GOMPERS PREPARATORY ACADEMY A UCSD Partnership
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Course Title: AP Chemistry
Instructor: Kristie Chiscano
Instructor Availability: Monday 3:30-4:30 and by appt.
Instructor Contact: kchiscano@gomperscharter.org/619-263-2171 Ext 2121/Room 21

Course Description:

AP Chemistry provides an orderly development of the fundamental concepts and principles of chemistry with an emphasis on inquiry and critical thinking skills, including problem solving,mathematical reasoning, and experimental investigations. Students should understand that this course is designed to cover BOTH semesters of freshman-level college chemistry, and we will cover this content in less than 9 months. Therefore, the breadth, pace, and depth of material covered exceeds the standard high school Chemistry course and is at a college level. This includes the college-level textbook, laboratory work, and time and effort required of students. Students should expect to spend 7-10 hours a week outside of class learning the material at an appropriate level for an AP class. Students are encouraged to attend all extra study sessions (calendar to follow) to help support their learning.

GPA Grading Guidelines:

Category	Grading Criteria	Percentage
Classwork	• Completion/Quality (Must have a minimum of 1 weekly grade)	30%
Demonstrations of Learning	• Key Course Assignments (See course syllabus for Unit Key Assignments)	35%
Homework/Independent Learning	• Any work assigned to a student in which they complete on their own outside of class. (Must have a minimum of 1 weekly grade)	10%
Quarter Finals	• Quarter finals are course specific, standards based exams that cover content from the 9 week quarter.	25%

* Classwork/Participation and Homework/Independent Learning will we updated weekly.

Prerequisites: Students should have strong math skills and are motivated to put in the extra effort that is required for a college level course.

Course Materials: LeMay "AP Chemistry The Central Science", Princeton Review of AP Chemistry exam review book, computer, access to internet, online lectures and online practice problems and videos will be assigned

Course Structure: This course will be a combination of lecture based, textbook reading based and problem/inquiry based course. Parts of the course will model a flipped classroom where notes are taken at home and then reviewed in the classroom and reinforced with practice problems in class. Students will be expected to watch the videos available on internet and take notes at home and work on online problems. Then the class time is spent reviewing and discussing the material and going over practice problems. The students should expect 1-1.5 hours of homework each night and should also be studying on the weekend in preparation for the AP Chemistry and final exam. If their homework does not take the full time, they should be studying out of their review book to prepare for the exam. There is a laboratory component to the class which is organized to teach the students the necessary laboratory skills and satisfy the AP College Board curriculum.Finally extra sessions will be utilized on Monday afternoons and on some Saturdays to adequately support the students with the goal to help them be successful in the course and on the exam. Attendance for these sessions are mandatory. And students will be responsible for the material given during these sessions including those during winter and spring intersessions. A calendar will be distributed to help students and family plan schedules to allow their students to attend.

Course of Study:

Content Standards	Learning Objectives	Key Assignments/Exams	Estimated Length of Instruction Time.Some weeks may be partial weeks
Measuring in Chemistry/Team Work	-Students will learn how to measure using scientific measurements -Students will learn to calculate and understand the concept of density -Students will learn the basic elements and start	-Build a Boat -Density Lab-Inquiry lab -Lab Safety Quiz -Assessment Measurements/Conversions in Chemistry -Element	2

	to explore the periodic trends.	Investigation project: You and your Element -Self Check (15 min independent assessments on status of understanding of concepts learned) -Unit Test -Chromatography Lab	

Nomenclature	Students will be learning the naming of chemical compounds for use in further understanding of chemistry and chemical reactions in the world around us.	-Unit test -weekly homeworks practices -self check on nomenclature rules -Inorganic nomenclature lab	2
Atomic Structure and Periodic Trends	-Students to understand the atom-the smallest building block of matter and its structure -Students to examine and interpret the elements and determine their chemical reactivity based on their grouping in the periodic table	Unit test -weekly homeworks -regular self checks -periodic trends lab -periodic trends graphing inquiry lab -mass spectrometry lab	2
Chemical Reactions	-Students learn the language of describing chemical reactions -Students learn the type of chemical reactions that exist in our daily life -	Unit test -weekly homeworks -regular self checks -Presentation of learning-types of chemical reactions -Bunsen Burner Safety lab	1
Bonding	Learn the fundamentals of chemical bonding	Unit test -weekly	2

	which will be necessary for the understanding of further chemical processes.	homeworks -regular self checks	
Structure and Properties	Learn how the atoms form structures and how the forces between molecules can determine the properties of substances.	-Unit test -weekly homeworks -regular self checks -Cooperative Learning Group Presentation on Intermolecular Forces and their trends -Flame test lab -Inquiry Activity: How is light produced?	1
Stoichiometry	Students learn how to predict the amounts of substances consumed or produced in chemical reactions -Students learn the importance of limiting reactants and how it is used in real life situations	-Unit test -weekly homeworks -regular self checks -Hydrate ratio of Epsom salt lab -	4
Intermolecular forces/ Solutions	Understand the chemistry of solutions. Evaluate how the intermolecular forces determine the chemical properties of solutions	Unit test -weekly homeworks -regular self checks -Chromatography II lab-affects of solvents -	3
Thermochemistry	-Learn how energy from chemical reactions is the basis for many of our daily life necessities -explore the energy and its changes and understand how to	Unit test -weekly homeworks -regular self checks -Designing a hand warmer-inquiry lab	3

	applies to chemical reactions and how it is used to predict chemical reactions		
Gases	-Examine the physical properties of gases -Learn how scientists calculate gas conditions	Unit test -weekly homeworks -regular self checks -POGIL lab-Why does the balloon not inflate anymore?	2
Kinetics	-Learn how to calculate the speed of chemical reactions -Discover the factors that can change the rate of chemical reactions and how that applies in daily life situations	Unit test -weekly homeworks -regular self checks -Inquiry Lab: Acid affect on Marble (Rate of decomp. of calcium carbonate) -Kinetics of Crystal Violet fading	2
Equilibrium	Learn the concept of equilibrium and how to calculate equilibrium constants. Learn the application of constants and how to predict how systems at equilibrium can respond to changes.	Unit test -weekly homeworks -regular self checks -Lab: Applications of LeChâtelier's Principle	4
Acids and Bases	-Learn about this common type of chemical in our lives and how the properties of the reactions are calculated	Unit test -weekly homeworks -regular self checks -introduction to titration lab -Inquiry Lab: Buffers in Household Products	2

Electrochemistry	Learn about the electricity that powers much of our society. Learn about the relationship between electricity and chemical reactions	Unit test -weekly homeworks -regular self checks -Introduction to electrochemical cell lab	1
Laboratory Skills	Laboratory skills are required for college and can be used to help with obtaining real time jobs in STEM fields and biotechnology fields. Students will learn some of the skills which could be used in college and in science careers	-Presentation of Learning -Distillation of Cherry Coke Lab -Analysis of food dye in commercial beverages-spectro metry lab	2
Junior Portfolio	Students taught how to have a college ready and job application ready resume/cover letter and to start diving deeper into their answers for their PIQ for college applications. Also they work on a 12 minutes public speech about themselves and their work.	-Portfolio consisting of updated resume, PIQ, cover letter and college research material to be used for an end of year presentation and towards college applications	2
Nuclear Chemistry	Nuclear reactions are used for several items in daily life and the power of the reactions are still be studied. Students learn the basics of reactions involving an atom's nucleus	Unit test -weekly homeworks -regular self checks	1
Introduction to Organic Chemistry	Organic chemistry deals with the study of many molecules used in our body, plants and fuels.We learn the basic	Unit test -weekly homeworks -regular self checks	2

	discussion of the structure of organic molecules to prepare the students for futher college classes and advanced biology topics		

Course Specific Student Expectations:

What do you expect of your students?

- Adherence to all GPA code of conduct rules
- No eating/drinking in science laboratory area
- Attendance to extra Monday and Saturday support sessions, and study sessions during winter and spring intersessions. See contract provided to students to be signed by teacher, student and parent/guardian.
- Students will work on homework and it will require time outside of class and on vacations with the expectations that this will help them study for the exam and be more likely to succeed on the college level, AP exam.
- Follow the attendance policy in accordance with the school. There will be a deduction in points for items that are submitted late unless it is an excused absence. And any late items are to be turned as soon as possible and before the next unit test so the students has ample time to prepare for the unit test.
- Tardy policy: Students who are late to class will write their name in a designated section of the board next to the time they arrive. They have to make up the number of minutes of class they missed rounded up to the nearest 10 (so if they are up to 10 minutes late, they owe 10 minutes - if they are 14 minutes late, they owe 20 minutes, etc.) after school with that teacher. If students have a pass, they must still write their name on the board and tape the pass next to it or set their planner on my desk so I can review you it.

- Late work policy/Monday 6th period: All late assignments will get 20% off (whether it is five minutes late or two days late). They cannot be handed in more than three days late, or they will earn a zero. As soon as students earn two zeros in any given class, they will have to stay after school for "6th period" on Monday to study and complete work for that class. They will also get a phone call home. Missing assignments will need to be made up within 1 week and the parents will be notified for each missing assignment.

Accommodations/Modification and Supports:

Any student who requires accommodations, modifications or additional supports should contact me as early as possible so that we may arrange accommodations, modifications and supports. I am available for tutoring and can work out a time with advanced notice.

GPA Student Expectations:

- Be college prep
- Communicate with the instructor if you are not understanding material immediately
- Use your resources in and out of class to help you become and independent learner and develop college readiness skills
- Do your homework when assigned and in a timely fashion
- Work hard, try to learn and ask for help if needed
- Learn important lab skills and critical thinking skills to help you in college and in life situations

School-wide Attendance: All students are expected to be punctual and in their classroom seat, ready to learn for each day. Under California law (Ed. Code 48200) all children between the ages of six and eighteen are required to be enrolled and in regular attendance at school. GPA families know that school attendance is the critical first step to make sure that each student receives an education that will help them on their path to college. Students cannot learn what they need to be prepared for the next grade level, if they are not in school. The more absences from school a student has, the more they fall behind in their classes and the more difficult it will be to make it to college.

Planner Use: All students are expected to write all assignments in their GPA planner daily. Your first GPA planner will be provided by the school to support organization and time management.

Homework Completion: As a school working toward college preparation, all GPA students are expected to complete their daily/weekly assignments. Students who fail to complete their homework assignments on time, and are unexcused, will be required to attend lunch and after school tutoring support daily until completed. Until all assignments are completed, students may not be eligible for athletics, clubs, and other extracurricular activities.

Electronic Device Policy: Cell phones, smart watches, and other electronic communication devices that can send and/or receive data are not permitted to be visible, heard, or used in any manner during school hours except by approval of school authorities. Any emergency that needs to be relayed to the student may be done through the front office during school hours. Any violation and/or disruption of the learning process will result in the confiscation of the item. The parent/guardian must pick up the confiscated item from the Office of Student Conduct or the teacher.

Computer/Internet Usage Policy: Students may not use computers and/or the GPA network without proper adult supervision. The teacher/staff will choose resources on the Internet that are appropriate for classroom instruction and/or research for the needs, maturity, and ability of their students.

Acceptable Use-

- Access to any site that provides information relevant to current class assignments
- Access to college or university websites
- Use of teacher approved educational software (games, instructional tools, etc.)

Academic Integrity: Honest behavior is an expectation for all students at Gompers Preparatory Academy. Our goal is to create and maintain an ethical academic atmosphere. Acts of academic dishonesty that will not be tolerated at GPA are listed below:

- Cheating on any classroom assignment, test, or quiz
- Plagiarism - copying or representing another's ideas, words, or work as one's own, without properly citing the source. Plagiarism includes the misuse of published material, electronic material, and/or the work of other students. The original writer who intentionally shares his/her work for another to copy, without the permission of the teacher, is also engaged in plagiarism
- Fabrication (any falsification or invention of date, citation, or other authority in an assignment); theft or alteration of materials
- Unauthorized collaboration
- Unauthorized use of electronic devices

Students found in violation of GPA's Academic Integrity Policy will be disciplined appropriately, which may lead to formal suspension. Consequences for offenses may include, but are not limited to, detention, *lowering of academic and citizenship grade and/or suspensions/exclusion from extracurricular activities*.

Standards/Format for Writing Papers - MLA Format:

The standard format for all papers follows the MLA formatting rules:

1. Typed, double-spaced: TIMES NEW ROMAN, 12 font, including title
2. Heading: 4 lines - UPPER LEFT corner

Student name:	"Sammy Gompers"
Teacher name:	Ms. Teacher
Course name, period:	English I, Period 3
Date	06 February 2009

3. All pages numbered: upper right corner, last name and page number; no punctuation, no "p." or "pg."

4. Title: centered, upper and lower case
5. Work Cited/ Documentation Format: It is necessary to credit any source that is used in a paper or project. Plagiarism is considered cheating. All sources must be documented. Citing sources in a paper must be thorough and accurate. MLA formatting for in-text citations and works cited is mandatory.

Important Dates:

Quarter 1:
- Q1 Finals Week: October 23rd and 27th
- Parent Conferences: October 23rd - 27th
- End Date: October 30th

Quarter 2:
- Q2 Finals Week: January 22nd - 26th
- Parent Conferences: January 16th - 22nd
- End Date: January 31st

Quarter 3:
- Q3 Finals Week: April 9th - 13th
- Parent Conferences: April 16th - 20th
- End Date: April 23rd

Quarter 4:
- Q4 Finals Week: May 29th - June 1st
- End Date: June 26th

Student Signature : _____ Parent/Guardian Signature: _____

Date: _____