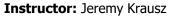
# Utica High School Adv Chemistry 1



**Email:** jkrausz@northfork.k12.oh.us

Website: www.office.com then login to OneNote

Phone: 740-892-2855

**Office Hours:** Mornings before school 6:45 – 7:15 in room 206 or by appointment

**Course Description:** Chemistry is a mathematics-based science. This course will provide an introduction to major chemistry principles while building on concepts introduced in Physical Science. Through well-designed lab experiences students will master concepts, use problem solving skills, and apply them to real-world situations. Investigative, hands-on lab activities that address the Ohio Inquiry standards are an integral part of this course. Topics to be covered include the periodic table, naming compounds and writing chemical formulas, chemical equations and reactions, bonding, calculation of chemical quantities, stoichiometry, properties and behaviors of gases and solutions, and nuclear chemistry.

**Materials needed:** Students MUST have all materials, including iPads, in class every day. Students must have a <u>scientific calculator</u>, a 3-ring binder and paper with sections for notes, a pencil, and pen.

# Grade Weights: 0 90 - 100 = A 0 Tests - 55% 0 80 - 89 = B 0 Quizzes - 15% 0 70 - 79 = C 0 Labs/Classwork/Homework- 30% 0 60 - 69 = D 0 Labs/Classwork/Homework- 30%

#### **Major Course Projects and Instructional Activities:**

Tests: Test will be given at the end of a unit and represent student knowledge for the

topic. There will be 3 or 4 test given per 9 week period.

Quizzes: Quizzes are given frequently over the course content. They often fall in the middle of a unit to check for student understanding.

Labs: Major laboratory experience will include a written lab report that represents students understanding of the lab and the data collected during the lab.

Daily Classwork and Homework: Short assignments done in class and daily homework assignments completed outside of class.

At the end of the 1st 9-weeks, the 9 weeks average will count towards 20% of the grade, and the midterm and final exams counting for the remaining 20% (10% each). The average of four 9-weeks grades will count for 80% of the final course grade and the midterm and final will count for the remaining 20% of the final grade.

## **Denial of Credit Policy for Full-Year Course:**

#### **DENIAL OF CREDIT due to absence**

Any student who accrues non-professional absences in excess of four (4) days in a nine week period will be subject to receive zeroes on assignments for every additional day of non-professional absence for the remainder of the 9 weeks for each class that this takes place. Each new nine weeks every student will begin with a clean slate with regard to period attendance. Denial of credits can be appealed in writing only to the building principal.

#### **Class Participation**

What you put into this class will be what you get out. Active participation is essential in Chemistry. This class is not meant to be observation. You will be given many opportunities to participate in class discussions, activities, and labs. Your grade will reflect poor participation. Remember, poor participation includes not paying attention to discussions, lectures, or instructions; sleeping; talking; and being generally disruptive.



#### **Test Retakes**

Students may retake tests for a maximum score of 80%. Retake will be done during study hall, before/after school, or academic assist. You may only retake one exam per unit of study. If a test is assigned during remote learning there will not be a retake.

#### **Classroom Policies:**

- Everyone is expected to be in their seats preparing to start class before the tardy bell rings. When the bell rings, students should complete daily bell work in their folders. Homework and other assignments will be due shortly after the bell.
- ♦ **Mutual respect is required at all times.** Everyone's opinions and contributions in class are welcomed. When someone else is talking you must be courteous.
- ◆ Come to class prepared with all your materials. You will need to bring your note- book , iPad, textbook and calculator to class everyday.
- ♦ All students will wait for specific instructions before entering the lab. No student should use the sinks, gas jets, safety shower or emergency eye wash unless you have permission from the instructor.
- Safety rules must be followed at ALL times. The rules are in place to ensure that every student in the room is as safe as possible in all situations.

### **Absences/Missed Assignments, Quizzes, Tests:**

It is your responsibility to make up any missed work not exceeding one day more than the period of absence. Check the class website. Come see me when you miss a day. I will point you towards anything you missed. If there were any additional notes that were not part of a handout, you are responsible for getting them from a partner. You will also need to get with someone in the class who can give you an overview of the class you missed. You are responsible for keeping up with these things during non-instruction time. IF YOU MISS A DAY, IT IS YOUR RESPONSIBILITY TO GET CAUGHT UP!

If you are absent for a quiz or test day, you are expected to take the test/quiz on the day you return to class. Be prepared.

The majority of the work in this course is cumulative. Therefore, keeping up with **your** work will help to insure **your** success.

**Recommended/Required Readings:** Students are encouraged and may be required to read articles from current science journals and magazines.

#### **Chemistry Syllabus**

Periodic Table  Chapter 8, 9  Chapter 8, 9  Naming molecular compounds, Bonding  Chapter 11  Chapter 14  Chapter 5  Naming Equations  Chemical reactions  The Mole  Stoichiometry  Solutions and Solubility  Gases  Acids and bases, pH  Equilibrium  Nuclear Chemistry  Chapter 12  Chapter 19  Chapter 19  Chapter 19  Chapter 19  Chapter 18  Chapter 19  Chapter 18  Chapter 19  Chapter 19  Chapter 19  Chapter 18  Chapter 19  Chapter 18  Chapter 25		Chemistry Synabus			
<ul> <li>Units and measurement and matter</li> <li>Atomic structure and history</li> <li>Electron clouds and probability</li> <li>Periodic Table</li> <li>Chapter 5</li> <li>Chapter 6</li> <li>2nd 9-Weeks</li> <li>Chemical formulas and nomenclature</li> <li>Naming molecular compounds, Bonding</li> <li>Balancing Equations</li> <li>Chemical reactions</li> <li>Chapter 11</li> <li>3rd 9-Weeks:</li> <li>The Mole</li> <li>Stoichiometry</li> <li>Solutions and Solubility</li> <li>Gases</li> <li>Acids and bases, pH</li> <li>Equilibrium</li> <li>Chapter 18</li> </ul>	1 <sup>st</sup> 9-Weeks:				
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<ul> <li>Electron clouds and probability</li> <li>Periodic Table</li> <li>Chapter 6</li> <li>2nd 9-Weeks</li> <li>Chemical formulas and nomenclature</li> <li>Naming molecular compounds, Bonding</li> <li>Balancing Equations</li> <li>Chemical reactions</li> <li>Chapter 8, 9</li> <li>Balancing Equations</li> <li>Chapter 11</li> <li>3rd 9-Weeks:</li> <li>The Mole</li> <li>Stoichiometry</li> <li>Solutions and Solubility</li> <li>Gases</li> <li>Chapter 10</li> <li>Chapter 12</li> <li>Solutions and Solubility</li> <li>Gases</li> <li>Chapter 14</li> <li>4th 9-Weeks:</li> <li>Acids and bases, pH</li> <li>Equilibrium</li> <li>Chapter 18</li> </ul>	•	Units and measurement and matter		Chapter 3	
<ul> <li>Periodic Table</li> <li>2<sup>nd</sup> 9-Weeks</li> <li>Chemical formulas and nomenclature</li> <li>Naming molecular compounds, Bonding</li> <li>Balancing Equations</li> <li>Chemical reactions</li> <li>Chapter 8, 9</li> <li>Balancing Equations</li> <li>Chemical reactions</li> <li>The Mole</li> <li>Stoichiometry</li> <li>Solutions and Solubility</li> <li>Gases</li> <li>Acids and bases, pH</li> <li>Equilibrium</li> <li>Chapter 18</li> </ul>	•	Atomic structure and history		Chapter 4	
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4 <sup>th</sup> 9-Weeks:	•	Solutions and Solubility		Chapter 16	
<ul><li>Acids and bases, pH</li><li>Equilibrium</li><li>Chapter 19</li><li>Chapter 18</li></ul>	•	Gases		Chapter 14	
• Equilibrium Chapter 18	4 <sup>th</sup> 9-Weeks:				
	•	Acids and bases, pH		Chapter 19	
• Nuclear Chemistry Chapter 25	•	Equilibrium		Chapter 18	
	•	Nuclear Chemistry		Chapter 25	