

Pre-AP Chemistry 2017-2018 Syllabus

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|---------------------|--------------------------------------|----------------|---|
| Instructor | Johnathan Chase | Phone | (619) 796-2661 |
| Room | 601 | E-mail | johnathan.chase@sweetwaterschools.org |
| Office Hours | Mondays and Wednesdays, after school | Website | http://chasegame.net |

Course Description

This course is designed to provide a solid first-year chemistry experience to serve as a foundation for students electing to take AP Chemistry next year. This course will give students an excellent understanding of the ways in which matter and energy interact both on the atomic scale and on the macroscopic level. An emphasis on critical thinking, problem solving, and lab skills will help students to be successful at the Pre-AP level.

Expectations

Students will come prepared for each class (laptop, notebook, pencil, homework is complete)

Students will act responsibly and always consider safe conduct in the lab

Students will give their best effort and actively seek out help when needed

Grading Policy

Course grades are meant to be objective measures of student progress in the course. Graded work is broken into the three categories below:

Participation Assignments (20%) – notes, warm-ups, exit tickets, worksheets, lab data collection

Growth & Reflection Assignments (30%) – self-evaluation and peer-evaluation, quizzes

Mastery Assignments (50%) – summative exams, formal lab analysis, team projects/presentations

Students are graded on a traditional scale, (A is 90%, B is 80%, C is 70%, D is 60%, less than 60% is an F), however some assignments may be adjusted or curved at your teacher's discretion.

Digital Tools

While content mastery is the primary focus of this course, students will have opportunities to learn about several digital tools that are designed to help them be more successful. Here are a few tools that we will use this year:

OneNote – digital notebook that allows students to add and edit content to share with their instructor

Quizizz, GoFormative – in-class tools to share progress and practice

Chasegame – the website where you should always start your day and find assignments

Edpuzzle, Quizlet – online systems that allow students to get instant feedback on their practice

Jupitergrades – feedback on student progress is posted here

*Note: The textbook for this class is Chemistry: The Molecular Nature of Matter and Change, 5th edition. We will use the text as an occasional reference but the primary source of information will be ChaseGame.

Course Schedule:

| Dates | Unit | Subtopics |
|--------------------------|---------------------------|--|
| 1/10/18 – 2/2/18 | Reactions & Solutions | Reaction Types, Solubility Rules, Net Ionic Equations, Concentration, Dilutions, Redox Reactions |
| 2/5/18 – 2/23/18 | Gases | Pressure-Volume-Temperature-Mole Relationships, Ideal Gases, Gas Laws, Molar Volume of Gases, Kinetic Energy and Temperature |
| 2/26/18 – 3/16/18 | Thermochemistry | Specific Heat, Calorimetry, Enthalpy, Bond Energy, Hess's Law, Heating Curves |
| 4/2/18 – 4/13/18 | Kinetics | Rate Factors, Collision Theory, Reaction Mechanisms, Energy Diagrams, Catalysis |
| 4/16/18 – 5/25/18 | Acids/Bases & Equilibrium | AB Models, AB Strength, pH/pOH Calculations, Titration Curves, Equilibrium, ICE Charts, Le Châtelier's Principle |
| 5/29/18 – 6/6/18 | Final Exam Review | |

Student Lab Safety Agreement

To conduct safe and effective laboratory activities, all students must follow proper laboratory procedures. Please read and initial each item and sign where indicated.

General Rules

1. Prepare for the lab by reading the instructions and safety information ahead of time. ____
2. Always pay attention to the work—don't fool around in the lab. No horseplay, pranks, or practical jokes. ____
3. Follow all verbal and written instructions given by the instructor. ____
4. Never work in the lab unsupervised or perform unauthorized or unapproved experiments. ____
5. Do not eat, drink, apply cosmetics, manipulate contact lenses, or chew gum in the lab. ____
6. Keep work areas tidy. Keep aisles and exits clear, and move backpacks, jackets, and other personal items out of the way of lab work. ____

Personal Safety

1. Approved eye protection must be properly worn at all times while you perform lab work. ____
2. Wear any additional safety equipment (aprons, gloves, etc.) as directed by the instructor. ____
3. Wear closed-toe shoes, tie back long hair, avoid loose or baggy clothing, and avoid short skirts or shorts while performing lab work. ____
4. Report all accidents, spills, or injuries to the instructor immediately. ____
5. Know the location of, and how to use, all classroom safety equipment. Know the location of the nearest exit. ____
6. Wash hands with soap and water after handling any laboratory materials. ____

Laboratory Safety

1. Consider all lab chemicals and specimens to be dangerous. Do not touch, smell, or taste any chemicals unless specifically instructed to do so. ____
2. Read the label on bottles carefully before using chemicals. Be sure you're using the correct chemical before removing it from the bottle. ____
3. Do not remove chemicals, specimens, equipment, or other supplies from the lab. ____
4. Follow proper procedures when operating a burner or other heat source. Always turn it off when not in use. ____
5. Do not handle broken glass with bare hands. Use a brush and dustpan to clean up broken glass and place in a designated glass disposal container. ____
6. Dispose of all waste materials only as directed by the instructor. ____

Do you have allergies or other medical conditions that your instructor should be aware of?

Yes

No

If yes, please describe.

Safety Commitment

I, *(print name)* _____, have read and fully understand the rules, safety practices, and regulations governing my conduct in the science laboratory. I will abide by these rules to ensure my safety and the safety of all laboratory participants. I will follow all written and verbal instructions given by the instructor and ask questions if I do not understand a direction or procedure. I understand that violation of these rules may result in removal from the laboratory, removal from the science class, a lowered grade, or other consequences as determined by the instructor.

I have read through and understand the information presented in this syllabus. I will do my best to help my child succeed by monitoring completion of their homework and routinely checking their grades online.

Parent Signature _____ Date _____

I have read through and understand the information presented in this syllabus. I will strive to always come prepared for class, arrive on time and clearly communicate any necessary attendance issues, and come in for extra help voluntarily or as directed by my teacher.

Student Signature _____ Date _____