

Dear Future Honors Chemistry Student,

You have signed up for honors chemistry! I would like to welcome you and let you know more about the course and my expectations. The Shorecrest honors chemistry class is designed to be an intensive preparation for students planning to pursue science or engineering at the college level. It is for students that like science a great deal and really want to get the most of high school classes. The course uses a college level online textbook, and the curriculum and style of teaching are likewise based on college level work. As a result, the course moves quickly through 20 topics and related chapters. There is not time to cover everything in class, in detail; so much learning is left to the student to accomplish outside of class. Honors Chemistry requires a very disciplined daily approach to learning and study. Good math and reasoning skills are also essential. **The course is very dependent, and builds on, content and lab techniques taught in our 9<sup>th</sup> grade Integrated Physical Science course. It is expected that you know these concepts and can perform the lab techniques.** The expectations are high! Please make sure you read all of what I have outlined below. You will have to sign a study contract when the course begins.

## Honors Chemistry Study Expectations

Chemistry is unlike any science course you have ever taken! In the past, science courses have covered some general concepts of chemistry (probably repeated multiple times throughout the grades). However, this will be the first time you are taking a course specific to chemistry that will dive deep into the science. To that end, you will encounter things you have never seen before. Chemistry is an abstract science that seeks to understand things we cannot see or touch. The foundations of chemistry rely heavily on math and physics concepts that you likely have never had to apply before. Chemistry has its own language you will need to learn. Honors Chemistry may be the first science course that you take that is taught in a college format. There is simply too much material to cover so only selected topics can be explained in class. And we will move quickly through the material. The textbook is a college level text and requires a concentrated effort to learn. In the end, this will be great practice for college level study later. However, it may require a complete change in the way you approach a course:

1. You will have to be responsible for much of your own learning. This means spending significant time studying topics on your own and seeking help as needed. You cannot depend on class time alone to learn the material. Selected topics are emphasized in class and lab, but it would be impossible to cover everything during the classroom time. You will benefit greatly by being in a study group. Get together on a regular basis with people you can work with and learn from. Work on homework and discuss the topics together.
2. You may be used to waiting until the last minute to cram before a test, or to do an assignment. You may also be used to getting good grades with minimal effort. Chemistry does not work that way! Chemistry is a process of assimilating knowledge, it requires time to study and think about what you have learned. It requires lots and lots of careful practice. You have to be wide-awake and not in a hurry to really learn chemistry.
3. You may be used to reading a textbook (or maybe not) and understanding material and getting good grades. Chemistry is not like that! You have to really read the material – probably several times. You will also need to read other sources (e.g., other texts, online articles, etc) to get a different perspective and see other examples. It is usually difficult to learn from just one

source. You also have to keep ahead of the assigned class material and homework! If a topic is taught in class, and you have not studied, you will usually get lost.

4. You really do need to take notes in class and keep them organized. You have to do your own work and seek your own understanding. If you rely on others (and copy their work) you will not learn and ultimately get poor grades on tests.
5. Chemistry is like learning another language. It has its own system of symbols and grammar that you must memorize and master early in the class. Memorize what the teacher tells you. If you don't, you'll always be looking things up rather than learning new material being covered. By the second quarter we use the language of chemistry to teach chemistry.
6. It is easy for chemistry to get ahead of you if you don't keep up. Each unit depends on the previous. If you procrastinate, or don't study and keep ahead, you will find yourself hopelessly lost very quickly. We cannot discuss a topic if we have not both studied it!

The point of this is to make sure you understand what is needed and expected of you to succeed in Honors Chemistry. If you choose not to put an honest and thorough effort into learning chemistry, it may not be possible to get a good grade. Even worse, you may not learn chemistry. You will be asked to sign a study contract at the beginning of the course confirming that you understand and will follow these expectations.

## **Summer preparation strongly encouraged!**

Because we cover a lot of ground, and since Chemistry has its own language, it is essential that you arrive ready to read, write and speak chemistry. To that end, you really should have the following memorized **BEFORE the first day of class!** You may have already done some of this in IPS class, but it never hurts to review.

**Memorize the first 92 elements on the periodic chart, including the element symbol, English name, and common ions (if any).** For example, Na, Sodium, +1.

**This will be your first class assignment and there will a closed book quiz after the first week of school.** Students that cannot understand chemistry language will find it difficult to understand the content being taught. **This is why we encourage you to complete this work before school starts.** You will definitely have a significant advantage by doing this. There are a number of electronic apps and games, that that you can find online, which can make this easy.

**If you have any questions, feel free to come see me before school is out or email me over the summer.**

I look forward to meeting you in the fall,

Vince Santo Pietro  
Chemistry Teacher  
Shorecrest High School