

AAC Chemistry (P-Tech Early College) Syllabi

2024-2025



Ms. C. Owens, M.Ed.

Willowridge High School Room: J-213

281-634- 6842

Tutorials: Tuesdays & Thursdays 2:50pm -3:30pm

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Instructor for: P-Tech Early College: AAC Chemistry

PALS: Peer Assistance & Leadership

Science Department Chair

WHS Science Fair Coordinator

WHS Campus Student Leadership Coordinator

Introduction and Course Description:

Welcome to AAC Chemistry! AAC Chemistry, defined as the study of substances, begins your journey into the world of the advanced physical sciences and is considered a college-preparatory class.

Course Overview: AAC Chemistry students will apply mathematics to real-world problem-solving situations, including the practical use of Algebra. It is also a course that requires a great deal of abstract thinking, visualization in three dimensions, and the use of logic and critical thinking skills. By nature, this course is lab-based with special emphasis on quantitative and qualitative methods of analysis. You are expected to be prepared in all class activities. ***This is a very easy course to fall behind in quickly if you are not prepared and do not keep up with the pace of the course.*** The following guidelines will be implemented throughout the school year.

- New material will be presented every day.
- Chemistry is cumulative – information from Day 1 will be used all year.
- Algebra and a portion of Geometry will be integrated regularly.
- 24-hour late assignment policy with deductions is in place unless due to an excused absence (Ex: If you are absent one day, you are given one day to turn in late assignments. Please check Schoology daily for updates)
- Success comes from **daily attendance** and considerable amount of **effort inside and outside the classroom!**

Required Materials: 1- 70 sheet spiral notebook each semester (Interactive Notebook required for this course), and plenty of #2 pencils and pens. You will have access to a calculator and other material.

Lab Safety Rules

1. **Wear ALL AVAILABLE safety gear.**
2. **NO FOOD, DRINK, or Applying Make-Up during class or labs.**
3. **NO HORSEPLAY!** Lab conduct is taken very seriously and students misbehaving or horse playing in lab are subject to both a zero for the lab and an office referral.
4. **NO UNAUTHORIZED LAB PROCEDURES.**
5. **CLEAN YOUR ASSIGNED LAB AREA AT THE END OF EACH LAB EXPERIENCE.**
You can remove your safety gear (goggles and lab coat) when your area is clean.

Textbook Resource: *Chemistry 9251 9780328763467 Pearson Chemistry, (SAAVAS) Texas Edition]

This textbook will serve as a resource, online formative assessments and some assignments for the course. There will be a large amount of material pulled from other college-level resources and class lectures which will appear on all exams.

Interactive Notebook Responsibility: All students will be required to maintain an organized and functional interactive notebook (IAN). IANs are used as a tool to help students organize their notes, academic vocabulary, lab activities and other important information. When created and maintained correctly, students will benefit from its usage at the time of studying for exams and reviewing lab material. It is the responsibility of each student to update and bring their notebooks to class daily. I will allow students to keep their notebooks in the classroom on assigned days for storing or grading purposes only.

AAC Chemistry Course Outline: The following outline is subject to change.

Topics
1st Nine Weeks
Safety and Laboratory Equipment Orientation *Mandatory Science Fair Orientation (Research, data collection and project creation will be ongoing from the month of August through January 2025) Atomic Theory Electromagnetic Spectrum Isotopic Composition The Periodic Table Periodicity Electron Configuration Ionic and Covalent Bonding Covalent Nomenclature and VSPER Writing Chemical Formulas Ionic and Covalent Nomenclature
2nd Nine Weeks
Unit Conversions using Dimensional Analysis Scientific Notation and Significant Figures Usage in Chemistry Percent Composition Empirical Formulas Molecular Formulas Types of Chemical Reactions Balancing Chemical Equations Stoichiometry *Mandatory Science Fair Project Check-In
3rd Nine Weeks
Types of Solutions Solubility Graphs and Saturation Levels Solution Stoichiometry Molarity Concentration & Dilutions Acids and Bases Neutralization *Mandatory Science Fair Project Showcase and Regional Competition
4th Nine Weeks
Gas Laws Gas Volume Relationships Gas Stoichiometry Nuclear Chemistry Nuclear Energy Production Thermodynamics

Classroom Technology and Communication:

All students and parents will have access to varied communication tools. I will utilize the following tools to keep you abreast of due dates, exams, quizzes, special labs, science fair due dates and other critical information. (Remind 101, Band App, Talking Points app, Teacher FBISD Website: and Skyward student assignments/Parent portal access for current student progress and Schoology) **FBISD is now a 1:1 laptop district. It is expected that the laptop is used for all online classroom activities and NOT cell phones.**

However, ALL electronics must be turned off and placed in the classroom phone stadium daily. Failure to comply with the classroom technology and campus rules will automatically receive parental contact and discipline action. This course will have a Blended Learning Environment. Schoology will be utilized in this course.

FLINN SAFETY CLASSROOM REQUIREMENTS:

ALL STUDENTS MUST PASS THE FLINN SAFETY EXAM AND LABORATORY EQUIPMENT PRACTICUUM WITH AT LEAST **100%** SUCCESS PRIOR TO BEING ALLOWED IN THE LABORATORY AREA **by Tuesday, August 13, 2024**. No Exceptions! Retakes will be allowed during after-school tutorials.

Grading Criteria:

Daily Grades: 50% Examples: Quizzes Interactive Notebook check points Homework In-Class assignments Specific Online Assignments Warm-Ups (IAN) Mini projects Field Trip Studies writing reflections. Science Fair Project: Specific checkpoints	Major Grades: 50% Examples: Unit Exams Final Exams All Labs and lab reports Project-Based Learning Projects Science Fair Project: (Board, Presentation, Prototype etc..)
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Testing: Major tests will be given at the end of each unit. Retesting will be allowed according to FBISD district policy. Students are strongly encouraged to study well and be successful the first time the test is given. * **On test days, students will place their backpacks at the back of the room and all cell phones will be silenced and placed in the classroom phone stadium. Earbuds/Air pods/Headphones are not allowed upon entry. Apple watches must be stored away safely.**

Academic Dishonesty: Students who engage in any form of academic dishonesty shall be subject to disciplinary action and/or grade penalties as determined by campus administration and outlined in the FBISD board policy. A student shall be required to complete an alternate assignment/assessment with parallel learning objectives. Students will be required to demonstrate mastery of content and skills. Credit shall be denied (a zero recorded in the gradebook) until an alternate assignment/assessment has been completed for a maximum grade of a 70. It is the responsibility of the student to communicate with the teacher to initiate an alternate assignment/assessment within 24 hours. District and campus guidelines will be enforced.

Make-Up Work:

Students will be expected to make up assignments and tests after an absence. Students are responsible for obtaining and completing the make-up work in a satisfactorily manner. It is expected that if a student is absent, they will attend the next scheduled tutorial day. Please view our Schoology course page for any updates daily.

Late-Work: No late work will be accepted for full credit. Students who turn in late work can only receive a maximum grade of 75. District policies regarding late work will be enforced.

Special Laboratory Announcement: Laboratory work is an essential part of learning and understanding science concepts and is designed to enhance information given in class. Lab safety is non-negotiable. **A safety contract must be signed by you and your parent/guardian indicating your awareness of ALL safety policies. You will not participate in lab experiments until this contract is signed.** If you choose to violate lab safety policies, you may be subject to grade deductions, expulsion from the lab and/or a zero on that lab report. Each student is responsible for all the material covered in the lab. Students must also complete (at home when prompted) a prelab assignment prior to entering the laboratory and must complete (at home) a post lab prior to submission for a grade.

Expectations: These policies are in place to ensure all students know my expectations and have an optimum learning environment.

- Show respect and abide by the social contract for all persons, and visitors in this classroom. There will be no derogatory comments/language about sex, gender, race, religion, or personal thought.
- Student Visitation is **not allowed** during any class period!!!
- Arrive before the tardy bell and start on your warm-up activity immediately.
- Always deliver your best and honest work
- Always use safe practices during **all** lab experiments
- Students will not be allowed to leave the classroom during the **first 15 minutes** of the class period nor the **last 10 minutes** of the class period.
- Bell to Bell instruction will be implemented. I am the bell.
- All classroom, WHS campus and FBISD district guidelines and policies will be implemented daily and consistently.

A Note on Consequences:

Following these policies and procedures will result in increased time to participate in “fun” or extra activities and increased privileges. Students who do not abide by the procedures outlined above will experience negative consequences. The **first infraction** will receive a verbal warning. The **second infraction** involves a parent phone call home. The **third infraction**, a scheduled parent and teacher conference. If the student continues to have a problem, they will be referred to the administration for further action. **Immediate administration involvement results after a level 2 offense.**

A Note to Students and Parents:

I have found that when expectations are clearly outlined and explained to both students and parents it increases the success of a class. Therefore, students need to share these policies and procedures with their parents or guardians, get them signed, and return them to me by Friday, August 9, 2024. If there are any questions, please email me as soon as possible at Christal.Owens@fortbendisd.gov.

Tutorial Schedule:

**Tuesdays and Thursdays
2:55 pm – 4:00 pm**

***Schedule may vary due to district meetings.**