Introduction
Chemistry is the study of the behaviors of substances and how they change. Chemistry is sometimes called the “central science” because knowledge of chemistry is vital to an understanding of biology, geology, astronomy, medicine and physics. Key topics you will study this year include: atomic structure, problem solving methods, chemical reactions, stoichiometry and the mole, nuclear chemistry, bonding, gases, heat changes in chemical processes, equilibrium, kinetics, acids and bases, and oxidation-reduction. In this course, you will explore the topics in depth, with an emphasis on the mathematics of chemistry. You will learn how to communicate your findings to other scientists. You will become a problem-solver and a scientific investigator through laboratory experiments. You ultimately will relate your observations to models of matter at the particle level, and use your knowledge to draw connections between our classwork and everyday applications of chemistry.

Many students feel overwhelmed at first, because the material is abstract and unfamiliar. However, the material can be mastered. Here are some suggestions on how to succeed in chemistry:

• Keep up-to-date with assignments and studying. Use a planner to keep track of your work.
• Spend 45-60 minutes daily, outside of class, on homework and assignments.
• If you have concerns or difficulties, big or small, be proactive and ask for help right away! Ask questions during class, or during my planning period, or after school.

Additionally, chemistry is a cumulative subject, and students are expected at all times to be familiar with concepts studied earlier in the year. (This means that questions relevant to previous topics can appear on tests and quizzes.)

Required Materials
Students need the following materials every day for class: a pen or pencil, a nonprogrammable (non-graphing) calculator, a 2” three-ring binder for recording lecture notes and for storing handouts and other materials (NOT shared with any other subject), and a bound composition book for recording laboratory observations and data. In general, textbooks can be kept at home.

Grading
In order to give every student the opportunity to succeed in chemistry, grades in Honors Chemistry will be determined using weighted averages.

• Homework assignments will be worth 10% of the course grade.
• Pop quizzes will be worth 15% of the course grade.
• Unit tests will be worth 45% of the course grade.
• Lab reports (both formal and informal) will be worth 30% of the course grade.

What to Expect
Every moment of class time is valuable and will be used to promote student learning. Avoid unnecessary absences and make every attempt to arrive to class promptly. Class time will involve a variety of learning strategies, including lecture, experiments, guided inquiry, cooperative activities, and guided practice. The assignments and test dates for each unit will be listed, along with their due dates, on unit assignment sheets. Homework (from the textbook or on handouts) will be assigned daily. Laboratory investigations will take place periodically throughout the year; formal or informal lab reports will be due after the lab session as noted on the assignment sheet. For each unit, several short, and often unannounced, quizzes will be given in class. Students will maintain an in-class portfolio, which will document individual student progress. Many course materials (including labs, assignment sheets, and handouts) will be available in Google Classroom and on the class website at the following URL: wwwdrvanderveen.com
Homework may be checked any day at the beginning of class, or checked online. Late homework will not be accepted unless the student was absent. **Late homework will not be accepted for unauthorized absences or if you are in school on the day it is due.** Laboratory reports and projects will be penalized 50% if received one day late; assignments will not be accepted more than one day late. **If extra time is requested on a test, the test must be completed on the original test date.** Students are accountable for all graded or checked assignments, and assignments not turned in will result in a grade of zero for that assignment. If there are exceptional circumstances, please conference with Dr V.

Students are expected to promptly make up any work missed due to absences. If you miss class, the handouts from that day will be placed in the appropriate bin on top of the file cabinets. If you are in school at any time during the day, it is your responsibility to stop by room 265, pick up your materials and to turn in any work due that day. If you are absent for a test, you are expected to make up the test the day you return. For absences of more than one day, you may have up to three days to complete the assessment. However, absence is not an excuse for missing a deadline—when in doubt, turn it in early. **Refer to pp. 17-18 of the student handbook for the official policy on unauthorized absences.** Do not slip assignments under the door or place them on my desk! Missed labs must be made up within one week of the original lab date.

**Academic Integrity**
Assume, unless you are told otherwise, that work assigned outside of class, including homework and laboratory reports, is to be done **independently**. Cheating on tests will not be tolerated. **Instances of academic dishonesty will be handled as outlined on pp. 28-29 of the student handbook.** This includes assignment grades of zero for plagiarized work and parent notification. Take the high road and avoid this!

**Classroom Rules**
Students need to be on time and prepared for class. Students who arrive late must bring a pass or detention will be assigned. Students are required to ask permission and sign out before leaving the room. Students are expected to be respectful of fellow classmates. Students are expected to work cooperatively with all classmates. Students are expected to participate in all class activities. Abusive language, in any form, will not be tolerated. No food or beverages are allowed in class. Cell phones or other devices are not to be used during class time. **Graphing (programmable) calculators may not be used on tests, although they may be used at other times.** Students MUST follow all safety rules. Please see the handout “Safety in the Chemistry Laboratory” for a detailed discussion of lab safety rules. Students are required to sign and return the Laboratory Safety Contract before being allowed to carry out any laboratory experiments. **Any student not complying with safety rules will be removed from the lab setting and will not be allowed to return to the lab until a score of 100% is earned on a laboratory safety quiz.**

**Objectives**
By the end of this course, successful students will have learned to understand the fundamentals of the material by:

- studying a meaningful sequence of units which stress the interrelatedness of the topics,
- thinking independently and drawing meaningful relationships,
- minimizing the memorization of material,
- basing theories on historical experimental evidence, rather than blind faith in the teacher,
- relating course material to experiences from their own lives, and the special needs and interests of other students in the class,
- participating meaningfully in relevant laboratory experiences, which encourage forming hypotheses about the problems and gathering facts, and
- being aware of current and future opportunities and problems in chemistry and related subjects.

Class participants will have become better students by:

- accepting the responsibility for their own education
- realizing that grades should reflect their own interests, abilities, and time constraints, and not some arbitrarily imposed value system,
- improving their ability to allot time and attention to subjects,
- improving their ability to select goals within their progress and success range,
- developing latent talents and interests, regardless of their original reasons for taking the course, and
- learning to understand and apply the scientific method, as well as other means, to comprehend the physical world.
This sheet must be signed and returned to Dr. VanderVeen. It will be kept in the students’ chemistry portfolio.

Classroom Expectations:
• Students will be on time.
• Students will be prepared for class.
• Students will be respectful to others in the classroom.
• Students will be involved in classroom activities.
• Students will always use safe laboratory practices.

Safety:
• No food or beverages are allowed in class.
• No horseplay is allowed in class.
• Students will wear appropriate clothing, as outlined in the safety handout.
• Students will follow directions carefully.
• Failure to comply with safety rules will result in the student being asked to leave the laboratory; the student will not be allowed to return to laboratory activities until a grade of 100% is earned on a safety quiz.

Grading:
• Grades are calculated based on a weighted average:
  HW 10%  Quizzes 15%  Tests 45%  Labs 30%
• Graphing (programmable) calculators may not be used on tests.
• Homework may be checked any day at the beginning of class, or checked online; late homework will not be accepted. Homework is not accepted for unauthorized absences.
• If you are in school at any time during the day, it is your responsibility to pick up your materials from room 265 and to submit any work due that day.
• Labs or projects turned in one day late will receive a 50% penalty. Absence is not an excuse for missing a deadline.
• Students will maintain a lab notebook and an in-class portfolio.
• Grades for assignments not turned in will be recorded as zeros.
• Extra time for tests must be completed on the original test date.
• Students need to promptly make up assignments, labs, tests, or quizzes missed due to absence.
• Labs must be made up within one week of the original lab date.

I have read the course expectations and safety guidelines for Honors Chemistry.
I understand the expectations and requirements for Honors Chemistry.

Name of Student ___________________________ Name of Parent/Guardian ___________________________
Signature of Student ________________________ Signature of Parent/Guardian ________________________
Date ___________________________ Date ___________________________

NOTE: This page is double sided. Be sure to sign both sides.