



Veritas Christian Homeschool Group - Chemistry

2018/ 2019 - Class Syllabus

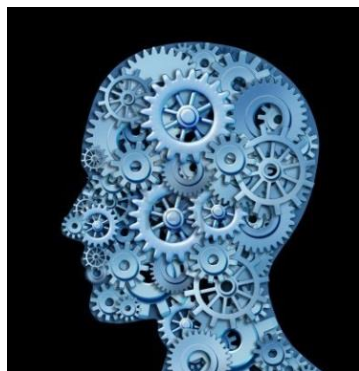
Welcome

Greetings, my name is Mrs. Morales, and I have the awesome privilege of being your chemistry instructor for the year. You may be aware of the reputation chemistry has for being a very difficult class. If you have in any way wondered whether that is really the case, I would like to clarify this – it *is* very difficult (but not impossible). You, however, are in much control over your success or failure in the class. If you remain motivated and well-organized, there is no reason why you cannot enjoy extreme success in the class. There are three main keys to success you should consider, (1) managing your time wisely, (2) learning relationally, and (3) coming to class prepared.

Excellent time management. A rigorous, high school level chemistry course can be a rewarding experience *if* you manage your time wisely. On the website you should find a *Week-at-a-Glance* intended as an aide in your time management. Please follow this carefully, as outlined. The importance of excellent time management cannot be overstated: chemistry is not a subject that one can “cram” for, since its content is very conceptual and has to be absorbed slowly. Students fail in the course when they do not keep up on assignments and reading. You cannot neglect five days of study and hope to catch it all up in one day – this is a recipe for disaster!



Learn relationally. What makes chemistry difficult is the fact that you have to interpret what is happening at the submicro (atomic/ molecular) level by making observations of chemical phenomena at the macro level (color change, gas release, heat, etc.). While this is happening you then have to communicate these observations with complex representations (symbols, equations, formulas). Having stated all that, if you try to simply memorize what you are learning, you will be wasting your time and will not perform well on exams. You need to try to *relate* the new things you are learning with things you already know.



Understand this, a knowledge of chemistry will benefit you greatly in everyday life, should you decide to ever cook, make soap from scratch, pour concrete, use glues and adhesives, you cannot help but recognize that chemical interactions are everywhere.

The higher-order cognitive skills you have the potential to develop in this course will serve you in many areas of your life – in particular, college. Rote memorization is considered a lower-order cognitive skill, and is a very ineffective learning strategy. Take time to think, mull over, contemplate, argue with yourself, rethink, recalculate – this is what it takes to be successful.

Come to class prepared. There is absolutely no way you will understand chemistry if you don't make an attempt to read and understand the material on your own, first. If you can teach yourself the basic content, we can reserve class time for the difficult applications of that content. You may be aware of this, but in *traditional* classroom environments, teachers typically introduce basic content, and send the students home to figure out on their own how to apply this basic content in more advanced applications. In the *flipped* classroom setting, you will teach yourself the basic content, and come to class to learn the advanced application. This makes for a better learning experience for everyone.

Course Materials

- ✓ Addison-Wesley's *Chemistry*, Revised 5th Edition
- ✓ Binder (2-inch ring capacity), about 20 dividers for each chapter covered in textbook
- ✓ Paper for taking notes
- ✓ Scientific calculator
- ✓ Internet access at home for watching YouTube videos and screencasts as assigned

Grading

You will be able to follow your progress using the learning management software, Teacherease. Please study for an "A," as there is nothing worse than studying for a course with the only goal of "passing." Your total course grade will be based upon your performance in these key areas:

Chapter Tests – 35%

In-class Quizzes – 15%

Homework Assignments – 25%

Laboratory (lab notebook, quizzes, write-ups, & APA reports) – 20%

Class Participation/ Citizenship – 5%

Chapter Tests (35%)

You will have a chapter test *about* every four weeks. These tests are to be closed-book, closed-note, and closed internet. You will complete these at home *under the supervision of a parent*. Please allow yourself no more than 90 minutes for each test. Completed tests are to be placed in sealed envelopes with your parent's signature over the seal, signifying they were active as proctors. No exceptions - I will not accept tests that are not in sealed and signed envelopes.

In-class Quizzes (15%)

Once a week, I will give you a quiz on your reading for the week, and perhaps over content we covered in the class prior. You will have about five to ten minutes to complete these quizzes – please note these are only worth 15% of your grade and are for the benefit of keeping you up on your reading.

Homework Assignments (25%)

These will be graded on completion, neatness and grammar. Write very legibly whenever you answer questions. You should also use excellent grammar whenever possible, which means writing answers in complete sentences. Please write all answers in your own words, not the words of the writers of the textbooks – this is plagiarism. This process will better assist you to process the content. For all calculations, *you need to show your work*.

Laboratory (20%)

The laboratory class will have its own syllabus and schedule of when assignments are due. You will get the most out of lab if you read the entire experiment and complete the pre-lab questions. You will be working in partners, so part of being a good partner is coming to the lab session well prepared. You will need to write up in APA and IMRAD format one or two labs each quarter. We will go over the protocol in lab class for your success in this form of technical writing.

Class Participation/ Citizenship (5%)

Since Veritas is a Christian organization, it is very important that you conduct yourselves as fine young, Christian men and women. This involves being engaged during the lecture, asking and answering questions respectfully, and always coming prepared for discussion and laboratory hours. If you sit and visit with friends during the discussion hour, you will be asked to leave, and your parents will be notified.

Please make sure that all work you turn in is your own. Do not write down answers in homework that are provided simply by any answer keys to the textbook, or answers from your friends. I encourage you to collaborate with other students in the class and work together on assignments.

Course Pre-requisites

Algebra I- this really helps when we get to balancing chemical equations and stoichiometry
Physical Science course

Please bring to every class:

✓ Chemistry textbook
✓ scientific calculator

✓ Binder and paper
✓ laboratory notebook

✓ writing utensils
✓ assignments due

Late Homework Policy

All assignments are due at the beginning of class. Any assignments turned in late by one week will receive a 50% penalty. Assignments will not be accepted after two weeks. I will not notify you of late assignments – no email or a reminder – this is entirely your responsibility.

Excused Absences

If for some reason you have to miss class, please make sure your parents email me. It will be your responsibility to make up any quizzes or assignments missed. Any missed work will be accepted the following week after your absence without penalty. After that, the late work policy above will be enacted. If you need a quiz, please email me immediately so I can send you an electronic copy of the quiz you can take at home.

Final Exam

The final for this class will be comprehensive, and will be administered on the last day of class.

Organizational Materials

I have prepared the following materials to keep you organized throughout the course of the year:

(1) *Week-at-a-Glance* – this is for you to tack to your cork-board at home, so you can see at a glance, what assignments are due during a given week of the trimester.

(2) *Check off list on the Weebly webpage* – by every Friday afternoon, I will update the Weebly webpage, summarizing the week's lessons, along with a preview for the next week. I will also provide a check off list for the upcoming week, so you can come to classes prepared.

Please read this syllabus very carefully as both you and I are bound to the terms of it (with some special exceptions, when and where noted during class).

Apps

If you have a cell phone, please download the following apps:

Quizlet – a great electronic flashcards app; I will give you access to flashcards I'll set up for the class.

Appear.in – video conferencing software that enables you to hold a video conference with me, if you need additional chemistry support during the week.

Kahoot! – a game-based platform, this app turns your phone into a game controller to answer questions posed on a video screen as individuals or teams, during class.

Royal Society Periodic Table – an electronic periodic table that will come in very handy!

You may contact me anytime if you have questions about the content of the course. I may be reached by email at cloud9science@gmail.com, allow 24 hours to respond to your questions. I look forward to a wonderful year in our exploration of chemistry! God be glorified for coming up with such an amazing system of tiny charges and masses!