General Chemistry Course Syllabus 2017-2018

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Text: Prentice Hall Chemistry Prentice Hall Cost of Textbook: \$72.97

Course Description:

The Chemistry curriculum continues students' investigations of the physical sciences that began in Grades K-8 The course is designed to provide students with the necessary knowledge and skills in chemistry. Chemistry extends the physical sciences to more abstract concepts including, the structure and properties of matter, structure of atoms, the interaction matter, and the conservation of matter. These concepts are investigated through laboratory experiences and fieldwork designed for students to develop appropriate knowledge and skills in science as inquiry.

Outcome Expectations:

At the end of this course students should be able to:

- 1. Use appropriate scientific tools to observe record, organize, analyze, interpret, write, and present the results of scientific investigations clearly and accurately.
- 2. Use information, calculations, and predications to explain the nature, properties, classification, and nomenclature of matter including the prediction of chemical formulas based on balance of charges.
- 3. Use the law of conservation of matter, including molarity and molality, to determine chemical composition under different reaction types and conditions.
- 4. Use modern atomic theory to explain the characteristic properties of atoms including size, charge, particles, isotopes, chemical bonds, light emission, and electron movement.
- 5. Explain the trends in the Periodic table and use the knowledge to predict the properties of representative elements.
- 6. Demonstrate the effects of varying factors (concentration, temperature, and pressure) on the rate of chemical reaction.
- 7. Collect, analyze, and compare data on the effects of motion of atoms and molecules on physical and chemical process and relate these to energy flow during phase change.
- 8. Explain the process involved in solute-solvent interactions and evaluate the nature of acids compared with bases
- 9. Demonstrate the effects of varying factors (volume, temperature, pressure and the number of moles) on gasses and chemical reactions involving gasses.
- 10. Collect data, analyze data and calculate the amount of heat given off or taken in by chemical or physical processes.

Course Content and Sequence: Topic	Chapter(s)
Atomic Structure	4
 Modern Atomic Theory 	5
 Matter & Changes 	2
 Periodic Trends 	6
 Ionic Nomenclature & Bonding 	7,9
 Covalent Nomenclature Bonding & Geometry 	8,9
 Chemical Reactions 	11 & 20

•	Chemical Quantities (Moles)	10
•	Stoichiometry	12
•	Solutions	16
•	Acids, Bases and Salts	19
•	Gases	13.1 & 14
•	Thermochemistry	17
•	Reaction Rates & Equilibrium	18

Various chapters and section in this book may not be covered. Various pages within covered chapters may also be skipped. Additional topics will be covered as deemed appropriate. The goal in this curriculum is quality not quantity coverage.

Materials List

- 3-ring Binder (1 ½ in to 2 in) with dividers [suggested: Notes, Practice, Assessment, Labs]
- Scientific Calculator
 - Cassio FX-300 ES or FX-115 ES, **Best Choice**
 - o or Texis Instruments TI 30XIIS
- 3- hole punch loose-leaf paper
- Set of Index Cards (200 Flash Cards)
- Blue or Black pens
- Pencils (Mechanical) or sharpened pencils
- Agenda/Planner
- Highlighter

Grading

Final Exam	20%		A	90 and Above
Course Work	80%	broken down as follows	В	80-89
Assessments		40%	C	74-79
Labs		30%	D	70-73
Practice work		20%	F	69 and Below
Quizzes		10%		

^{**}Grade calculation break-down is subject to change based on Henry County policies. **

Grade Reports

Cumulative grades will be on Infinite Campus and progress reports will be available in Infinite Campus at the end of every nine weeks grading period. But students and parents are strongly encouraged to check Infinite Campus on a regular basis. Questions or concerns regarding grades may be emailed to the teacher or parents may call the teacher. Parents may also call the school and request a teacher conference through the counseling office.

Testing Procedures

For all quizzes and assessments students are expected to put electronics in their bags (or give to the instructor) and bags/notebooks are placed in a designated area. Students found to have electronics, class notes, and/or practice material in their possession during an assessment will receive a zero for the assessment and will be issued an automatic office referral. Chemistry students are given a reference sheet from the instructor and may use their own calculator. Students will have 45 to 50 minutes to complete Unit Assessments and 10 to 20 minutes to complete quizzes.

Late Assignments

Chemistry is a college preparatory course and assignments are expected to be completed on time. This includes all assignments, even those not collected for a grade. As a chemistry student, it is of vital importance that you take an active role in your learning and begin to become self motivated as these skills are crucial for success at the college level. Students can only receive a maximum score 50% for late work if submitted prior to assignments being returned or answers given out in class. Students do have the option to attend tutorial and

complete assignment under the supervision of any chemistry teacher to receive a maximum of 70% on late work. Supervising teacher will need to date and sign to indicate that the work was completed with them.

Make-up Procedures

If you are absent, and that absence is excused, you will be given the same number of days absent to turn in the missed assignments. If you are absent only one day, and on that day a previously announced test or quiz or major assignment is due, you will be expected to take that test, quiz or turn in the assignment on the day you return to class. All make-up work should be labeled as such (Make-up), include date of absence on all make-up work.

Tests Make-up Procedures

If you are out multiple days and have missed a test, it must be made up with-in 5 school days. You are responsible for scheduling a make-up day with the instructor. Failure to make-up a missed test in a timely manner will result in a grade zero for that assessment.

Tutoring

Chemistry is a course where skills are revisited and necessary throughout the entire course. Students need to get assistance sooner rather than later. Chemistry tutoring will be available on a set posted schedule and additional times may be arranged with ANY chemistry instructor at least two days in advance. Typically, tutorial occurs before or after school and teachers will not be responsible for transporting students. Students can attend tutorial with any chemistry teacher and do not have to wait until their teacher is on the schedule. When attending tutorial, students should bring with them any notes, practice assignments, and resent quizzes/test.

Lab Safety Regulations

A separate Lab Safety Contract will be provided for review and signature by both student and parent. It must be reviewed by parties and the student information sheet completed before the student can participate in lab. Failure to adhere to the safety regulations during a lab will result in immediate removal from the lab, loss of grade and possible disciplinary actions.

Classroom Expectations

- 1. Be Prompt- ON TIME
- 2. Be Ready (Prepared)
- 3. Be Respectful
- 4. Be Responsible
- 5. Follow all school and county rules.
- 6. Remember this is a lab classroom always follow all Lab Safety Regulations per the contract and NO food or drinks are allowed in class (exception bottled water).

Bring Your Own Technology (BYOT)

Students can use digital devices to aid in their learning process. These devices are only to be used in the classroom at the discretion of the teacher. Any device being used for purposes that are not educational or beneficial to the learning process will be confiscated.

Consequences for violation of this rule are:

1st offense – student will receive a verbal warning

2nd offence – student will receive a verbal warning and parent(s) will be contacted

3nd offense – student will receive a detention and parent will be contacted

4th offense – student will receive a referral

Academic Honesty-

Students are expected to submit items that are their own work. Plagiarism is never acceptable, when resources are used they are cited within the student's work. If you are caught cheating, copying, plagiarizing or using any form of dishonesty to complete your course work, a grade of zero will be given for the work in question. Students should not be in possession of any electronic device during assessments/quizzes, violation of the policy will be referred to administration for the disciplinary action. Furthermore, parents will be contacted and NO letter of

recommendation for college or scholarships will be written by any chemistry instructor for students found to be in violation of the academic honesty policy.

How to pass this class?

Doing the following items will help you be successful in this class:

- 1. Do assigned reading promptly.
- 2. Use your calendars and agenda.
- 3. Be present daily. If you are sick, make up work in a timely manner when you return. If absent for more than one day arrange for your work to be brought to you.
- 4. Keep your notebook up to date.
- 5. Complete your own assignments.
- 6. Study for tests (start reviewing for a test at least three nights before the test).
- 7. Ask questions when you do not understand and attend tutorial if needed.

It is important for you to understand; the instructor assign the grades you have earned. This semester will offer many opportunities for you to develop and refine your study skills. I look forward to educating, encouraging and empowering you to your greatest potential. Do not hesitate to contact your teacher by e-mail, phone or schedule conference if you have any questions or concerns. Thank you in advance for your help and support.

Note: The instructor reserves the right to change any section of this course syllabus at any time during the semester to more adequately meet the needs, interest or abilities of the students.

Please keep a copy of the syllabus in your note book at all times.