Woodland High School

Chemistry Course Syllabus

2020-2021

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Text Book

Chemistry: Your online text book is HMH and it can be accessed from the Launchpad.

Course Description:

Chemistry is a laboratory course in which students study the properties and behavior of matter. Students who successfully complete this course may expect to know the nature and structure of atoms, the contributions of various scientists to the development of chemistry as a science, how substances are involved in chemical reactions, and the use of some of the compounds in their everyday life. Topics such as atomic structure, kinetic theory of gases, and chemical reactions will be covered.

Course Outline and Content:

1st Semester

- 1. Scientific Method and Matter
- 2. Measurements and Calculations
- 3. Atomic Structure
- 4. Electrons & Periodicity
- 5. Chemical Bonding
- 6. Nomenclature
- 7. Chemical Reactions
- 8. Nuclear Energy

2nd Semester

- 1. Chemical Quantities
- 2. Stoichiometry
- 3. Energy
- 4. Gas Laws
- 5. Solutions
- 6. Liquids and Solids
- 7. Acids and Bases

Syllabus can be viewed at

https://www.georgiastandards.org/Georgia-Standards/Documents/Science-Chemistry-Georgia-Standards.pdf

Remind 101:

Sign up for important updates from Mrs. N. Fraser Text the message @k9hc7h to the number 81010. If you're having trouble with 81010, try texting @k9hc7h to (470)239-6139

Materials Needed: (When we are back in class)

Composition Note Books-3 Pencils and Pens Pocket folders-2

Notebook Paper Colored Pencils Scientific Calculator Graph Paper

Positive Attitude



School-wide Grading Policies

Final Exam or EOC/ Milestone Assessment – 9th to 12th grade level courses – 20% Practice Work (Classwork, Homework, formative assessments): 40% Assessment Tasks (Quizzes, labs, Summative assessments, major tests/ projects): 40% Practice work includes minor assessments like short Quizzes, mini labs too.

It is very important for the student to score a 70% or above for the first semester to be successful at the end of the year.

Tutoring:

Tutoring will be offered after school from 3.15 pm to 3.45 pm. I shall inform you the days for tutoring. Prior appointment must be taken if you desire to be tutored.

Make-up Work Policies:

Unexcused absences will result in no grades awarded for the work given while absent. Excused absences allow the students to make up the work in the equal amount of time they were absent.

Chemistry can be a very difficult course and your attendance each day is imperative. Every day we will work on important information. Your presence and focus is extremely important to be successful in Chemistry.

During remote learning, please make sure you complete the assignments on Google doc and turn in on time.

IF YOU ARE ABSENT IT IS YOUR RESPONSIBILITY TO MAKE UP ALL WORK MISSED!! The following is a list of ways you may make up assignments:

- 1) *Homework/Classwork* If you are absent the day an assignment is due, you are responsible for handing it in the day you return to class.
- Labs and Tests Make up times need to be arranged with me. These assignments must be made up before or after school. You must make up all labs and tests within one week. After one week all grades will be converted to zeroes.

School Wide late policy 2020-2021

- 1. All late work will be accepted up to 3 days beyond the published school days beyond the published due date without penalty.
- 2. After 3 school days work will be accepted with a maximum grade of 75%
- 3. After 10 school days (2 weeks from the due date, work will remain a zero)

Classroom Rules and Discipline Procedures:

To ensure an optimum learning environment, please adhere to the following WHS Student Non-Negotiables: When we get back to the normal situation at school,

- 1. Be in class on time
- 2. Be prepared for the class and ready to learn before the bell rings
- 3. Dress for success. Follow the dress code
- 4. Food is not allowed in the classrooms
- 5. No hats or headgear are allowed in the building
- 6. Technology use is at the discretion of the teacher.
- 7. No cursing in the school building
- 8. No cell phones during instruction and also during testing.

- 9. Write legibly at all times. If I cannot read it, I will not grade it.
- 10. Before tests, place all books, materials, etc. away from the testing area.
- 11. At the end of class, I will dismiss you. Please do not put up your materials or leave your seat.
- 12. You are considered tardy if you are out of your <u>assigned seat</u> when the tardy bell rings. It is extremely important that you arrive on time so that class time can be maximized. Referrals will made according to the school tardy policy.

Academic Integrity Policy:

Academic integrity is a fundamental value of quality education; therefore, Woodland High School will not tolerate acts of cheating, plagiarism, or falsification of school work. Should it be determined that an academic integrity violation has taken place, the school reserves the right to assign a grade of zero, and submit a disciplinary referral to the appropriate Assistant Principal. The school also reserves the right to remove or suspend enrollment in any Advanced Placement/Honors classes as well as Academic Honor Societies.

All tests administered during the school year are based on the standards aligned by the GA department of education

As a department, we work very hard to maintain the security of our tests. Quality assessments take a great deal of effort to create. Students are given the opportunity to go over the questions missed in class and clarify information in the class. Remediation, review and retest will be offered after school after notifying the teacher ahead of time.

I look forward to this school year and to working with each and every one of you. With your help we can make this an enjoyable, interesting, and challenging class.

STUDENT SAFETY CONTRACT

Science is a hands-on laboratory class. You will be doing many laboratory activities that require the use of hazardous chemicals. Safety in the science classroom is the # 1 priority for students, teachers, and parents. To ensure a safe science classroom, a list of rules has been developed and provided to you in this student safety contract. These rules must be followed at all times. Both you and a parent or guardian must sign the Student/Parent Information page indicating you have reviewed these rules before you can participate in the laboratory. Keep this safety contract in your science notebook as a constant reminder of the safety rules.

GENERAL GUIDELINES

 Conduct yourself in a responsible manner at all times in the laboratory.
 Follow all written and verbal instructions carefully. If you do not

understand a direction or part of a procedure, ask the instructor before proceeding.

 Never work alone. No student may work in the laboratory without an instructor present.

4) When first entering a science room, do not touch any equipment, chemicals, or other materials in the laboratory area until instructed to do so

5) Do not eat food, drink beverages, or chew gum in the laboratory. Do not use laboratory glassware as containers for food or beverages.

6) Perform only those
experiments authorized by the instructor. Never do anything in the laboratory that is not called for in the laboratory procedures or by your instructor. Carefully follow all instructions, both written and oral. Unauthorized experiments are prohibited.
7) Be prepared for your work in the laboratory. Read all procedures thoroughly before entering the laboratory. Never

play around in the laboratory. Horseplay, practical jokes, pranks are dangerous and prohibited.

 8) Observe good housekeeping practices. Work areas should be kept clean and tidy at all times.
 Bring only your laboratory instructions, worksheets, and/or reports to the work area. Other materials (books, purses, backpacks, etc.) should be stored in the classroom area.
 9) Keep aisles clear. Push your chair under the desk when not in use.

10) Know the locations and

¹⁷⁾ all work surfaces (including the sink) and apparatus at the end of the experiment. Return all equipment clean and in working order to the proper storage area.

18) Know what to do if there is a fire drill during a laboratory period; containers must be closed, gas valves turned off, fume hoods turned off, and any electrical equipment turned off. 19) Handle all living organisms used in a laboratory activity in a humane manner. Preserved biological materials are to be treated with respect and disposed of properly. 20) When using knives and other sharp instruments, always carry with tips and points pointing down and away. Always cut away from your body. Never try to catch falling sharp instruments. Grasp sharp instruments only by the handles.

CLOTHING

21) Any time chemicals, heat, or glassware are used, students will wear laboratory goggles. There will be no exceptions to this rule!

22) Contact lenses should not be worn in the laboratory unless you have permission from your instructor.

23) Dress properly during a laboratory activity. Long hair, dangling jewelry, and loose or baggy clothing are a hazard in the laboratory. Long hair must be tied back and dangling jewelry and loose or baggy clothing must be secured. Shoes must completely cover the foot. No sandals allowed.
24) Lab aprons have been provided for your use and should be worn during laboratory activities.

ACCIDENTS AND INJURIES

25) Report any accident (spill, breakage, etc.) or injury (cut,

35) Handle flammable hazardous liquids over a pan to contain spills. Never dispense flammable liquids anywhere near an open flame or source of heat.
36) Never remove chemicals or other materials from the laboratory area.
37) Take great care when

transferring acids and other chemicals from one part of the laboratory to another. Hold them securely and walk carefully.

HANDLING GLASSWARE AND EQUIPMENT

38) Carry glass tubing, especially long pieces, in a vertical position to minimize the likelihood of breakage and injury.
39) Never handle broken glass with your bare hands. Use a brush and dustpan to clean up broken glass. Place broken or waste glassware in the designated glass disposal container.

40) Inserting and removing glass tubing from rubber stoppers can be dangerous. Always lubricate glassware (tubing, thistle tubes, thermometers, etc.) before attempting to insert it in a stopper. Always protect your hands with towels or cotton gloves when inserting glass tubing into, or removing it from, a rubber stopper. If a piece of glassware becomes "frozen" in a stopper, take it to your instructor for removal. 41) Fill wash bottles only with distilled water and use only as intended, e.g., rinsing glassware and equipment, or adding water to a container. 42) When removing an electrical plug from its socket, grasp the plug, not the electrical cord. Hands must be completely dry before touching an electrical switch, plug, or outlet. 43) Examine glassware before each use. Never use chipped or cracked glassware. Never use

dirty glassware.

44) Report damaged electrical

operating procedures of all safety equipment including the first aid kit, eyewash station, safety shower, fire extinguisher, and fire blanket. Know where the fire alarm and the exits are located.

11) Always work in a wellventilated area. Use the fume hood when working with volatile substances or poisonous vapors. Never place your head into the fume hood.

12) Be alert and proceed with caution at all times in the laboratory. Notify the instructor immediately of any unsafe conditions you observe.
13) Dispose of all chemical waste properly.

Never mix chemicals in sink drains. Sinks are to be used only for water and those solutions designated by the instructor. Solid chemicals, metals, matches, filter paper, and all other insoluble materials are to be disposed of in the proper waste containers, not in the sink. Check the label of all waste containers twice before adding your chemical waste to the container.

14) Labels and equipment instructions must be read carefully before use. Set up and use the prescribed apparatus as directed in the laboratory instructions or by your instructor.

15) Experiments must be personally monitored at all times. You will be assigned a laboratory station at which to work. Do not wander around the room,

distract other students, or interfere with the laboratory experiments of others. 16) Students are never permitted in the science storage rooms or preparation areas unless given specific permission by their instructor.

Keep hands away from face,

eyes, mouth and body while using chemicals or preserved specimens. Wash your hands with soap and water after performing all experiments. Clean (with detergent) rinse

Clean (with detergent), rinse, and wipe dry

burn, etc.) to the instructor immediately, no matter how trivial it may appear. 26) If you or your lab partner are hurt, immediately yell out "Code one. Code one" to get the instructor's attention. 27) If a chemical should splash in your eye(s) or on your skin, immediately flush with running water from the eyewash station or safety shower for at least 20 minutes. Notify the instructor immediately. 28) When mercury thermometers are broken, mercury must not be touched. Notify the instructor immediately.

HANDLING CHEMICALS

29) All chemicals in the laboratory are to be considered dangerous. Do not touch, taste, or smell any chemicals unless specifically instructed to do so. The proper technique for smelling chemical fumes will be demonstrated to you. 30) Check the label on chemical bottles twice before removing any of the contents. Take only as much chemical as you need. 31) Never return unused chemicals to their original containers. 32) Never use mouth suction to fill a pipet. Use a rubber bulb or pipet pump. 33) When transferring reagents from one container to another, hold the containers away from your body. 34) Acids must be handled with extreme care. You will be shown the proper method for diluting strong acids. Always add acid to water, swirl or stir the solution and be careful of the heat produced, particularly with sulfuric acid.

equipment immediately. Look for things such as frayed cords, exposed wires, and loose connections. Do not use damaged electrical equipment. 45) If you do not understand how to use a piece of equipment, ask the instructor for help. 46) Do not immerse hot glassware in cold water; it may shatter.

HEATING SUBSTANCES

 47) Exercise extreme caution when using a gas burner. Take care that hair, clothing and hands are a safe distance from the flame at all times. Do not put any substance into the flame unless specifically instructed to do so. Never reach over an exposed flame. Light gas (or alcohol) burners only as instructed by the teacher. 48) Never leave a lit burner unattended. Never leave anything that is being heated or is visibly reacting unattended. Always turn the burner or hot plate off when not in use. 49) You will be instructed in the proper method of heating and boiling liquids in test tubes. Do not point the open end of a test tube being heated at yourself or anyone else. 50) Heated metals and glass

remain very hot for a long time. They should be set aside to cool and picked up with caution. Use tongs or heat-protective gloves if necessary.

51) Never look into a container that is being heated.52) Do not place hot

52) Do not place hot
apparatus directly on the
laboratory desk. Allow plenty
of time for hot apparatus to
cool before touching it.
53) When bending glass, allow
time for the glass to cool before
further handling. Hot and cold
glass look the same. Determine if
an object is hot by bringing the
back of your hand close to it
prior to grasping it.

Mrs. N. Fraser – STUDENT/PARENT INFORMATION

Please provide the following information. Also, please read the classroom and lab safety rules listed on the syllabus. Sign below indicating you have read and understand them. Please sign up for remind too.

STUDENT NAME:	GRADE LEVEL:		
CLASS:	PERIOD:		
PARENT NAME(S):			
Parent Phone (Home / Work / Cell):			
Parent Email address:			
HEALTH INFORMATION:			
Do you wear contact lenses?	Yes	No	
Color blind?	Yes	No	

Please list any allergies, medications or other medical information that might be pertinent to this class.

I have read and understand

- a) The information provided in the syllabus
- b) The student / Lab safety contract.
- c) That I need to sign up for remind 101

STUDENT SIGNATURE:	 DATE:	·
PARENT SIGNATURE:	 DATE:	