SYLLABUS AND POLICIES FOR AP CHEMISTRYIII

Mrs. LeGrone / Rooms 427 and 429

What is AP Chemistry III?

This is an advanced placement course designed to prepare the student for the AP Chemistry exam. The course covers the equivalent of one full year of college level General Chemistry, comparable to a first year course at a college or university. The course is a rigorous math-based course, with a strong laboratory component. It is intended for students who have demonstrated a willingness to commit considerable time to studying and completing assignments outside of class, and who have successfully completed a prior course in chemistry during high school.

The course will develop the student's ability to incorporate mathematical skills in the solution of chemistry problems, both through the use of textbook problems and laboratory activities. Significant emphasis will be placed on developing the student's ability to solve problems through dimensional analysis and estimation. Students will be required to do extensive writing, and to keep a thorough and accurate ongoing laboratory notebook.

Since passing the AP exam may qualify the student to by-pass a first-year college chemistry course, AP Chemistry should not be considered "college prep." **Rather, this is a college class, with college level expectations for behavior, participation and effort.**

A Word About Calculators

You *will* be bringing your calculator to class *every day*; this *isn't* an option. The preferred type of calculator for AP Chemistry is the Texas Instruments® TI-30. It's inexpensive (about $10 at Wal-Mart or Office Max/Depot), yet powerful enough to handle anything you'll encounter in AP Chemistry or Physics. Beware of the so-called "algebraic" calculators like the two-line TI-34 and larger Casio® calculators; they require a different problem-solving approach. Graphing calculators, like the TI-83 or higher, are allowed on the AP Chemistry test, therefore, they will be allowed in this class. But please understand that it is up to YOU to learn how to use them! Whichever calculator you use, it should be able to handle scientific notation (look for the **EE** or **EXP** key) and logarithms (look for the **log** key). A $3 credit-card-sized "four-banger" simply won't handle everything you're going to have to do in this course.

Brief Course Outline

We will be using the text Steven S. Zumdahl and Susan A. Zumdahl, Chemistry, Seventh Ed., Houghton Mifflin Co., Boston, 2000. These books are new and you will be held responsible for any damage incurred during the semester the book is assigned to you. Because of the fluidity of the school schedule – holidays, club schedules, assemblies, pep rallies, testing, etc. – it's impossible to give specific dates on which we'll address specific topics. I *can*, however, give you a rough outline of the topics we will cover and how we'll cover them.

- ***Topic Outline***

  The following list of topics for an AP course is intended to be a guide to the level and breadth of treatment expected rather than to be a syllabus. The percentage after each major topic indicates the approximate proportion of multiple-choice questions on the examination that pertain to the topic.

Time	Topic	Objectives	Labs
½ week	Matter & Measurement	**Students should be able to…** ▪ Recall a definition of chemistry ▪ Understand the process and stages of scientific (logical) problem solving ▪ Recall the three states of matter, their general properties and the methods for their interconversion ▪ Understand and recall definitions for physical and chemical change ▪ Know the difference between elements, mixtures and compounds including the difference between heterogeneous and homogeneous mixtures ▪ Understand and be able to use scientific notation (standard form) ▪ Recall and use SI units and prefixes ▪ Be able to convert between units ▪ Understand the concept of derived units and use relationships relating to density ▪ Recall the meaning of uncertainty and understand and be able to use the rules for determining significant figures and rounding off ▪ Understand the differences between, and be able to apply, the concepts of accuracy and precision ▪ Learn, and be able to use, formulas for the conversion of the three different temperature units.	**Recommended AP Lab –** Separation by chromatography

1 ½ week	Atoms / Ions / Nomenclature / Nuclear Chemistry	**Students should be able to…** ▪ Recall a very brief history of Atomic Theory ▪ Know and understand the five main aspects of Dalton's Atomic Theory ▪ Recall some of the experiments that led to the identification of sub-atomic particles ▪ Know the three particles that make up the atom and their relative charges, masses and positions in the atom ▪ Be able to use the Atomic # and Mass # of an isotope to calculate the numbers of protons, neutrons and electrons present ▪ Know what the term isotope means and be able to perform simple calculations relating to isotopic data ▪ Understand the phenomenon of radioactivity and the properties of radioactive particles ▪ Be able to write nuclear equations ▪ Understand the concept of half-life and be able to perform calculations related to it ▪ Recall some uses of radioactivity ▪ Understand the term mass deficit ▪ Be able to use neutron:proton ratio to make predictions about stability ▪ Understand the terms nuclear fission and fusion ▪ Understand, that in very general terms, radioactivity involves the rearrangement of the nucleus and chemical reactions involve the rearrangement of electrons ▪ Know the approximate locations of metals, non-metals and metalloids on the periodic table ▪ Understand the meaning of the terms Molecule and Ion ▪ Learn the lists of common anions and cations (including polyatomic ions) ▪ Know how to combine those anions and cations in the correct proportions to form ionic compounds with no net charge ▪ Be able to name binary ionic compounds of a metal and a non-metal ▪ Be able to name binary molecular compounds of two non-metals ▪ Be able to name simple binary acids ▪ Be able to name ionic compounds containing polyatomic anions ▪ Be able to name oxoacids and compounds containing oxoanions ▪ Be able to name hydrated salts	**Recommended AP Lab –** Determination of percentage of water in a hydrate **Recommended AP Lab -** Determination of the formula of a compound
1 week	Organic	**Students should be able to…** ▪ Be able to name some simple aliphatic organic compounds ▪ Understand and be able to write equations for some organic reactions (Combustion, Substitution, Acid Base, Addition & Esterification)	**Recommended AP Lab –** Synthesis, purification, and analysis of an organic compounds
1 week	Bonding	**The student should be able to…** ▪ Understand that when forming chemical bonds atoms are attempting to form more stable electronic configurations ▪ Understand the essential difference between intra and inter bonding ▪ Understand the concept of ionic bonding and the nature of the ionic bond ▪ Understand the concept of covalent bonding and nature of the covalent bond ▪ Be able to draw Lewis structures ▪ Understand the concept of resonance related to Lewis structures ▪ Understand the concept of formal charge related to Lewis structures ▪ Be able to predict the shape of, and bond angles in, simple molecules and ions using VSEPR theory ▪ Understand the concept of the dative (co-ordinate) bond related to Lewis structures ▪ Understand that ionic bonding and covalent bonding are at two ends of a sliding scale of bond type ▪ Understand the concept of electronegativity ▪ Understand that polarization caused by small highly charged cations leads to ionic compounds exhibiting some covalent character ▪ Understand that differences in electronegativity in covalent molecules causes dipoles and some ionic character in covalent compounds	**Recommended AP Lab -** Determination of molar mass by vapor density

		▪ Understand when molecules exhibit polarity ▪ Be able to predict the shapes of simple molecules and ions using Lewis structures ▪ Understand the occurrence, relative strength and nature of dipole-dipole interactions, London dispersion forces and hydrogen bonds ▪ Understand how solid structure influences properties ▪ Understand the nature of liquids ▪ Understand the nature of sigma and pi bonds ▪ Understand and be able to identify different types of orbital hybridization	
½ week	Electron configuration	**The student should be able to…** ▪ Understand the Bohr model of the atom ▪ Understand how line emission spectra are formed ▪ Appreciate that the electron can be considered to have wave like properties as well as particle type properties ▪ Understand and use equations that relate the Energy, frequency, speed and wavelength of waves including the Rydberg equation ▪ Understand the concept of electrons in shells and the use of quantum numbers ▪ Understand the use of the terms s, p, d and f and their use in orbital notation ▪ Recall and understand the rules for filling orbitals and determining electronic configuration, including the Pauli exclusion principle, Hund's rule of maximum multiplicity and notable exceptions ▪ Be able to construct the electronic configuration of the elements using the s, p and d and f notation ▪ Be able to construct the electronic configuration of the elements using the noble gas core and s, p, d and f notation ▪ Be able to construct the electronic configuration of simple ions (including d block ions) ▪ Recall the shapes of the s, p and d orbitals ▪ Recall that orbitals are electron probability maps ▪ Be able to describe electronic configurations using the electrons in boxes notation ▪ Recall the meanings of the terms paramagnetic, diamagnetic and isoelectronic	**Recommended AP Lab –** Colorimetric or Spectrophotometric analysis
½ week	Periodicity	**Students should be able to…** ▪ Understand that regular, repeatable patterns occur across periods and within groups on the periodic table ▪ Appreciate that these patterns sometimes have notable exceptions ▪ Recall and understand that the noble gases have full outer shells that represent stable electronic configurations ▪ Recall how, and understand why, group I, II, VI and VII elements achieve pseudo noble gas electronic configurations ▪ Recall the definition of ionization energy ▪ Recall the definition of electron affinity ▪ Recall and understand the variation in ionization energy and electron affinity when moving about the periodic table ▪ Be able to predict the group an element is in from ionization energy data ▪ Understand and be able to apply the terms diamagnetic and paramagnetic ▪ Recall how and why atomic and ionic size vary when moving about the periodic table ▪ Understand how many physical properties change gradually when moving about the periodic table ▪ Understand and recall the change in the specific chemical properties	
½ week	Equation Writing	**Students should be able to…** ▪ Be able to write and balance net ionic equations for Double Replacement Reactions ▪ Be able to write and balance net ionic equations for Simple REDOX Reactions ▪ Be able to write and balance net ionic equations for Non-Simple REDOX Reactions ▪ Be able to write and balance net ionic equations for Hydrolysis Reactions	**Recommended AP Lab –** Determination of the formula of a compound

		▪ Be able to write and balance net ionic equations for Complex Ion (Transition Metal) Reactions ▪ Be able to write and balance net ionic equations for Organic Reactions ▪ Be able to answer simple questions associated with the reactions	
½ week	Qualitative & Quantitative Chemistry	**Students should be able to…** ▪ Understand that a reaction in aqueous solution is one that is carried out in water ▪ Understand the terms electrolyte, weak electrolyte and non-electrolyte and be able to predict which compounds fall into which category ▪ Be able to calculate the individual ion concentrations when ionic compounds are dissolved in water ▪ Understand the difference between, and be able to write, full, ionic and net ionic equations ▪ Learn and be able to apply solubility rules ▪ Be familiar with a limited number of colors associated with precipitates ▪ Recall that an acid is a hydrogen ion donor ▪ Recall that a base is a hydrogen ion acceptor ▪ Understand how the degree of ionization/dissociation determines the strength of an acid and a base ▪ Understand that in a neutralization reaction an acid and base react to form a salt and water ▪ Learn some reactions that produce gases as products and the chemical tests for those gases ▪ Understand that oxidation and reduction can be described in terms of loss and gain of electrons respectively ▪ Be able to find the oxidation number of an element within a compound ▪ Become familiar with some common oxidizing and reducing agents and the half-equations that represent their action ▪ Understand and be able to recognize the different types of REDOX reaction. Namely synthesis (combination), decomposition, combustion, single and double displacement (replacement) including metal displacement, hydrogen displacement from water and acids and halogen displacement ▪ Learn and be able to use the reactivity series as a tool for predicting displacement reactions ▪ Understand the concept of disproportionation ▪ Recall and understand the technique of titration ▪ Be able to carry out simple quantitative moles calculations relating to REDOX titration data	**Recommended AP Lab –** Separation and qualitative analysis of cations and anions **Recommended AP Lab –** Determination of concentration by oxidation reduction titration
2 weeks	Stoichiometry & Solutions	**Students should be able to…** ▪ Be able to write chemical equations in words ▪ Be able to write chemical equations using chemical formulae and chemical symbols (this requires knowledge, and correct use of, chemical nomenclature) ▪ Understand, and be able to use, state symbols as part of chemical equation writing ▪ Be able to balance chemical equations ▪ Understand why balancing chemical equations is important ▪ Understand the concept of percentage by mass ▪ Be able to calculate empirical formulae from percentage by mass data ▪ Be able to convert empirical formulae to molecular formulae by using Molar Mass data ▪ Understand and be able to apply the concept of the mole in chemical calculations (including the application of Avogadro's number) ▪ Be able to use combustion data to calculate empirical formulae of compounds ▪ Understand the importance of, and be able to apply, the concept of stoichiometric coefficients relating to reacting ratios ▪ Know how to calculate the number of moles of a solid substance present in a reaction from data ▪ Be able to perform calculations relating to molarity ▪ Understand and be able to perform calculations relating to the Beer-Lambert law ▪ Be able to perform calculations relating to dilution ▪ Be able to perform calculations relating to molality ▪ Be able to calculate the formulae of hydrated salts from experimental data	**Recommended AP Lab –** Determination of mass and mole relationship in a chemical reaction

		▪ Understand, and be able to apply, the concept of a limiting reactant ▪ Understand, and be able to apply, the concept of percentage yield	
1 week	Colligative properties	**Students should be able to…** ▪ Understand the concept of vapor pressure ▪ Be able to relate changes (both quantitative and qualitative) in vapor pressure to addition of non-volatile solutes to solvents (Raoult's Law) ▪ Understand and recall Raoult's Law in terms of ideal solutions of two volatile components AND deviations from ideal behavior ▪ Be able to recall and use equations relating to quantitative treatments of Boiling Point Elevation, Freezing Point Depression, Osmotic Pressure and the van't Hoff factor	**Recommended AP Lab –** Determination of molar mass by freezing point depression
1 week	Gases	**Students should be able to…** ▪ Be able to convert between different units of pressure ▪ Be able to convert between different units of temperature ▪ Recall and be able to use Boyle's law in calculations ▪ Recall and be able to use Charles' law in calculations ▪ Recall and be able to use Gay-Lussac's law in calculations ▪ Recall and be able to use Avogadro's law in calculations ▪ Recall and be able to use the Combined gas law and the General gas law in calculations ▪ Recall and be able to use the Ideal gas law in calculations ▪ Understand and be able to use the van der Waals equation (modified ideal gas law) in calculations ▪ Recall and be able to use Dalton's law of partial pressures in calculations ▪ Recall the conditions that are used as standard in calculations ▪ Be able to use molar gas volume in calculations ▪ Understand the Kinetic theory as applied to gases ▪ Understand the concept of, and be able to perform calculations involving, the root-mean-square-speed of gases ▪ Understand the terms effusion and diffusion and be able to perform calculations relating to those concepts	**Recommended AP Lab –** Determination of the molar volume of a gas
2 weeks	Thermochemistry	**Students should be able to…** ▪ Learn definitions that describe the systems studied in thermochemistry ▪ Understand, be able to quote a definition and write suitable equations for standard enthalpy of formation ▪ Understand, be able to quote a definition and write suitable equations for standard enthalpy of combustion ▪ Understand and be able to use a Hess's law cycle or algebraic methods to calculate a given enthalpy change ▪ Understand and be able to use in calculations, average bond energy terms ▪ Understand the meaning of the terms exothermic and endothermic ▪ Understand and be able to apply the concept of entropy both in descriptive and calculation contexts ▪ Understand and be able to apply the concept of Gibbs Free Energy both in descriptive and calculation contexts ▪ Understand and be able to apply the energetics of the ionic bond as described by the Born-Haber cycle and associated calculations ▪ Understand the role of charge density in determining some physical properties of ionic compounds	**Recommended AP Lab –** Determination of enthalpy change associated with a reaction
1 week	Electrochemistry	**Students should be able to…** ▪ Recall the definition of oxidation and reduction in terms of electrons ▪ Understand and recall the definition of standard electrode potential ▪ Understand and recall how to construct a cell diagram (line notation) and draw a diagram (picture) of the apparatus needed ▪ Recall the conditions that standard electrode potentials are measured under ▪ Understand the nature and purpose of a salt bridge ▪ Be able to predict the likelihood or otherwise of chemical reactions using	**Recommended AP Lab** – Determination of electrochemical series **Recommended AP Lab** – Measurements using electrochemical cells and electroplating

		standard electrode potentials and understand how those predictions may not prove to be accurate ▪ Understand and use the Nernst equation ▪ Understand the relationship between Gibbs free energy, equilibrium constants and Ecell, and be able to perform related calculations ▪ Understand electrolysis and be able to perform quantitative calculations relating to it	
1 week	Equilibrium	**Students should be able to…** ▪ Understand the concept of dynamic equilibrium ▪ Be able to write an expression in terms of concentrations for the equilibrium constant Kc given a chemical equation ▪ Understand that equilibria take a finite time to be achieved ▪ Be able to calculate values for Kc and associated data from initial concentrations ▪ Be able to write an expression in terms of partial pressures for the equilibrium constant Kp given a chemical equation ▪ Be able to calculate values for Kp and associated data from pressure data ▪ Recall and understand Le Chatelier's Principle ▪ Understand the application of Le Chatelier's Principle and be able to predict the shift in position of equilibria and optimum conditions in reactions ▪ Understand and be able to apply the relationship of Kc to Kp, the different formats of Kc (reciprocals and roots) and the relationships in simultaneous equilibria ▪ Understand and be able to apply to calculations, the concept of solubility product ▪ Understand and be able to apply to calculations, the concept of common ion effect ▪ Understand and be able to interpret phase diagrams ▪ Understand and be able to interpret heating and cooling curves	**Recommended AP Lab –** determination of the equilibrium constant for a chemical reaction
1 week	Acid / Base Chemistry	**Students should be able to…** ▪ Be able to recall the Bronsted Lowry, Arrhenius and Lewis definitions of an acids and bases ▪ Be able to identify acid base conjugate pairs ▪ Recall the difference between strong and weak acids in terms of ionization ▪ Be able to calculate pH of strong acids and strong bases ▪ Be able to calculate pH of weak acids and weak bases using Ka and Kb ▪ Recall a definition of Kw, the ionic product of water ▪ Recall the definition of a buffer ▪ Understand and how a buffer works ▪ Be able to identify and calculate the pH of a buffer solution ▪ Understand the techniques and procedures associated with titrations ▪ Be able to sketch titration curves and be able to suggest a suitable indicator for a particular titration ▪ Understand the hydrolysis of salts and the effect this has on pH ▪ Understand the meaning of the term 'equivalence point' ▪ Understand how indicators work	**Recommended AP Lab –** Standardization of a solution using a primary standard **Recommended AP Lab –** Determination of concentration by acid=base titration, including a weak acid or a weak base **Recommended AP Lab –** Determination of appropriate indicators for various acid-base titrations: pH determination
1 week	Kinetics	**Students should be able to…** ▪ Be able to recall AND understand Collision Theory ▪ Be able to recall AND understand how temperature, concentration, surface area and catalysts affect a rate of reaction ▪ Understand AND be able to interpret a Maxwell-Boltzman distribution plot ▪ Understand AND be able to interpret an energy profile plot ▪ Be able to deduce orders, rate equations and rate constants (including units) from initial rate data ▪ Understand the link between the rate determining (slow step) in a reaction mechanism and the rate equation ▪ Understand AND be able to interpret graphical data relating to rates	**Recommended AP Lab –** Determination of the rate of a reaction and its order

Labs and Lab Fees

We'll be doing about as many labs in AP Chemistry III as we did in AP Chemistry II – and they're frequently more involved than the ones in AP Chemistry II. The lab activities will correlate with the topic(s) we're covering at the moment.

Yes, there *is* a lab fee for AP Chemistry III– it's $15 per student. This money goes toward purchasing materials that are used up during the course, usually chemicals and glassware. Any excess money is used for lab equipment maintenance and purchase (a single digital balance runs about $225, so it goes fast). Checks may be made payable to Mary G. Montgomery High School. I am *still* an absolute tyrant in lab especially where safety is concerned. If a student is misbehaving in lab, disregarding the procedure, or otherwise endangering himself or others, I will not hesitate to remove him from the lab area. Depending on the severity of the infraction, I *may* or *may not* allow him back into the lab, at least for a while. More about lab safety in another handout. We have a state-of-the-art chemistry classroom and lab, with excellent furniture, fixtures, and safety equipment. These facilities are there to be *used*, and we're going to use them in the ways they were *intended* to be used. Students who abuse the facilities – and I have a very broad definition of what constitutes "abuse" – will be sent to the office on a discipline referral. *Period*. End of discussion.

Assignments and Grading

Tests come at the end of a *topic*, usually every Friday. Tests count 100 points each and make up 60% of your grade. The tests will be made up of 3 timed sections. Part 1 is 35 multiple-choice questions. You will have 40 minutes & no calculator is allowed. Part 2 will consist of 2 free response questions. You may use a calculator on this section. You will have 25 minutes. Part 3 will consist of 2 reactions & 1 free response question. There will be no calculator allowed & you will have 15 minutes. I will use a times & time limits will be STRICKLY enforced. Failing to stop the test when the timer goes off may result in a reduced grade. The remaining 40% of your grade will be made up of quizzes, homework, early work, and labs. Quizzes count 100 points and are given **every day** except test days. Lab activities count 500 points each. We will usually have lab on Thursdays. Homework assignments are worth 100 points each. Your homework grade is determined by how ***completely*** and ***accurately*** you do the assignment. You don't automatically get full points for simply having turned in a paper. Your midterm/final will be given at the end of each quarter. It will be cumulative throughout the entire course. This test will make up 20% of your quarter grade. Your grade will be based on the standard "90 – 100 = **A**" grading scale. Rounding is done according to standard rules.

One BIG difference between AP Chemistry II & AP Chemistry III is that I do scale your test grades. The AP Chemistry test given at the end of the year is extremely difficult. So difficult in fact that you can score a failing grade & still earn credit for a years worth of college chemistry. I will strive to make my tests just as difficult to prepare you for this test, in doing so; I will also give you the same advantage that the AP Chemistry test gives you. Please see the for test grade scale below.

A		B		C		D		E	
Score	**%**	**Score**	**%**	**Score**	**%**	**Score**	**%**	**Score**	**%**
100	100.0	64	89.4	49	79.4	39	69.4	19	59.4
99	99.7	63	88.7	48	78.3	38	68.9	18	56.3
98	99.4	62	88.0	47	77.2	37	68.4	17	53.1
97	99.1	61	87.3	46	76.1	36	67.8	16	50.0
96	98.8	60	86.6	45	75	35	67.3	15	46.8
95	98.5	59	85.9	44	73.9	34	66.8	14	43.7
94	98.2	58	85.1	43	72.8	33	66.3	13	40.5
93	97.9	57	84.4	42	71.7	32	65.8	12	37.4
92	97.6	56	83.7	41	70.6	31	65.2	11	34.2
91	97.3	55	83.0	40	69.5	30	64.7	10	31.1
90	97.0	54	82.3			29	64.2	9	27.9
89	96.7	53	81.6			28	63.7	8	24.8
88	96.4	52	80.9			27	63.2	7	21.6
87	96.1	51	80.2			26	62.6	6	18.5
86	95.8	50	79.5			25	62.1	5	15.3
85	95.5					24	61.6	4	12.2
84	95.2					23	61.1	3	9.0
83	94.9					22	60.6	2	5.9
82	94.6					21	60.0	1	2.7
81	94.3					20	59.5	0	0.0
80	94.0								
79	93.7								
78	93.4								
77	93.1								
76	92.8								
75	92.5								
74	92.2								
73	91.9								
72	91.6								
71	91.3								
70	91.0								
69	90.7								
68	90.4								
67	90.1								
66	89.8								
65	89.5								

Mary G. Montgomery High School Category Points Grading Scale

Tests 60%
Test grades will include: _____*tests*_____

Other grades 40%
Other grades will include: _____*homework, quizzes, labs, earlywork*_____

Example grade calculation for Category Points

Tests (60%)	Earned	Possible
Test 1	97	100
Test 2	82	100
Test 3	57	100
Project 1	40	50
Project 2	20	50
	296	400

To get your test average, add up all of your earned points and divide by the possible points.

296 points ÷ 400 points = 74.0 average

Other (40%)	Earned	Possible
Homework 1	60	75
Class work 1	88	100
Quiz 1	70	100
Homework 2	45	50
Homework 3	8	20
	271	345

To get your "other" average, add up all of your earned points and divide by the possible points.

271 points ÷ 345 grades = 78.6 average

To get your class average, take your test average and multiply by 0.6. Then take your other average and multiple by 0.4. Lastly add those two numbers together. This is your class average.

74.0 x 0.6 = 44.4
78.6 x 0.4 = 31.44

Average = 75.84 (Quarter Net Average)

This is your average going into the CRT (also called QNA). To get your grade after the CRT you take your QNA and multiply it by 4. Then you add your CRT grade. Finally, you divide that number by 5. This is your final quarter average.

For example, you have a 75.84 going into the CRT and you make a 65 on the CRT.
(75.84 x 4) + 65 = 368.36

Now divide by 5…
368.36 ÷ 5 = 73.67
This is your final quarter average.

Final Quarter Grade = 74

Make-Up Work

If you miss a test, quiz, or class work, you will be assigned a grade of zero. If the work is not made up within 1 week, the grade of zero will become final. **It is YOUR responsibility to find out what you missed when you return.** I will not track you down to give you your assignments. You must get notes and assignments from a classmate; after a ***valid*** attempt at completing the work, I will be available after school to help you. You have three school days after your absence to schedule which day you will be making up your test or quiz. Failure to make arrangements will result in the forfeiture of your one-week time period, and the zero will stand. All class work and homework that must be made up is due within three school days. The time limit for make up tests is 2:38 on the following Friday. I will **NOT** stay after on Friday afternoons for you to make up a test.

Like last semester, you will get 5 extension requests. Unlike last semester, there will be a 25% late penalty for any question that you go back & answer. You may not ask for an extension request for any back assignments.

I reserve the right to make make-up tests and quizzes different from the regularly scheduled test/quiz. While I will endeavor to make the degree of difficulty comparable to the original test/quiz, I am under no *obligation* to do so. It *is* to your benefit to take the tests and quizzes on the scheduled days.

If you are absent you may go to www.molecafe.com and get your assignments for the day. The lecture, homework, and any worksheets or handouts can be found there. Therefore, there is NO excuse for falling behind! If you have any problems with your homework, there is a link for a live chemistry tutor. You can access them Monday – Friday 3:00 pm to midnight.

Expectations

Besides yourself, there are a few things that you will be required to bring to class each and every day. These things include: your chemistry notebook, loose-leaf paper, a pencil, black pen, your lab notebook, your calculator, and your book. Failure to bring any of these items may result in a reduced grade for the day. The AP Chemistry test will let you use a black pen & so will I; however, please understand that if I cannot read it, like the AP test graders, I will NOT grade it!

Parent Conferences

Parent conferences may be scheduled through the school office at **221-3153**, or at the midterm PTO meeting; impromptu conferences are strongly discouraged. However, I am available for conferences during my planning period. I may also be contacted through my e-mail address at teeda21@yahoo.com. Because of privacy concerns, I *will not* discuss a student's performance via E-mail; this address will be strictly for scheduling conferences and answering any questions that you may have.

Class Rules

I have quite a few classroom rules. They are very simple and follow the guidelines in your student handbook. These rules are made to create an environment that will aid student learning. They are not intended to be restrictive of one's character or personality, but rather each student will develop his/her greatest potential.

1. When you enter the room, turn in your homework from the previous day without talking.

2. If you have parent notes, doctor's notes, or admit slips place them in the signature box. I will get them back to you sometime during the class.

3. You must bring your notebook, book, pencil, paper, and calculator everyday. Failure to bring even one of these items may result in a reduced grade.

4. You may NOT share calculators during a test. If I see you I will assume that you are cheating and you will receive a grade of zero.5. With the exception of turning in your work, do not leave your seat without permission.

6. You may bring a bottle of water to class; however, you will not be allowed to leave the classroom to go get water.

7. You may NOT leave my classroom to go anywhere else (another teacher, guidance, the office…) unless you are requested either in writing or called over the intercom and then, your work must be completed in order for you to leave. This is AP Chemistry. You need to be in this class!

8. Please refrain from any disrespectful gestures or remarks in this class. This includes eye rolling and any improper language.

9. When in lab, if I start talking you are to immediately become silent. I am probably trying to tell you something important about the lab that involves either your safety or your grade.

10. Do not be even one second late for this class. You are to be in your seats when the bell rings.

11. You will come to class in proper uniform. This includes the appropriate shoes, backpack, shirt tails tucked in, and NO cell phones.

12. You are not to get out of you seat until you are dismissed. I will not hold you late, but I will also not let you congregate around the door or the desks. I may have some important closing information that I need you to hear.

13. Once you are done with you class work, you are to remain quiet at your desk. Do not start talking to those around you. Be respectful of the fact that others may not be done with their work.

14. You may NOT eat anything or chew gum in this class. Gum has a nasty way of ending up under the desks & food tends to attract roaches.

Consequences

There will be consequences for violating the school policies and procedures. Remember, it is your responsibility to know these policies and procedures, and when you violate them I presume it is a choice that you have made knowing that there are consequences that will follow. The basic consequences are outlined below; these pertain to all class A offences. Any offences of class B or C nature will result in a written disciplinary referral and the student will be sent to the office.

1st offense – T/S conference / verbal warning
2nd offense – T/S conference / written behavioral essay, returned and signed by parents
3rd offense – referral to guidance with explanation of infractions
4th offence – disciplinary referral, student is sent to office with documentation of prior offenses

Note: Failure to return an essay with a parent signature is classified as "deliberate disobedience" a class B offense. Please refer to the student handbook for other possible consequences.

Survival Tips

- Keeping up with class notes and assignments is crucial.
- AP Chemistry is a *cumulative* course; that is, if you get lost at any point, chances are your grades will suffer from that point onward.
- This course is designed for college-bound students and is an honors course, and I strive to teach it that way as much as possible. If you think *I'm* moving too fast or boring you to tears, wait 'til you get to college!
- Don't be afraid to ask questions – that's why I'm here. On the other hand, don't expect me to *give* you an answer – I'll ask leading questions that will help you figure out the answer for yourself.

AP Chemistry 3 Research & Design Syllabus Signature Form

Both you and *<u>your parents</u>* should <u>read</u> this syllabus and sign it. Return this portion to me no later than **this Friday**, and place the rest in your notebook.

Student Name _____
(PRINT)

I/we have read the above syllabus and understand the expectations of the class. I will keep this syllabus in the front of my notebook and use it as a guide throughout the semester. A parent and I have signed this syllabus as a statement of accepting the challenges and responsibilities of this class in order to achieve my greatest academic potential.

Student signature _____ Date _____

Parent signature _____ Date _____