**COURSE OUTCOME:**

* **Course Description:** The goal of Honors Chemistry is to develop an understanding of chemistry and its role in the world and how it fits into the many different sciences. Chemistry is a study of matter – what matter is, what it is made of, what properties it has, how it came to have those properties, and what that matter can do. This a course that will outline the role that chemistry plays in the student’s personal, community, and global environment. This course includes student-centered activities, in the laboratory and in the field, current problems, and real-life issues.
* **Link to county curriculum**<http://science.knoxschools.org>
* **Link to state standards**<http://www.state.tn.us/education/ci/sci/index.shtml> (Chemistry 1 Standards)

**INSTRUCTION:**

* **Topics and General Pacing**

|  |  |
| --- | --- |
| **Unit** | **Pacing** |
| Introduction to Chemistry, Safety and Measurement | 6 days |
| Atomic Theory and Structure | 4 days |
| Nuclear Chemistry and Isotopes | 4 days |
| The Periodic Table and Electrons | 10 days |
| Bonding and Chemical Formulas | 10 days |
| The Mole | 7 days |
| Chemical Equations and Reactions | 6 days |
| Acids and Bases | 1 day |
| Matter | 4 days |
| Kinetic Molecular Theory and Gases | 4 days |
| Solutions | 4 days |
| Stoichiometry | 2 days |

The number of days spent on each topic is approximate based on the amount of time needed by students to learn and master the material.

* **Materials Needed**

|  |  |
| --- | --- |
| 1 composition note book | Scientific calculator |
| Loose Leaf paper | Highlighter |
| 2 pocket folder | Red ink pen |
| Blue or black ink pen | Pencil |
| Box of TIssues |  |

**Textbook**: Zumdahl *World of Chemistry*© 2007. The replacement cost for this book is **$69.90**

**Fees**All chemistry classes have a $30.00 lab fee which will be used to purchase chemicals, food products for food labs, disposable lab materials (pipettes, matches, plastic materials) and supplies for activities such as model building or slime making. Fees can be paid with cash or check (checks are to be made payable to Carter High School for ONLY the $30 for this course).

* **Resources**
* ***School-based*:**
	+ Use of the Internet to research topics, as well as computer programs to enhance learning skills, such as Microsoft Office, Holt Interactive Tutor, Discovery Education, Odyssey, and other Knox County approved software
	+ Education films “Kilowatt Ours,” “The White Hole,” “Atom Bond”, “Green Energy”, “Who Killed the Electric Car”, “How Stuff Works”, “Nuclear Energy”
	+ Annenberg Media’s “World of Chemistry” Series
	+ Discovery Education videos (such as “Chemical Reactions,” “The Periodic Table,” “Greatest Discoveries in Chemistry,” etc.)
	+ Technology, film clips, base & supplemental texts, audiovisuals, novels, etc.
* ***Outside*:**
	+ Annenberg Media’s “World of Chemistry” Series
	+ Discovery Education videos online (such as “Chemical Reactions,” “The Periodic Table,” “Greatest Discoveries in Chemistry,” etc.)
	+ Online media such as “The Periodic Table of Videos” and Teachertube.com
	+ Student-made materials to complete assignments on various topics throughout the semester
	+ Guest speakers which may include community scientists, community volunteers, or community out-reach programs such as those offered by Ijam’s Nature Center
	+ Articles from magazines such as Popular Science, National Geographic, Science, Scientific American, ChemMatters, and others as deemed relevant to the course
	+ Any videos to be shown not included in the above, which are not already pre-approved for viewing by the Knox County Science department, will have a permission note sent home about them prior to their being shown.
* If you do not approve of a specific resource listed in this syllabus, please make your request to me in writing and an alternative assignment and/or materials will be provided. The request should include your name, the child's name, the specific activity/materials in which you do not want your child to participate or to which you do not want them exposed, and the nature of your objection.
* **Safety Procedures**Safety procedures must be followed at all times. A lab safety contract signed by both the student and parent is required **before** a student can participate in lab. Before students can participate in labs they will be required to complete a unit on safety and to pass a safety test.

**ASSESSMENT:**

* **Expectations and Skills**Through the experiences in this course, students will develop critical thinking and problem solving skills that can be applied to their everyday lives. Students will be given standards and skills to learn and master throughout the course based on the course curriculum, and will have many varied ways to demonstrate their mastery.
* **Grading Policy/Rubrics**

“Success is the maximum utilization of the ability that you have” –Zig ZiglarAll Knox County Science courses hold to the State’s grading system as follows:

A 93-100

B 85-92

C 75-84

D 70-74

F Below 70

Grades will be determined based on a percentage of total points throughout a semester. The following breakdown of grading is subject to change:

 Tests: between 50-100 points

 Weekly Quizzes: 20-30 points

 Labs: between 20 and 50 points

 Notebook: between 50-150 points \*Depends on the size of a unit\*

 Projects: (1) Nuclear Chemistry Presentation: Complete research and prepare a presentation. Class time will be provided for students to work on this project. (2) Adopt an Element: Complete project outside of class. Students will be asked to research and create a tissue box that represents and element of their choice. \*Due dates and research dates will be provided in advance for students verbally, as well as on School Fusion.

The End of Course (EOC) test taken as your final exam at the end of the semester will count as 25% of your grade. The remaining 75% of the grade will be based upon the student’s level of mastery of certain skills and standards as outlined in the county curriculum.

* **Assignments & Projects**

Students will be expected to participate in a reading activity/assignment at least once a week throughout the semester. Keeping a class/lab notebook is a class requirement. This notebook will be graded periodically.

* **Make-Up Work Policy/Late Work Policy**

All make-up work is the **student’s responsibility**. If the student is absent it is his/her responsibility to check in their class period’s folder to receive any handouts/worksheets distributed on the day they were absent. The student will also check with their group and/or lab partners to receive any notes, verbal assignments, etc. Students will also be able to look at the teacher’s class notebook and/or lab notebook to receive information on what was missed. After students have exhausted these resources, they may check with the teacher for any other important information. Make-up test and quizzes should be taken care of before school or after school, with appointment, or during the designated enrichment period. A student has one week from the date of missed assignment, test, or quiz to make it up before the grade becomes a zero. If a student misses a lab assignment, an alternate assignment or research will be used as a make-up grade. Specific details will be discussed in class.

Late-work policy: For each day that an assignment is late, 5 points will be deducted from the total grade that the student receives.

**GENERAL EXPECTATIONS:**

* **Students:**
	+ - * **Attendance Policy:** The best way to be successful in chemistry is to BE IN CLASS! If you are absent, follow the make-up policy.
* **Classroom Policy/Procedures:** All school and county rules WILL BE followed, from cell phones to tardies to dress code and behavior.
	1. Come in prepared, and on time. Students should follow the tardy policy.
	2. Students should not be a disturbance to others who are trying to learn. Talking when an instructor is teaching is inappropriate.
	3. Students should be respectful to their peers, visitors, teachers, and themselves. Students should also be respectful of any furniture, equipment, and other items that are in use in the classroom or lab.
	4. Students should follow all lab safety rules.
	5. Students are required to continue working on assignments until the teacher dismisses the class.
	6. Students, who finish their work early, are to peer tutor another student. This does not mean provide answer or do the work, but to help reteach the material using tips and clues. Follow the saying “Tip, Tip, Teach”.
	7. During classroom discussion, all students are expected to retain an open mind and be respectful of others opinions.
	8. Students should raise their hand, and ask for permission, if they feel the need to leave the classroom.
	9. No bathroom breaks will be given in the first 15 minutes or the last 15 minutes of class. This goes for any need to leave the classroom. Bathroom breaks should be kept at a minimum. Students have 7 minutes to get to class, this is plenty of time to take care of any business. Each student will have 6 bathroom passes to use for the semester. Students will keep up with their passes on a clipboard located at the door. If more than 6 are used, then the student will be required to serve a tutoring session to make up for time lost out of class. These will be held the following day that the bathroom pass is used from 8:00 – 8:15. Failure to show for tutoring will result in an office referral for insubordination.
* **Tardies** – You are tardy to this class, when you do not have the material from the handout bin when the bell rings. Tardies will result in signing the tardy log and serving silent lunch the following day. If you are tardy to class, do not be a distraction to your peers.
* **Electronics** – Cell phones are a distraction during instruction. Cell phones should be put away during teacher instruction and group settings. What work you do not accomplish from being distracted on your phone will reflect in your grade and your amount of homework. Cell phones are not permitted at all during quizzes, tests, or EOC exams. This will result in an office referral and an automatic zero on the quiz, test, or EOC.
* **Food** – Due to the nature of what happens in science rooms, no food or drink other than water bottles will be allowed in the classroom. ABSOLUTELY NO FOOD OR DRINK will be allowed in the lab at any time.
* **Honor Code:** The Knox County Science statement about plagiarism is as follows:
According to Harbrace Handbook, 15th edition:

“Plagiarism is defined as presenting someone else’s ideas, research, or opinion as your own without proper documentation, even if it has been rephrased.  It includes, but is not limited to the following:

1.      Copying verbatim all or part of another’s written work;

2.      Using phrases, figures, or illustrations without citing the source;

3.      Paraphrasing ideas, conclusions, or research without citing the source;

4.      Using all or part of a literary plot, poem, or film without attributing the work to its creator.”

**Consequences Of Plagiarism**

Plagiarism is a form of stealing and academic fraud.  Students who are found guilty of plagiarism will have the option of either redoing the assignment within a specified time period and accepting a grade letter drop or taking a zero on the assignment.  Parents should be involved in making the decision.

* **Teacher:**
* **Communication Strategies**

**Contact Information:** Please email me at taylor.thacker@knoxschools.org or you may call the school at 933-3434 and leave a message. My plan period is during fourth block, 2:05 until 3:30.

* **Portal Post Policy**

One way in which I am best able to communicate with students and parents is through Parent Portal. In order to give timely feedback, I will update grades at least once per week online. Please contact me with questions.

* **Intervention Strategies** If the course grade drops to failing, parents will be contacted and the student will be asked to participate in one or more of the following intervention strategies:
* **Tutoring:** I am available before and after school by appointment. Students will also report to each of their classes for 30 minutes a week after lunch for a tutoring period. The students will be given the schedule for which classes they should report to on a certain day.
* **Redo Policy**: The re-do policy applies to attempted work, **not to be confused with missing work**. If a student feels the need to re-do an assignment, he/she will have that opportunity. A re-done assignment will have a maximum value of 90%. Before being allowed to re-do an assignment, the student must first have tutoring of some type. **This will be at teacher discretion**. The assignment may not be exactly like the original assignment and must be done outside of regular class time (such as during enrichment). There are some exclusions to this re-do policy, such as: End of Course Exams, labs, performances, or any other assignment specified by the teacher ahead of time.
* **\***Students may also be asked to participate in one of these intervention strategies even if they do not have a failing grade at the teacher’s discretion if the teacher feels it is in the student’s best interest for success to do so.

The Board affirms that it is essential that the teaching about religion—and not of a religion be conducted in a factual, objective and respectful manner in accordance with the following:

* 1. Music, art, literature, or drama with a religious theme or basis are permitted as part of the curriculum for school-sponsored activities and programs provided it is essential to the learning experience in the various fields of study and is presented objectively;
* 2. The emphasis on religious themes in the arts, literature and history shall be only as extensive as necessary for a balanced and comprehensive study of these areas. Such studies shall never foster any particular religious tenets or demean any religious beliefs; and
* 3. Student-initiated expressions to questions or assignments which reflect their beliefs or non-beliefs about a religious theme shall be accommodated. For example, students are free to express religious belief or non-belief in compositions, art forms, music, speech and debate.

I have read the syllabus and agree to follow it. I will not receive my bathroom passes or be allowed to do labs until I have signed this syllabus. I also understand that I must sign a lab safety agreement to do labs.

Student signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

I have read the syllabus and understand it. Any questions I have are listed below and will be answered through the e-mail provided or through the School Fusion. I also understand that I must sign a lab safety agreement for my child to do labs.

Parent/Guardian signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Questions:

Student Allergies:

E-mail address: