD quiz scores.
9) **Not paying attention to Prelab Quizzes for Exp. 16 and 23**. Both are giving you significant hints!
10) **Not taking advantage of the resources YOU PAY FOR**, like: Counseling Services for test anxiety; Career Center to plan your future; Accessible Education Center if you have accessibility issues; Peer Connection for workshops and tutoring; and CoSAC for tutoring.
11) **Glassware Names** – Use them correctly, particularly in Exp. 23, 24 and 25 write ups, and OW 2. Figure out what they do. Measuring a volume is NOT the same as delivering a volume. A pipet delivers 10.00 mL to a flask, it does not contain 10.00 mL. The pipet sucked up a little more than 10.00 mL because it stays wet.

Volumetric flask

Conical or (narrow neck) Erlenmeyer flask



Lab Schedule will be a separate document.

This will allow us to update it based on possible campus closures due to COVID restrictions.