Berkeley City College

Chem 1A Syllabus, Fall 2018

Instructor: Siraj Omar, Ph.D.
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I. Class Meetings:

Lecture:	0900 – 1150	TTh	(Room 431 BCC)
Lab (Section–1):	1330 – 1620	T	(Chem Lab, Room 521 BCC)
Lab (Section-2):	1330 – 1620	Th	(Chem Lab, Room 521 BCC)
Office hours:	1400 – 1600	MW	(LRC BCC; drop-in)
	1600 – 1650	Th	(Room 523; by appointment)

II. **Class Description & Objectives**

Chemistry 1A is the first part of a two semester general chemistry course, which will cover topics that include atomic structures, electron configurations, trend in periodic properties, chemical bonds and bonding theories, the concept of moles, reaction stoichiometry; thermochemistry; intermolecular forces and properties of gases, liquids, solids, and solutions. This class assumes that you already have knowledge of basic chemistry that is equivalent to one year of high school chemistry or the successful completion of an introductory chemistry course. Mathematics skills, particularly algebra, are essential for your success in this class. You must be comfortable with word problems, ratios, percentages, and logarithm. (Chem 1A is a pre-requisite for Chem 1B. It is a transferrable course to UC and CSU, and is a required subject for all science majors, medical degree, and degrees in dentistry and pharmacy.)

Student Learning Outcome:

Upon completing this course students will acquire the following knowledge and skills:

1. Solve quantitative chemistry problems and integrate multiple ideas, that include incorporating stoichiometric and algebraic relationships, in problem solving processes.
2. Explain qualitative trends in physical and chemical properties of elements and use molecular level concepts (physical and/or chemical) to explain macroscopic properties of matter.
3. Perform experiments according to laboratory safety procedures; collect and analyze experimental data; interpret results that include graphs construction; write organized laboratory reports.

III. **Books and Supplies**

- OpenStax (OER) General Chemistry: https://openstax.org
- Chemistry, 8th or 9th Edition, by Zumdahl, Cengage learning (supplementary text)
- Chem 1A Laboratory Manual, Siraj Omar, Berkeley City College, (Copy World)
- Lab notebook, safety goggles, and scientific calculators.
- Lab-coat or apron (recommended)

IV. **Grading:**

1. Weighting factors:

Homework	8%
Lab & Reports	20%
Quizzes	16%
Midterms	36%
Finals	20%
Total	100%

2. Distribution of Grades:

A	≥ 90%
B	79 - 89%
C	65 - 78%
D	50 - 64%
F	< 50%

(Note that points accumulated from homework, lab reports, quizzes and tests are not equivalent. It is the percentage score from each section that is important.)

V. **Homework Assignments**

Homework will be assigned weekly through online homework provider (go to www.saplinglearning.com, and sign up under "Berkeley City College - CHEM 1A – OMAR". There'll be 20-25 homework problems to be assigned for each chapter, plus about 10 practice problems that will be graded for extra credit.

VI. **Quizzes, Mid-terms and Final Exam:**

A total of 9-10 quizzes, three (3) midterms and a final exam will be given during the semester. There will NO make-up on quizzes, midterm tests or finals, but only the top eight (8) quiz scores will be counted into the final grades. In general, each midterm exam will cover materials from three (3) chapters, but the final exam will be comprehensive. Dates for midterms and the finals are indicated in the class schedule (given in this syllabus). If there is any conflict on the schedules with your personal prior engagement, please let me know one week before the scheduled date so that an alternative date can be arranged. If you miss a midterm or the final exam due to sickness, you must provide a medical certificate or a doctor's note.

VI. **Laboratory**

- Laboratory is an important component in this class. You will perform 12-13 experiments, and for each experiment you will write a comprehensive lab report. During lab you may perform experiments with one or two partners and you will be sharing experimental data. However, lab reports must be written and submitted individually.
- Please DO NOT copy your partner's lab reports; (this includes the calculations). Plagiarism is an academic offence. You will be given a "zero" grade for your lab reports if it is determined that you have copied someone else's work.
- Each lab report must be turned in within one week the experiment is completed; points will be deducted from late reports. **Lab reports that are more than three (3) weeks overdue will not be graded.**

Please read the following guideline for the laboratory preparation and for writing lab reports:

1. You must read the experiment and complete the pre-lab exercises before coming to the class. Pre-laboratory exercises must be turned in at the beginning of the lab period. You WILL NOT be allowed to perform the experiment if you have NOT read the experiment or done the pre-labs.
2. You MUST have a lab notebook that is dedicated strictly for your laboratory work by the second week of the semester. All experimental Data and Observations MUST be written in this lab notebook in indelible INK. Pencil MUST NOT be used. (You will not be allowed to perform the experiment if you come without your lab notebook.)

3. **Preparing Lab Notebook and Writing Lab Reports**
   - *Lab notebook*: start on a new page for each experiment and you must have the following written in the lab notebook before you come to the laboratory perform any experiment: (1) *Title*; (2) *Objective*; (3) *Procedure* (outline or list steps to be carried out), and (4) *Data Table*. Please do this in your lab notebook before the lab period, so that you're familiar what needs to be done during the experiment and not waste precious laboratory time.
   - *Lab report*: Organize lab report using the following format: (1) *Title*; (2) *Objective*; (3) *Overview*; (4) *Procedure*; (5) *Data Table*; (6) *Calculations* (if applicable); (7) *Summary*; (8) *Answers to Post-lab questions*. The final lab reports must be organized according to the format mentioned above, or points will be deducted.
4. Please show your data to your lab instructor before leaving the lab at the end of each lab period. (Your lab instructor may ask you to complete some of the calculations before allowing you to leave.)
5. All lab reports MUST be typed – including the Data Tables. However, the calculation parts may be hand-written. T**here must be at least 1 inch margins (or borders) on the top, bottom, left, and right of every page of your reports.**
6. The complete lab reports must be turned in within one week after the experiment is completed. Lab reports that are more than 3 weeks overdue will NOT be graded.

VIII. **Safety in the Laboratory**

1. Safety in the laboratory is of primary importance. You must wear safety goggles at all time during laboratory classes, regardless of whether you are doing an experiment or not.
2. Eating and drinking are NOT ALLOWED in the laboratory.
3. You must wear close-toed shoes. Sandals or flip-flops are NOT allowed in the chemistry labs.
4. You must wear clothing that protects your body. Shorts, short skirts, and sleeveless shirts/blouse are not allowed. Avoid wearing flammable synthetic materials. Do not wear contact lenses.
5. Do experiment that is assigned by the instructor. Any kind of unauthorized experimentation with chemicals is strictly prohibited.

VII. **Reading/Studying**

- It is crucial that you read the chapter before coming to class. If you come to class without knowing what topic(s) the lecture will cover, you will not gain anything during the lecture.
- You must pay attention during lectures and study the materials outside the class periods. Studying is not the same as reading. It is an active process, which includes summarizing concepts in your own words and memorizing formulas, as well as solving problems. You must do the homework assignments to fully grasp the concept(s) covered during each lecture.
- In this class you should expect to spend 10-12 hours per week outside class periods to read and review materials, do homework assignments, and write lab reports. Additional hours may be needed to study for quizzes or examinations.

VIII. **Academic Decorum and Attendance**

- Attendance in lectures and labs are important and will be recorded. Be sure to sign the attendance sheets. Please contact me if you find yourself in a situation that might cause you to miss more than two lecture periods. You are strongly encouraged to take notes during lectures and participate during class discussions. Do Not do your homework assignments during lectures.
- Be punctual! If you arrive late, enter quietly. If you have to leave the class before the end of the period, please be seated where you can leave with the minimum disruption to the class.

Please Do Not use smart phones, Ipads, or laptops during lectures!!

Please respect the desire of others to learn by NOT talking during lectures or causing disruption, but you may ask questions during lectures. In fact, you are encouraged to participate actively during lecture demonstration and exercises.

IX. **Integrity**

- All work submitted for grading must be your own. Copying is cheating and is an unacceptable behavior. **Cheating during quizzes, tests, or examinations will NOT be tolerated and it will earn you an automatic zero for those quizzes or examinations**.
- Copying your partner's lab reports is also considered cheating; **your lab reports will NOT be graded if I found two or more identical reports**.
- **Be a full and active participant when you work on experiments/assignments with others**. If you just copy the groups or your partner's data, you haven't learned anything and you are wasting your time.

Academic Calendar for Fall 2018

August 20	M	Fall Semester Classes Begin
August 25	S	Saturday Classes Begin
August 26	Su	Last day to Add without Permission Number or Add Card
August 31	F	Last Day to Add regular session classes with permission Number
September 3	**M**	**Labor Day Holiday** – No Class
September 3	M	Last Day to drop regular session classes and receive a refund
September 3	M	Census Day – Census Roster due "Online"
September 7	F	Grading Option - Last Day to File for PASS/NO PASS Grading option
October 19	F	Last Day to file petitions for AA or AS Degree/Certificate
October 25	Th	Professional Flex Day – No Classes
November 12	**M**	**Veteran's Day Holiday**
November 16	F	Last Day to Withdraw from Regular Se4ssion Classes and Receive a "W"
November 16	F	Attendance Verification Day – Instructors Submit Rosters "Online"
Nov 22 – 25	**Th-Su**	**Thanksgiving Holiday**
December 8	S	Saturday Instruction Ends
December 10-14	M-F	Final Exam Week
December 14	**F**	**Fall Semester Ends**

Chem 1A Fall 2018 Tentative Schedules for Lectures, Labs, Quizzes, Midterms & Finals

Wk	Date	Lect/Lab	Chapter Sections (in the text)
1	08/21	Lecture-1	Introduction to Gen Chem; Scientific method; Classification (1.1 – 1.4)
	08/23	Lecture-2	Measurement & Units Conversion; Significant Figures; Temperature & Density (1.5 – 1.6); Graphing technique
		***Lab*-1**	***Briefing on Lab and Lab Safety Guideline; Safety Video & Safety Quiz;***
2	08/28	Lecture-3	Atomic Theory; Atomic Structures; Isotopes & Symbols (2.1 – 2.3);
	08/30	Lecture-4	Classification of Elements & PT; Formulas & Nomenclature (2.4 – 2.7);
		Quiz #1	(Chapter-1)
		Lab-2	**Experiment-A2: *Error Analysis & Graphing***
3	09/04	Lecture-5	Nomenclature (continued) (2.7); Moles and Molar Masses (3.1)
	09/06	Lecture-6	Empirical & Molecular Formula ; Molarity & other conc. unit (3.2 – 3.4);
		Quiz #2	(Chapter-2)
		Lab-3	**Experiment-A3: *Separation by Paper Chromatography***
4	09/11	Lecture-7	Chemical Equations; Classification of Chemical Reactions (4.1 – 4.2);
	09/13	Lecture-8	Reaction Stoichiometry & Reaction Yields (4.3 – 4.4);
		Quiz #3	(Chapter-3)
		Lab-4	**Experiment-A4: *The Empirical Formula of an Oxide***
5	09/18	Lecture-9	Quantitative Analysis (4.5); Test Review.
	09/20	**Test #1**	(Chapter 1 – 4.4; Scantron are needed)
		Lab-5	**Experiment-A5: *Formulas of Hydrates***
6	09/25	Lecture-10	Thermochemistry: Energy and Calorimetry (5.1 – 5.2);
	09/27	Lecture 11	Enthalpy of Reaction & Hess's Law (5.3);
		Quiz #4	(Chapter-4: Sections 4.1, 4.2 & 4.5)
		Lab-6	**Experiment-A6: *Reactions in Aqueous Solutions***
7	10/02	Lecture 12	Electromagnetic Energy; Bohr's Model & Quantum Theory (6.1 – 6.3);
	10/04	Lecture 13	Electronic Structure and Periodic Properties of Elements (6.4 – 6.5);
		Quiz #5	(Chapter-5)
		Lab-7	**Experiment-A7: *Acid-Base Titrations***
8	10/09	Lecture 14	Ionic & Covalent Bonding; Lewis Symbols and Structures (7.1 – 7.3)
	10/11	Lecture 15	Octet Rules & Formal Charges; Resonance Structures (7.4 – 7.5);
		Quiz #6	(Chapter-6)
		Lab-8	**Experiment-A9: *Heat Capacity of Calorimeter & Enthalpy of Dissolution***
9	10/16	Lecture 16	Molecular Structures & Polarity (7.6);
	10/18	**Test #2**	(Chapters 4.5 – 7.5; Scantron are required)
		Lab-9	**Experiment-A10: *Spectrophotometric Analysis of Cobalt(II) Chloride***
10	10/23	Lecture 17	Localized Bonding Model & Hybridization (8.1 – 8.3);
		Lab Exercises	***Experiment-A12: *Lewis Structures and Molecular Shapes***
			(This will be assigned *as homework*; it is due on November 1, 2018)
	10/25	**Fall Flex Day**	(No class)

Wk	Date	Lecture/Lab	Topics
11	10/30	Lecture 18	Molecular Orbital Theory (8.4);
	11/01	Lecture 19	Gas Pressure & Ideal Gas Laws (9.1, 9.2 & 9.4);
		Quiz #7	(Chapter-7)
		Lab-11	**Experiment-A11: *Qualitative Analysis of Cations***
12	11/06	Lecture 21	Stoichiometry of Gaseous Reactions; KMT & Real Gases (9.4 – 9.6);
	11/08	Lecture 22	*Atmospheric Chemistry*
		Quiz #8	(Chapter-8)
		Lab-12	**Experiment-A8: *Molar Volume of Ideal Gas***
13	11/13	Lecture 23	Test Review;
		Quiz #9	(Chapter-9)
	11/14	**Test #3**	(Chapters 7.6 – 9; Scantron are required)
		Lab-13	**Experiment-A13: *Enthalpy of Vaporization and Fusion of Water***
14	11/20	Lecture 24	Intermolecular Forces; Liquid Properties & Phase Transition (10.1 – 10.3)
	11/22	No Class	(Thanksgiving Holiday)
		(No Lab this week)	
15	11/27	Lecture 25	Phase Diagram; Lattice Structures in Crystalline Solids (10.4 – 10.6);
	11/29	Lecture 26	Dissolution Processes & Solubility (11.1 – 11.3);
		Quiz #10	(Chapter-10: Section 10.1 – 10.4)
		Lab-14	**Experiment-A14: *A Molar Mass from Freezing-Point Depression***
16	12/04	Lecture 27	Vapor Pressure of Solutions & Colligative Properties; Colloids (11.4 – 11.5);
	12/06	Lecture 28	Review for Finals;
		Lab-15	(Last day to turn in lab reports for Experiments A13 &A14 only; all other lab reports will not be accepted.)
17	12/11	**Final Exam**	(Comprehensive and Mandatory)

(*-This experiment does not require lab write-up. **Formal lab write write-ups are required for All other experiments**.)

(All formal lab reports must be typed with 1.5 spacing, and please use a font no smaller than size 10, except for the calculations and chemical equations, which may be hand-written. Please write everything in INK. Pencil should NOT be used in report writing.)

Formal Lab Reports MUST BE ORGANIZED according to the following format or else, they will be returned ungraded:

1. Title of experiment;
2. Objective
3. Procedure
4. Data Table
5. Calculations (including error analysis if applicable)
6. Summary of Experiment
8. Post-lab Questions

Laboratory Notebooks and Laboratory Reports

Laboratory Notebook

Science is not a list of facts that you have to memorize. It is a process that involves gathering information and collecting data, analyzing those data, providing critically thinking and discussion what all those data and information mean, and then arriving at some conclusion based on the information and data collected. Whatever conclusion that one has arrived based on data collected in one study or set of studies will be tested and verified by another set of studies (similar or otherwise). Therefore, scientists must keep records of the methodology and results of their experiments so that they can be repeated, checked and verified by others. Their experiments and experimental results, as well as the conclusions, are compiled in a dedicated **laboratory notebook.** Like those scientists, you are required to keep a laboratory notebook that is dedicated for the laboratory component of this class. You will record all experimental data, observations and results (including calculations) in this lab notebook. Your laboratory instructor will inform you the type of notebooks that may be used for this class. In general, your laboratory notebook must have a carbon copy, so that as you turn a set of experimental data and results for grading, you still have a copy of the data. You must keep your laboratory notebook ***neat*** and ***organized***. Your laboratory notebook should only be used for this purpose; it should NOT be used as a lecture notebook or for working on homework assignment problems.

The following is a guideline how you will be expected to organize and maintain your laboratory notebook:

1. Your laboratory notebook MUST be permanent bound notebooks; loose or spiral bound notebooks are not acceptable.
2. Leave the first 2-3 leaves of the notebook for table of contents. As you begin an experiment, you should enter the number and title of the experiment and the pages it is located in the notebook.
3. Start on a fresh page for each experiment:
    a. **Title**: At the top of this page, write the Number and Title of the experiment, and the date the experiment is carried out;
    b. **Objective:** Write the Objective statement of the experiment in a complete sentence;
    c. **Overview:** Write the experimental overview. (If you don't have time to do this, leave the rest of the first page and the next one for you to write the Overview later.) If you are planning to type your final lab report, skip this Overview section in the Lab Notebook, but you will write the Overview in the final lab report;
4. **Procedure**: On the third page (if you are not going to type your report) OR after the Objective (if you are going to type your report for this experiment), write the Procedure: list all the steps involve in the experiment in chronological order that is easy for you to follow during the experiment – numbering the experimental steps would make sense. You will refer only to your laboratory notebook to perform the experiment, and not to the lab manual;
5. **Data Tables:** After the Procedure section, prepare one or more Data Tables as necessary. All experimental data must be organized in tabulated format and properly labeled; leave enough spaces for data entry, possible errors and corrections. DO NOT cramp your data or make the data entry all over the place. (You MUST make sure that your laboratory instructor is able to find your entry within seconds.)
6. **Data Entry**: All data and observation MUST be entered directly into your laboratory notebook in non-erasable INK; scratch papers and pencils will NOT be permitted in the laboratory. Data values must contain significant figures consistent with the precision of the measuring devices. For examples, masses obtained on a centigram balances must contain two (2) digits after the decimal point, but masses obtained on an analytical balance must have four (4) digits after the decimal point. Volumes obtained using graduated cylinders must contain only one (1) digit after the decimal point, but those obtained using burets or pipets must have two (2) digits after the decimal points.

7. **Calculation**: Show all calculations wherever and whenever required. Organize and properly label each calculation. Round off the final answers to the correct number of significant figures.
8. **Result Summary**: briefly state what you have discovered/determined in this experiment and whether the objective of the experiment is achieved. Give reason(s) if it is not – provide possible source(s) of errors. (Note: You are not required to write this section in the laboratory notebook if you type your final lab report.)

Laboratory Reports

You are encouraged to type your final laboratory reports. It would make your reports look neat and professional, and easy to read. Regardless, each final laboratory report must be organized in the following format, which must be strictly adhered to:

1. **Your Name**:_____ **Partner(s)**:_____

   Date: _____
2. **Experiment Number and Title**
3. **Objective:**
4. ***Overview:**
5. **Procedure Summary:**
6. **Data:**
7. **Calculation:**
8. ***Error Analysis** (if applicable)
9. **Result Summary**

***Overview**:

An "Overview" is a brief summary that explains the chemical concept/principle of the experiment. If the experiment involves one or more chemical reactions, you must write the balance equations for those reactions and provide explanations that will link the outcome of those reactions to the objective. Mention what data will be collected during the experiment and what calculations will be carried; provide the mathematical formulas or equations that will be used in the calculations.

However, if the primary objectives of the experiment are to observe chemical reactions and to write balanced equations of those reactions, then you do not have to write any equations in the *Overview*. Do not write the detail of the experimental procedure in the Overview section.

***Error Analysis** (only if applicable)

Mean and standard deviation are calculated using the following formulas:

$$Mean\ (\overline{X}) = \frac{\sum X_i}{n}; \qquad Standard\ deviation = \sqrt{\frac{(X_i - \overline{X})^2}{(n-1)}}$$

where X_i are individual data values and $\overline{X}$ is the mean of the sum of X_i

If the true or acceptable value of the quantity determined in the experiment is known, express the accuracy of your result in term of percentage error, such that:

$$\%\ \text{Error} = \frac{(\text{Experimental Value} - \text{True Value})}{\text{True Value}} \times 100$$

Sometimes, for limited data the precision of experimental results maybe expressed in the form of *Percent Relative Deviation* (PRD), where

$$PRD = \frac{(\text{Highest value - Lowest value})}{\text{Average value}} \times 100$$

[Note: not every experiment will require an error analysis. Your laboratory instructor will inform you which experiments require error analyses.]

Examples of Objective and Overview of an experiment

Example-1:

Title of Experiment: The Decomposition of Hydrates

Objectives:

In this experiment we will quantitatively determine the identity of product of the decomposition of barium chloride dihydrate, $BaCl_2 \bullet 2H_2O$. We will also use qualitative observes to determine the decomposition reactions of other hydrates, namely, $CrCl_3 \bullet 6H_2O$, $CoCl_2 \bullet 6H_2O$, $NiSO_4 \bullet 6H_2O$, and $CuSO_4 \bullet 5H_2O$.

Overview/Concept of Experiment:

Hydrates are compounds that contain water molecules as part of their crystal structures. For a given hydrate, the number of water molecules per formula unit is fixed. These water molecules are loosely bound and can be driven off by heating. In the first part of this experiment, we will study the decomposition reaction of barium chloride dihydrate, $BaCl_2 \bullet 2H_2O$. Three decomposition reactions are possible during heating:

$$BaCl_2 \bullet 2H_2O(s) \rightarrow BaCl_2 \bullet H_2O(s) + H_2O(g)$$
$$BaCl_2 \bullet 2H_2O(s) \rightarrow BaCl_2(s) + 2H_2O(g)$$
$$BaCl_2 \bullet 2H_2O(s) \rightarrow BaO(s) + 2HCl_{(g)} + H_2O(g)$$

A known amount of $BaCl_2 \bullet 2H_2O$ will be accurately weighed and heated in a pre-weighed crucible according to the procedure outlined in the experimental section. To determine which reaction actually occurs, we will compare the actual yield obtained in the experiment with the theoretical yield calculated using the balanced equation of each reaction.

In the second part of this experiment, we will make qualitative observations of the decomposition of four different hydrates, namely, $CrCl_3 \bullet 6H_2O$, $CoCl_2 \bullet 6H_2O$, $NiSO_4 \bullet 7H_2O$, and $CuSO_4 \bullet 5H_2O$. These hydrates will be heated individually under low to mild heat and then with a strong flame. The vapor and condensate produced by each hydrates will be tested with blue litmus paper to determine whether an acidic gas is produced. Based on the results of litmus test, we will write a balanced chemical equation for the decomposition of each hydrate.

Example-2:

Title of Experiment: Double-Displacement Reactions in Aqueous Solution

Objective:

To observe the products of precipitation and acid-base reactions and write their molecular and ionic equations.

Overview:

Ionic reactions are also called double-displacement reactions, which are subdivided into precipitation reactions and acid-base reactions. These reactions involve exchanges of ionic particles and may be represented by the general equation:

$$AB + CD \rightarrow AD + CB$$

In precipitation reactions, at least one of the products does not completely dissolve in water and will form precipitates. Acid-base reactions are generally characterized by the evolution of heat, which makes the mixed solutions feel warm. In this experiment, two different solutions will be mixed and observed whether a precipitate is formed or heat is evolved. The formation of precipitates or the evolution of heat implies that a reaction has occurred, and for these reactions we will write the molecular and ionic equations in the result section. If no precipitate or heat is produced, it can be concluded that reaction does not occur.

Five Reasons Why Students Fail Chemistry

1. **Insufficient Math Preparation**

   Math, especially algebra, is an essential tool in chemistry. To be able to solve chemistry problems requires that you understand basic algebra and you must have the ability to transform word problems into mathematical expression. If you think that your math is a bit rusty, get help immediately. Don't wait until you're halfway through the semester.

2. **Not Getting of Reading the Text.**

   Textbook and lab manual are NOT optional items in the chemistry class. Even if the lectures are fantastic, you'll need the text to do the homework assignments. The best way to understand the lectures is to read the chapter before coming to each lecture. Some or many of you may come to the lab without reading the experiment that you've been assigned to do. That will be a big mistake because you'll be doing the experiment without actually understanding it and you'll missed the entire concept of the experiment.

3. **Procrastination**

   If you intend to pass and do well in chemistry you MUST study the lecture materials and do the homework promptly. NEVER put off studying and doing the homework assignment until you are halfway through the semester. It will be too late and you will never catch up. If you miss the basics, you'll get yourself into trouble. To master chemistry you must understand the concept. This requires that you study and do the homework on a daily basis. Build the concept a little at a time. Set aside a small segment of time each day for chemistry. It will help you gain a long-term mastery. Do not cram at the last minute.

4. **Not Doing Your Own Work**

   Homework assignments are helpful if you do the exercises yourself. Study guides and solution manuals are useful only if you use them for help or for checking your work, but not as an easy way to get your homework done. Don't let a book or someone else do your work for you. They won't be available during the tests, which will account for a big portion of your grade.

5. **Psyching Yourself Out**

   You must have a positive attitude toward chemistry. If you truly believe you will fail you may be setting yourself up for a self-fulfilling prophecy. If you have prepared yourself for the class, you must feel confident (but not over confident) that you will succeed.

Berkeley City College
Chem 1A, Fall 2018
(Student's Background Information)

Your Name_____

Tel. No._____ *email: _____
(Please write email address clearly)

1. What is your academic major or career goal? Is this class a pre-requisite?

2. Note: Chem 1A SHOULD NOT be your first chemistry class. Which of the following applies to you?

   ____I took and passed Chem 30A at (name the college):_____;

   ____I had one year of honors chemistry in high school; School's Name:_____:

   ____I passed AP Chemistry with a score of_____;

   ____Others (explain):_____

   _____

3. What is your academic load this semester in term of units? _____units

4. How many hours do you work weekly that is not related to classes? _____hr/wk

5. Will you be taking Chem 1B after completing this course? (Yes/No)

6. Which learning styles apply to you? (select all that apply)
   A) Visual and Verbal Learning Style
   B) Visual/Nonverbal Learning Style
   C) Tactile/Kinestatic (or hands on) Learning Style
   D) Auditory/Verbal Learning Style

7. What major challenges do you anticipate in this class?

8. Is there anything about you that I should know, such as special learning need or medical condition? (I keep this as a confidential matter; talk to me personally if you prefer.)