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**Honors Chemistry 1\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** Eastern High School 12400 Old Shelbyville Road Louisville, Ky. 40243

**Course Description:**

Chemistry involves the study of matter and energy. Many common and current problems of the modern world are related to the course content. The central theme of the course is problem solving within chemistry and learning to use qualitative analysis to address the common and current problems to a specific audience as defined by the student writer. The [Kentucky State Standards](http://holtmcdougal.hmhco.com/hm_data/pdf/states/KY/KY_WOC_KCCT.pdf) for Chemistry will be covered in this class, which include the following topics: 1)Matter and Measurement, 2) Atoms, Molecules, and Ions, 3)Stoichiometry, 4) Aqueous Solutions, 5)Thermochemistry, 6)Periodic Properties, 7)Solids, Liquids, and Gases, 8)Chemical Bonding, 9)Molecular Geometry, 10)Properties of Solutions, 11)Chemical Kinetics, 12)Chemical Equilibrium, 13)Acid-Base Chemistry, 14)Thermodynamics, 15)Electrochemistry, 16)Nuclear Chemistry. We will explore these topics through discussions, laboratory investigations, teacher demonstrations, and in-class assignments to prepare students for lifelong learning as illustrated in the [JCPS strategic plan and vision by 2015](file:///C:\Users\dsteine1.JEFFERSON\Desktop\Strategic_Plan_JCPS_Vision_2015.pdf) .

**Textbooks and Materials for Success:**

* Chemsitry text : Class set Chemistry Prentice Hall, Online text <https://ia600702.us.archive.org/26/items/ost-chemistry-chemistry_grade_10-12/Chemistry_Grade_10-12.pdf>

* Scientific Calculator- Make sure the calculator can perform log, exponential functions, and scientific notation.

• Three ring binder or spiral bound notebook, pens (black or blue ink), pencils, and note cards.

**GRADING SCALE:**

A – 93 - 100% / Exceeds Standards

B – 86 – 92% / Meets Standards  
C – 79 – 85% / Marginally Meets Standards  
D – 70 – 78% / Below Standards  
U – Below 70% / Unsatisfactory Performance

**GRADING POLICY:**

[Infinite Campus](https://infinitecampus.jefferson.kyschools.us/public/jcps.jsp) will be used as a grade book, for daily class communication, or for assessment. All students will have an opportunity to view grades during the scheduled class, when appropriate, during the school day. Student progression, promotion, and grading procedures give the District focus and also promote local school flexibility regarding types and frequency of reporting to parents. The procedures incorporate academic expectations for student learning, the continuous-progress nature of the Primary Program and accountability for individual student success. [JCPS Online](http://jcps.jefferson.kyschools.us/default.asp) will be used to post class assignments, view power points and as a resource for students to submit written work.

A student returning to school after an ***excused*** absence or a suspension may request make-up work within three (3) school days of his/her return to each class. The make-up work will include only written daily work, tests, and major projects. Some class work cannot be reasonably duplicated so an alternative assignment may result. The make-up work will be provided to the students as arranged with the teacher. The student will have the number of school days of absence or suspension plus one (1) school day from the time he/she receives the make-up work to turn it in to the teacher. Teacher discretion can be used to handle a special situation. Make-up work for ***unexcused*** absences, other than suspensions, cannot be made up unless directed by the Principal. It is the parent’s/guardian’s responsibility to notify the school on the day a student is absent.

**The following grade components will be used in this chemistry course as per District and SBDM guidelines.**

**10% - Student Engagement: Class work, Participation**

**20% - Student Engagement: Group work**

**10% - Student Progress: Homework, class assignments**

**20% - Student Progress: Quizzes**

**10% - Student Mastery: Projects**

**20% - Student Mastery: Final Exam**

**General Rules for Assignments**

All assignments must have your name (first and last), date and period, written neatly in the upper right hand corner. Along with this information, a title must be written clearly at the top of the paper. Assignments not turned in with all of the necessary information may be delayed in the grading process.

**Homework**

Homework will be assigned every night in the form of reading, section reviews, laboratory reports and projects. Homework must be on top of your desk or in the basket before the final tardy bell rings in order to receive credit. Those tardy to class will not receive credit for homework, since that work would be considered late once the tardy bell rings. Homework will be assessed based on the [homework rubric assessment system.](file:///C:\Users\dsteine1.JEFFERSON\Desktop\Homework%20Rubric%20Check%20System.doc)

**Laboratories and Projects**

Laboratories are used to reinforce material discussed in class or to introduce a new topic. Once a lab has been completed you will turn your own lab report using the laboratory report guidelines and it will be graded according to these guidelines.

Several projects will be completed to expand beyond the material discussed in class. Information and guidelines for these projects will be available when assigned.

Late Laboratories and Projects are accepted with a percent mark down. Assignments are considered late if they are not turned at the beginning of class. One day late will be marked down 25%, two days late will be marked down 50%, no late work will be accepted after two days. Any late work must be accompanied with a completed late work form and handed directly to the instructor.

**Academic Dishonesty**

Any student found to be cheating (i.e. cheat sheet, copying from another individual, etc.) on a test or quiz will receive a zero for the test or quiz with no chance to make up the assignment.

**CLASSROOM POLICIES:**

|  |  |
| --- | --- |
| Expectations | Classroom Rules |
| 1. Be Prepared 2. Participate 3. Complete ALL assigned work by the due date 4. Ask questions relevant to the topic of discussion 5. Keep hands feet and all objects to yourself | 1. Show respect to EVERYONE 2. Listen carefully to instructions 3. Follow directions 4. Raise your hand to gain the attention of the instructor 5. No portable electronic devices 6. NO EATING OR DRINKING IN CLASS |

**Consequences\***

|  |  |
| --- | --- |
| These are the consequences for not following the classroom rules:   1. First Offense 2. Second Offense 3. Third Offense 4. Fourth Offense | 1. Verbal warning 2. Teacher/Student conference and call home 3. In class writing assignment and call home 4. Referral to AP office |

\*If a student is endangering or showing blatant disrespect to anyone, the student will be removed from the class and sent to the Assistant Principal’s office with a referral.

**Laboratory Rules**

Each student will be required to take a laboratory safety test and sign a [Laboratory Safety Contract](file:///C:\Users\dsteine1.JEFFERSON\Desktop\Flinn_Safety_Contract1.doc) before performing any laboratory. Students will not be able to perform laboratories until s/he has passed the safety test with 95% accuracy.

If a student is not following any portion of the Laboratory Safety Contract, then a Laboratory Infraction notice detailing how the student behavior is a safety hazard to other students will be sent home to the parents/guardians of the student. The consequences for not following the instructions of the laboratory experiment are listed below:

1. First infraction : Warning
2. Second Infraction: Point deduction for not working as assigned by teacher (25%)
3. Third Infraction: More work not being completed as assigned by teacher (50%)
4. Forth Infraction: Failure to follow a directive and complete any work (zero for work)
5. Fifth Infraction: Referral and petition for removal from chemistry class

**TENTATIVE SEQUENCE OF TOPICS**:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Unit | Chapter | Approximate Duration (weeks) | Topic | Subtopics |
| 1 | 1,3,4 | 3 | Introduction to Chemistry | Lab tools, Techniques, and Safety  Measurement & Dimensional Analysis |
| 2 | 2 | 1 | Matter | Properties of Matter  Physical and Chemical Change |
| 4 | 5 | 2 | Atomic Structure | History of Chemistry and Atomic Models  Atomic Structure  Periodic Table Basics |
| 5 | 28 | 2 | Nuclear Chemistry | Ionizing Radiation  Neutron/Proton Ratios and Nuclear Stability  Nuclear Forces and Reactions  Fission & Fusion  Nucleosynthesis |
| 6 | 13,14 | 4 | Quantum Theory and Periodicity | Properties of Light & Energy  Electron Configurations  Periodic Trends |
| 7 | 15,16,6 | 2 | Basic Bonding & Chemical Nomenclature | Nature of Bonding  \*Naming of Ionic, Covalent, and acidic compounds |
| 8 | 8 | 3 | Chemical Reactions | Law of Conservation of Mass  Classification of Reactions  Product Prediction  Solubility Rules |
|  |  |  | Semester 1 Final | Cumulative |
| 9 | 7 | 2 | The Mole | Mole conversions  Composition Analysis  Concentration of Solutions |
| 10 | 9 | 2 | Stoichiometry | Mole ratio  Limiting Excess Reagents  Yield |
| 11 | 16 | 2 | Advanced Bonding | Lewis Diagrams  Molecular Shapes  Polarity  Intermolecular Forces |
| 12 | 10 | 2 | States of Matter | Kinetic Molecular Theory  State Changes  Heating/Cooling Curves  Phase Change Diagrams |
| 13 | 12 | 2 | Gases | Avogadro’s Law  Boyles Law  Charles Law  Combined Gas Law  Ideal Gas Law  Law of Partial Pressures |
| 14 | 17,18 | 2 | Solutions | Dissolution and Hydration  Colligative Properties  Molarity |
| 15 | 19 | 2 | Kinetics & Energy | Endothermic vs. Exothermic  Reaction Rates  Energy Diagrams  Catalyst |
| 16 | 20 | 2 | Acids and Bases | Acid – Base Theories  Acid – Base Strengths  Neutralization Reaction |
|  |  |  | Semester 2 Final | Cumulative |

**E-Signature**

Teacher will send out the course syllabus in an email. Teacher requests that parent select e-signature on the email and type their name in the parent guardian blank, and teacher will file the email in a folder on outlook.

I have read the syllabus and understand the expectations in the classroom and in the laboratory. To the best of my ability I, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Print your first and last name), will abide by the rules and meet the expectations my instructor has set for me.

Signature of Student \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature of Parent/Guardian \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_