

BREMERTON HIGH SCHOOL
Advanced Placement Chemistry
Mrs. Bryan

Welcome to AP Chemistry. This is a rigorous course intended to replace the freshman year of chemistry at the college level. Since this is a college level course taught in high school, it is very demanding, both in time and effort required. Much of the work involves solving math-type story problems, and students need to be taking an advanced math class at the same time they are enrolled in AP Chemistry. Homework is assigned weekly through March, with the month of April used for AP exam review. If you intend on being successful, you need to complete the homework. Watching me complete a type of problem, will not prepare you for the AP Exam! Practice is essential. The amount of work outside of class depends upon the student and his/her background; however, students should be prepared to spend about 30-60 minutes each night after school on just their AP Chemistry homework. Those students who are heavily involved in after school activities and/or jobs will have to learn to budget their time very carefully.

Labs. Approximately, once a month the class will meet for an extended lab block. This is a requirement, and NOT an option. Because we were assigned 2th period, we will start the lab in class and work afterschool until the lab is finished.

About the AP Exam. Advanced Placement is a nation-wide program operated by the College Board (which also administers the SAT exam) and has been in existence for over 50 years. One of the many functions of an AP course is to prepare students for the AP Exam given May each year in various subject areas. Although the course of study is well-described, the exam itself is prepared by a testing service in New Jersey and kept secret from students and teachers until it is actually given. Exams are graded outside the school on a scale of 1 to 5: 5 being the highest and 1 the lowest. Those students who score 3 or above are considered to have “passed” the exam, and may receive credit from the college they attend. Please check with the college(s) you are considering to determine their policy. Most students who pass the exam will be exempt from all or some of their freshman chemistry coursework.

AP Chemistry Information Sheet

PLEASE FOLLOW THE RULES OF THIS CLASS:

1. Be in your seat when the bell rings, ready to learn.
2. Be respectful to all people and materials in the classroom.
3. Obey all safety rules.
4. Listen!
5. Participate positively in class and use your time wisely.
6. Come prepared to class with your textbook, notebook, calculator, and writing tools.

*The rules of Bremerton High School as stated in the Student Handbook and the safety rules discussed in class will apply in this class.

ATTENDANCE: It is especially important that you have excellent attendance in science classes. If you tend to miss class frequently, it is likely that you will have a hard time keeping up with coursework. Often, there are demonstrations, discussions, or lab experiments that cannot be repeated.

If you are absent, it is your responsibility to check for missed work in the folders at the front of the room. It is also your responsibility to ask for help on the material that you missed. If you miss school, you miss out!

TARDIES: Do not be tardy to my class. Arriving late to class is disruptive to the learning environment and disrespectful to your peers and the teacher. You will get a warning the first time you are tardy. For each tardy after your first you will be assigned a lunch detention. Students with excessive tardies may have further consequences and parents will be notified

If you arrive to my classroom anytime after the bell rings it is your responsibility to write your name on the board. This will ensure that I will change your absence in the attendance system to a tardy.

ELECTRONICS: Absolutely no electronic devices will be used in class unless specifically directed by the instructor. Non-directed use of electronic devices in class will result in the device being confiscated by the teacher and turned in to the main office. Students can pick up the confiscated electronic device at the end of the school day. Repeated offenses will have more severe consequences.

ACADEMIC DISHONESTY: Academic dishonesty is a behavior issue. If a student is dishonest on his or her classwork and/or an assessment that student will be referred to the administration for disciplinary action. The academic consequence for cheating and plagiarizing will be that a “zero” will be entered in the gradebook to communicate lack of evidence of learning. If the student later demonstrates proficiency on the standard, the zero will be changed to reflect that. Alternate opportunity to demonstrate understanding, and replace the zero in the gradebook, will only be provided to students upon request.

Make-up work for academic dishonesty must be completed within one calendar week of the student's return from the associated discipline.

GRADING POLICY: Science Department Grading Policy

90% of your grade will be determined by your performance on tests, labs, quizzes, and projects. Work will only be accepted if it is complete and of high quality. If you do poorly on a test, you will have an additional opportunity to demonstrate that you have learned the material. Re-takes will not be offered for quizzes. However, your lowest quiz grade will be dropped at the end of the semester.

- Quizzes: 10%
- Tests: 40%
- Labs and Projects: 40%

10% of your grade will be determined by your "skills for success". Skills for success grades are based on your work habits, cooperation, teamwork, citizenship and leadership in the classroom.

Correctives policy for this class: This class is fast pace, and the topics build upon one another; therefore, if you do not understand a concept for one unit, you may be at a serious disadvantage as we move forward. If you engage in remediation and at a later date demonstrate that you have met the standard, your grade will be adjusted to reflect your understanding. *For some assignments (mainly exams you will be given the opportunity to take an alternative exam, but ONLY if you have completed assignments in a timely manner during the unit. For minor omissions, test corrections may be available.*

Summative work and homework deadlines: Late work will be accepted up to 5 weekdays past the due date. After the 5 day "grace period" no late work will be accepted except under extreme circumstances as defined by the teacher.

- The day that the work is due is considered as day 1. For example, if an assignment is due on Tuesday, that is day 1. Monday would be the 5th weekday and therefore the final day that late work is accepted.
- Work not handed in when the teacher collects the work is considered late.
- Non-student days are still counted toward the 5 days if they fall within the 5 day late window.

Penalty for late work: Work not handed in on the due date will have a 10% point deduction.

Make-up of a missed lab activity: Students who miss a lab activity due to absence will have one opportunity to make up the lab as arranged by the teacher and student within one week of the original lab date.

Make-up of a missed exam: Students who miss an exam due to absence will be scheduled to take the exam during class or after school within one week at the teacher's discretion. This may take place the day that the student returns to school if the exam was announced prior to the student being absent.

MATERIALS:

Pencil, Pen, Eraser
Scientific Calculator
Composition Notebook
Small Binder for Notes and Homework

PERSONAL BUSINESS: Please be sure that you take care of your restroom needs prior to class. In addition, take care of personal business (i.e. office or counselor, seeing another teacher, etc.) before and after school and at lunch.

- You may not use the restroom during the first or last ten minutes of class.
- **You may only use the restroom during independent study times.**
- You must ask for specific permission from the teacher to leave the classroom anytime.
- You must sign out and back in on the pass log and take the appropriate pass with you.
- Only one student is allowed to use the restroom at a time.

OFFICE HOURS:

If you need extra help, or need to make up a lab, I try to make myself available Tuesdays and Thursdays afterschool. Please double check with me if you are coming in—I occasionally have meetings on these evenings.

CONTACT INFORMATION:

If either you or your parent needs to reach me I check my email regularly. Please do not hesitate to contact me at leann.bryan@bremertonschools.org . Phone (360)-473-0849.

Please review this syllabus with your parent or guardian. Have him or her sign below and then return the entire syllabus to Mrs. Bryan ASAP.

Student Signature _____ Parent Signature _____

Writing a Lab Report in Chemistry

It is important that you have a good understanding of the lab before you enter the lab. Read the lab instructions completely. Complete your purpose, hypothesis, materials/procedure, and layout any data tables needed before you enter the chemistry lab. You will not be allowed to perform the lab without these components completed.

Purpose

- Task. What are you trying to accomplish in this lab?
 - Is this a skill you are practicing? Testing a chemistry principle or law?
- Concepts. What are the concepts being explored in the lab. (Research—use your textbook, notes or internet).

Hypothesis (not always applicable in chemistry labs):

- Should be a predictive statement about what you expect from your data.
 - This is not a predictive statement about whether or not you can perform the lab!

Materials and Procedure

- Must be detailed enough to allow you to do the task; however it is not necessary to rewrite the procedure word by word.
- Your written procedure is the only procedure you will take into the lab.
- Optional (but recommended) a sketch of the experimental set-up, list of equipment needed.

Data

- Record data/measurements you collect in a data table, or other appropriate format.

Analysis/Results/Questions

- Calculations of data.
- Graphs that includes a title and labeled axis with units.
- Answer any assigned questions here.
- Interpret your results here. What do they mean?

Conclusion (put your effort in here—it is worth more points than any other section!)

1. Include the purpose of the lab (remind me why you performed this lab).
 - Why did you do this experiment?
2. What is your conclusion? (explain).
 - Explain what your conclusion is.
 - Did your results confirm the law or principle that you set out to verify?
3. Give proof to back-up the conclusion that you have reported (convince me).
 - Explain what happened during the investigation; describe the products or results that made you arrive at your conclusion.
 - **Use your results to support your conclusion and relate it back to your purpose.**
 - Note: Be careful, do not claim something if your data does not support it!
4. Report problems and indicate the amount of error in your data.
 - Describe measuring problems or limitations of the tools that you used (if you made huge errors in your method, tell me in detail here)
 - Calculate percent error whenever possible.
 - Explain how errors affected your results.

A Good Conclusion...

The purpose of this experiment was write the purpose of your lab here, and discuss what you learned . The evidence found during this lab allow me to conclude, write your conclusion here. From the results, use quantifiable evidence (examples that summarize your data) from your results to support your conclusive statement . Possible errors include write your possible errors here, there must be at least two, which may have skewed the results by write how those errors may have affected your results.
Include % error if applicable.

A Good Conclusion (with a hypothesis)...

The purpose of this experiment was write the purpose of your lab here, and what you learned . The evidence found during this lab did/did not support

the hypothesis, which was write your hypothesis here. From the results, use quantifiable evidence (examples that summarize your data) from your results to support your conclusive statement (the second sentence). Possible errors include write your possible errors here, there must be at least two, which may have skewed the results by write how those errors may have affected your results.

Graphing Rules

1. Always use a line graph.

In science, we are typically comparing how one variable is changed by another variable. The best way to represent this is a line graph. In science you should always use a line graph unless specifically asked to display your data using a different type of graph.

2. The x-axis of the graph is the independent variable and the y-axis is the dependent variable.

In other words, y changes when x changes and not the other way around. Y is dependent on the value of x.

3. Abrupt changes in a graph tell you that something significant has happened.

We usually see straight lines or smooth curves on a graph. Obvious disruptions in a line graph indicate that a significant change has taken place.

4. Graphs should always be shown as smooth lines or curves. Never connect the dots with straight lines to form a saw tooth pattern.

The reason we can't connect the dots with simple straight lines is that we recognize the data we take isn't perfect. Besides that, the actual values in the areas between the dots almost never lie on a straight line. If we use our data points as a guide for drawing smooth lines or curves rather than as absolute truth, they are more useful for helping us identify the underlying trend that we are really interested in.

5. The title of the graph should always be "The dependence of [dependent variable] on [independent variable]."

Every graph should include a title and it should be written in this format.

6. Units should always be labeled on both axes of the graph.

If you don't know what units are being used on the graph, then it isn't very useful. Graphs should always have this important piece of information.

7. The data in the graph should fill the page.

If it doesn't, then you should rescale the axes so that it does. The larger the area covered by the data, the better the graph will be as a predictive tool.

8. Use a ruler.

It looks sloppy if the x- and y-axes are drawn freehand, and linear trends drawn with freehand lines may harm the predictive ability of the graph. For these reasons, always use a ruler to draw the axes and make the best-fit lines.

9. Your graph should stand alone.

Anyone should be able to pick up your graph and understand exactly what it represents. It should be labeled properly, scaled correctly, and contain enough data points to be valid.