



CHEMISTRY 12

MISS ZUKOWSKI

azukowski@sd61.bc.ca

Room 230

misszukowski.weebly.com/

Remind Messages:

TEXT @CLASSCODE TO THE

NUMBER (289) 205-1115

@chem12blk2

@chem12blk3

@chem12blk4

@chem12bk6

COURSE INFO

TEXTBOOK: *HEBDEN CHEMISTRY 12*

GRADE DISTRIBUTION:

TERM GRADES

Tests	55%
Labs	15%
Quizzes & Assignments	15%
Homework/Notebook	15%

FINAL GRADE

Cumulative Term Grades	70%
Midterm	10%
Final Exam	20%

EXPECTATIONS: To ensure that you obtain **maximum benefit** from this course, the following minimal standards are expected from each student:

- ✓ Regular attendance
- ✓ Arrive to class on time & prepared to work.
- ✓ Report to class with all necessary books and supplies.
- ✓ Complete each assignment to the best of your ability
- ✓ Submit assignments on time.
- ✓ Always exhibit responsible, cooperative, and respectable behavior.
- ✓ Come to class with a positive and mature attitude and be prepared to work hard!

CELL PHONE POLICY: Unless otherwise instructed, my classroom is a **no phone zone!** Having a phone out in class is a distraction to your learning, disruptive for students around you, and disrespectful to your teacher. Cell phones should be on **silent & away in a bag during class**. If students have difficulty with this temptation, they must put their phone in **teacher storage** during the lesson. Consequently, if a student is using their phone without permission, it will be confiscated and remain in storage for the duration of the class. If repeated offences occur, contact will be made home and/or admin notified.

Exceptions: *Students may listen to music during quiet work time, BUT your cell phone should be set to "shuffle" and out of sight. Phones may be used as cameras to document observations during laboratory work. May be used when instructed by a teacher for a Khoot Quiz.*

GRADES: Grades will be updated as soon as possible following tests, quizzes, labs, etc. They will be posted by student number on the class website.

WEBPAGE: The Chemistry 12 webpage contains everything you need for the course, including a course calendar, notes, notes keys, worksheets, worksheet keys, labs, and any general info such as this outline, homework/notebook cover page, lab marking rubric etc. The webpage is very important if you are absent. You can access what you missed that day (*get the notes, access the homework*) to stay caught up. I will also post videos and animations available that support the concepts in the course. My webpage is misszukowski.weebly.com and can be accessed through the school webpage.

REMIND: Be sure that you join the class Remind app to receive notifications of homework, upcoming quizzes & tests, etc. The class codes are on the previous page & can also be found on the class website.

ABSENCES: It is your responsibility to find out what was missed (*hint: remind app*) and take the proper steps to catch up! Check the remind app & the class webpage. Access the notes and assignment from my webpage. If you miss classes leading up to a test, you are still required to write the test on test day – come to focus block to get prepared. Absences for quizzes or tests **must** be supported by a note from a parent or guardian. If a valid excuse is not provided, you will not be permitted to make up the quiz/test. Pattern behavior will result in a referral to the administrative team.

QUIZZES: You will always be informed of a quiz (usually 1-2 days in advance). There will be several quizzes per unit, this depends on the length of the particular unit. If you miss a quiz, you will not write it at a later date, you will simply get the quiz to complete as a worksheet (*added to homework mark*). Your quiz will only be omitted if your absence was excused by a parent/guardian note.

TESTS: Are written at the completion of each unit and are always given at least 1 week notice and listed on the class webpage. Be responsible and prepare for tests! There are unit reviews given + “Monster Reviews” with practice exam questions. Begin studying multiple days in advance. You will often be given 1 class lesson to review-pending the pace of the course. There will be six unit tests in the course: Kinetics, Equilibrium, Solubility, Acid/Base I, Acid/Base II, and Redox. Any missed tests can only be written if the absence is excused. If you skip class (unexcused absence) on test day, you will get a zero for the test.

CORRECTIONS: I do not allow re-tests. Do not ask for them, you will not receive them. However, I do understand the pressure of grades & your innate desire to do well! You are provided with the opportunity to do both quiz & test **corrections**. Corrections on quizzes will be awarded +1/2 mark each & are to be submitted with the Unit Notebook, neatly on a separate page. Test corrections may only be completed during focus block. Test corrections must be *completed on a separate page, original questions written out in pen in full, below explain WHY it was incorrect, explain HOW you corrected your mistake + provide the correct answer all in pencil*. Test corrections are to save you when you “had a bad day” or “bombed out”. They are **not** a back-up plan when you didn’t prepare for a test. For this reason, test corrections are **only awarded 60% max** grade increase. (*ie: if you scored higher than 60% on a test, you are not eligible for corrections*)

HOMEWORK: Assignments are given almost daily, and included in your unit notebooks. They will be randomly chosen to be checked for completion. At the end of each unit, homework marks are totaled for grading. Late homework assignments are to be submitted with the Unit Notebook for completion credit only.

UNIT NOTEBOOK: Class notes, worksheets, vocab & formula list, homework assignments, quiz corrections, etc are all submitted in a package with a Unit Notebook Cover Page (copies on website & in classroom) on the day of the Unit Test. This is part of your homework grade, thus late submissions will lose marks accordingly (**see Unit Notebook Cover page for details*)

LABS: Experiments will be done with each unit, as fitting with course content. Lab write-ups will be self-evaluated using a rubric before handing in. Lab write-ups can be handed in late with a deduction up to the time that the marked labs are handed back (approx. 1 week). After this time, the lab **will not be accepted**. There will be a focus on helping you become competent at writing properly formatted write-ups.

5 things to live by in Chemistry 12:

- 1. Work hard.** If you listen and try in class, and complete your homework daily, you CAN succeed!
- 2. Don't complain in class or about the marking of test/assignments/quizzes.** If you have a problem, suggestion, or you believe there has been a mistake, come speak to me privately and in a mature manner.
- 3. Be responsible for your work and preparation.** Be aware of what is going on in the class with assignments, quizzes, tests, and the respective due dates. You know test dates a well in advance. If you are having trouble, seek extra help at focus block. If absent, get caught up ASAP!
- 4. This is an academic course,** and is challenging. Be ready to work each day.
- 5. I am here to teach you & support you.** If you are struggling with content or facing anxiety, please do not hesitate to come speak to me...I am a human, I am approachable, and I will do everything I can to help.

CHEMISTRY 12 LEARNING OUTCOMES:

Introduction to Chemistry

- Expectations
- Lab safety guidelines
- Safety features in a lab
- Types of chemical hazards

Reaction Rate:

- Methods affecting reaction rate
- Measuring reaction rate
- Collision theory
- Kinetic energy graphs
- Reaction mechanisms

Dynamic Equilibrium:

- Conditions/predicting a reaction
- Le Chateliers Principle
- Graphing & interpreting graphs
- K_{eq}
- Equilibrium calculations

Solubility:

- Dilution
- Qualitative analysis
- Balancing equations (formula, complete, net ionic)
- Solubility vs. precipitation
- Common ion effect
- Quantitative analysis
- K_{sp}
- Precipitation method

Acid Base I:

- Bronsted-Lowry Theory
- Lewis Theory
- K_w
- Conjugate acid base
- Weak acid base
- Common acids & bases
- Hydrolysis
- pH, pOH, pK_w
- Acid base mixtures
- K_a and K_b constants

Acid Base II:

- Indicators
- Titration curves
- Strong acid base
- Graphing & interpreting titrations
- Calculating K_a and K_b
- Primary vs Standard solutions
- Buffers
- Acid Rain

Electrochemistry:

- Redox titrations
- Oxidation numbers
- Balancing $\frac{1}{2}$ reactions
- Disproportionation reactions
- Standard Potential Table
- Redox equations
- Redox ranking problems
- Preferred reactions
- Electrochemical cell
- Redox titrations
- Practical uses
- Electrolytic cell

Final Exam:




There will be a final exam worth 20% of your entire grade. The key to success on the final exam is to start studying a month in advance by taking full advantage of practice questions provided on my webpage & the Monster Review Google Classroom. Students who do best on the final exam study hard and at length to be ready. Don't allow yourself to procrastinate, get your studying going early and often!

Work Ethic and Attitude: This is a challenging academic course. It requires you to stay on pace, work hard daily on assignments, and be ready for chemistry conversations every class. Don't be a lazy learner, get involved! Don't depend on anybody else for success except yourself.



Laboratory Safety Rules



1. Students are not to enter the lab unless a teacher is present. Students are NEVER to enter the lab prep room.
2. Never run or 'muck around' in the laboratory. During a prac, you MUST remain at your own bench.
3. There is no food or drink permitted in the laboratory. 
4. Water bottles & bags/backpacks are to be left at your desk during labs.
5. NEVER taste or smell any substance in the lab, unless instructed to do so safely by your teacher.
6. Always listen carefully and follow instructions specifically. If there is anything you don't understand, ask your teacher. It is very important for your safety that you understand all instructions.
7. Always clean up and return equipment to the correct place when finished an experiment.
8. Keep benches and floor areas tidy. This means all chairs must be pushed in when working at the lab benches, and extra books/equipment is never to be placed on the floor.
9. Breaks and accidents (even minor) must always be reported to your teacher immediately.
10. NEVER attempt to pick up broken glass. Inform your teacher, and keep others clear of the area.
11. Laboratory equipment and chemicals are ONLY to be used as directed by your teachers' instructions.
12. Waste products/remains from experiments are to be disposed of as instructed by your teacher. Remember, not everything is safe to rinse down the sink, or throw away in the bin.
13. Be sure any burning material (eg. Match) is put out completely before throwing away.
14. All hot equipment is to be placed to a heatproof mat, NOT directly on the benchtop.
15. ALWAYS wear safety glasses during experiments with hazardous materials or when heating.
16. Long hair and loose clothing must be tied back during experiments. 
17. ALWAYS wash your hands after any experiments in the laboratory.
18. Use gas taps & water for EXPERIMENTS only.
19. Bench tops are to be cleaned and disinfected following EVERY practical experiment. 
20. When heating or mixing substances, NEVER point towards yourself or others.
21. Never mix chemicals or do your own experiments unless you have permission from your teacher. This is wasteful, and could be very dangerous.
22. Always rinse/clean glassware following an experiment.
23. Always use tongs to pick up equipment/objects that have been heated
24. Only use matches to light Bunsen Burners.
25. If you need to leave a Bunsen Burner, ALWAYS turn it to the visible orange/yellow safety flame



Misbehaviour & breach of safety rules in the laboratory will result in immediate consequences, including a ban from participation in any further practical experiments.