Course: Chemistry **Instructor**: Brendan Cafferty **E-mail**: bcafferty@lexrich5.org	**Length of Course**: One year **Number of Credits**: One **Type**: CP	**South Carolina Uniform Grading Scale** A= 90-100 B= 80-89 C= 70-79 D= 60-69 F= Below 60

Course Description from the District Course Catalog

Students will be required to use critical thinking as they explain atomic structure and nuclear processes, bonding and chemical formulas, states of matter, solutions, acids and bases, chemical reactions, and thermochemistry and chemical kinetics. Emphasis is placed on quantitative analysis of laboratory experiments. This course is intended for students who have a strong math background and who are interested in pursuing a medical, engineering or pure science career. This is a lab science course.

Instructional Goals for Chemistry

- Students will develop scientific problem-solving and data analysis skills.
- Students will make connections between the content studied and its application to technology and society.
- Students will be provided with a schedule which lists all assignments, labs, quizzes, and tests. The schedule will also include due dates. Students are expected to turn in assignments on time and late work will be penalized.
- If a student is absent, the student should make every effort to adhere to the schedule and should follow the makeup policy described below.

Link to Standards: SC Department of Education Standards

Textbook/ Resources

Tro, Nivaldo, J. (2017). *Chemistry: A Molecular Approach* (Fourth Edition). Boston: Pearson Education.

Scope and Sequence

UNIT	Timeline
1st Quarter	
1 Introduction to Chemistry	2 weeks (Approx. 5 class sessions)
2 States of Matter	3 weeks (Approx. 8 class sessions)
3 Atomic Structure	4 weeks (Approx. 10 class sessions)
2nd Quarter	
3 Electrons, Ions, and Isotopes	4 Weeks (Approx. 10 class sessions)
4 Periodic Table Properties and Trends	5 Weeks (Approx. 12 class sessions)
3rd Quarter	
5 Chemical Bonding and Reactions	3 weeks (Approx. 8 class sessions)
6 Stoichiometry	6 Weeks (Approx. 15 class sessions)
4th Quarter	
7 Gases and Solutions	3 Weeks (Approx. 8 class sessions)
8 Acids and Bases	3 Weeks (Approx. 8 class sessions)
9 Intermolecular Forces and Organic Chemistry	3 Weeks (Approx. 8 class sessions)

Assessments/Grading:

- Students will be graded using the following categories: classwork/homework, labs, quizzes, and tests.
- The point value for each category is:
    - Tests = 100pts
    - Quizzes = 50 pts
    - Lab = 50 pts
    - CW/HW = 20 pts
- The semester grades will take into account a mid-term and final exam which will count 20% of the semester grade. Interim progress reports, end of term reports, phone calls and/or conferences will report student progress to parents.
- Students may exempt the final semester exam if they have an 80 or above for the class.
- Parents **and** students are also encouraged to log onto ParentPortal which can be accessed from the web. The system allows parents and students to access grades, attendance records, and disciplinary actions through a user id/password protected program. If you have questions about how to access ParentPortal, please call the front office. There is also a Power school app that is very convenient and easy to use. Our district code is NWRC.
- The plagiarism policy is in the student handbook. **Special note:** Although laboratory investigations are completed in groups, the lab report is an individual effort and should be **unique** to the individual student. If students plagiarize their lab reports, they will receive a zero in the gradebook.

Required Materials

- 3-ring binder or notebook for notes and handouts
- Pencil/pen
- A charged school issued Google Chromebooks are required.
- **Scientific calculator or Graphing calculator (Students can use Desmos as well.)**

Missing class and Make-up Work Policy

Students are encouraged to attend school regularly. Nevertheless, students are absent for a variety of reasons, but students should understand the responsibility of making up work. The following guidelines are established for make-up work:

1. It is the **student's responsibility** to make the necessary arrangements for **making up work** due to any absence.
2. There are a variety of options available to students to schedule make-up work during enrichment or after school.
3. Students who miss scheduled make-up appointments and/or assignments may be penalized.
4. Students will have **four school days** to complete in-class work for **every class day missed** in a course (up to two consecutive class days in a course.) **Examples:** If a student missed 1A on Monday, the student must complete make-up work no later than Friday of that same week. Or if a student misses 5B on Tuesday and Thursday during one week, the student must complete all make-up work within 8 school days of their return to school.
5. Students **missing three or more** consecutive classes in a course will be given **10 school days** to complete assignments unless other arrangements have been made.
6. **Pre-assigned work** (i.e. long term assignments, tests, presentations, etc.) is **due at the beginning of class upon the student's return** to class. If a student is not prepared upon return to turn in make-up work, the teacher may assign a zero unless other arrangements have been made.
7. The teacher will enter a "0" in the gradebook with the "M" comment for missing work. If a student does not make up work during the prescribed time, the teacher may assign a zero unless other arrangements have been made.
8. A student who misses classes because of a school-sponsored function is responsible for **long term assignments** that will be missed **before** going on the **trip**. Students should be prepared to make up any missed test/quiz and/or give any presentation the day they return to class unless other arrangements have been made.

9. Students whose lawful absences result in missing a final examination in a semester or yearly course will be provided a scheduled opportunity to make up the exam missed. Make up exams will not be scheduled during regular school hours. Exams must be taken on the scheduled day(s).

Avoiding a due date by not attending class is strongly discouraged and not a valid excuse for turning in late assignments; however, if a student must be absent from school, it is their responsibility and in their best interest to make-up all work missed as soon as possible.

Missing Class and Make-up Work (A note from me.)

All students should make every effort to attend class regularly in order to ensure their optimal success. I understand that there are times when students must miss class and student absences usually fall into two categories: planned and unplanned.

If a student has a planned absence, they should let me know and they should consult their class schedule so that they can plan a way to catch up on what they will miss. Students can use their study groups, recorded lessons, or other resources to catch up on material ahead of time if they have a planned absence. All class material will be on Google Classroom.

If a student has an unplanned absence, they can also consult their class schedule to see what they missed and take advantage of their study group, recorded lessons, or other resources to catch up on the material that they missed. If a student misses for an extended amount of time, we will develop a plan of action that will be shared with the parent. **Your student should initiate this process.**

If a student misses a quiz, they should make it up as soon as possible since quizzes are formative assessments that gauge mastery. If a quiz is not made up before the test is given, the student will not be allowed to make up the quiz.

If a student misses the day before a test, they will still be required to take the test if they return the next class period since no new material is taught the day before the test. **If a student misses a test, they must follow the test make-up policy which is TBD.**

Ultimately, it is the student's responsibility to learn the material that they miss and to make timely arrangements to make up work.

A Note on Content and Study Skills for Chemistry :

Chemistry is a very challenging course. It is particularly difficult to be successful in this course without personal motivation and daily study. I expect hard work, and students will be successful if they consistently do the following:

- Take notes in class in a notebook exclusively designed for this class.
- Write down and work all examples given during instruction. Chemistry is not a spectator sport!
- Complete the assignments on the day it is assigned. Don't procrastinate and don't copy someone else's work. You are responsible for your learning.
- Ask questions in class. Come for help during enrichment, and find a study group.