

<h1 style="text-align: center;">AP Chemistry Syllabus</h1> <h2 style="text-align: center;">South Forsyth High School 2013-2014</h2> <p style="text-align: center;">Mrs. Amanda Colavito, M.Ed. Room 494 770.781.2264 EXT 100494 <a href="mailto:acolavito@forsyth.k12.ga.us">acolavito@forsyth.k12.ga.us</a> Text: <i>Chemistry The Central Science</i> [individually assigned]</p>	<b>Supplies:</b> <ul style="list-style-type: none"> <li>• 1 ½ inch 3 ring binder with dividers for each unit and chemical equations (12)</li> <li>• Scientific Calculator</li> <li>• Composition Notebook</li> <li>• Highlighter, Pencil, blue/black ink,</li> <li>• Paper; graph paper</li> <li>• Student Lab Notebook (for purchase on mypaymentsplus.com)</li> <li>• *webassign card (\$TBA) *</li> </ul>
<p><b>Course Description from College Board:</b> The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year. For some students, this course enables them to undertake, in their first year, second-year work in the chemistry sequence at their institution or to register in courses in other fields where general chemistry is a prerequisite. For other students, the AP Chemistry course fulfills the laboratory science requirement and frees time for other courses. AP Chemistry should meet the objectives of a good college general chemistry course. Students in such a course should attain a depth of understanding of fundamentals and a reasonable competence in dealing with chemical problems. The course should contribute to the development of the students' abilities to think clearly and to express their ideas, orally and in writing, with clarity and logic. The college course in general chemistry differs qualitatively from the usual first secondary school course in chemistry with respect to the kind of textbook used, the topics covered, the emphasis on chemical calculations and the mathematical formulation of principles, and the kind of laboratory work done by students. Quantitative differences appear in the number of topics treated, the time spent on the course by students, and the nature and the variety of experiments done in the laboratory.</p>	
<p><b>Big Ideas</b> This is the concept outline, given by college board. For a more detailed description, please see <a href="http://media.collegeboard.com/digitalServices/pdf/ap/2013advances/AAP-ChemistryCED_Effective_Fall_2013.pdf">http://media.collegeboard.com/digitalServices/pdf/ap/2013advances/AAP-ChemistryCED_Effective_Fall_2013.pdf</a></p> <ul style="list-style-type: none"> <li>I) Structure of Matter</li> <li>II) Properties of matter</li> <li>III) Reactions</li> <li>IV) Reaction Rates</li> <li>V) Thermodynamics</li> <li>VI) Equilibrium</li> </ul>	<p><b>What you can expect from me for each unit:</b> <b>Unit Calendar</b>– posted in ITS Learning and will tell you important dates (note: this may be subject to change; changes will be announced in class) <b>Notes</b> - posted on ITS learning so you can print and then fill-in as we go; I do my very best to present the content in clear, understandable manner, where we will build on previous knowledge. We may also utilize podcasts, or a similar resource, to supplement what we cover in class. <b>Lab</b> – prelab (not accepted late) will be due before the lab and postlabs will be due after the lab. Safety is a primary concern and enforced. Not following the safety rules may result in loss of lab privileges and a reduced lab grade. A safety contract, quiz, and section in each lab will help to remind of this important aspect of lab! <b>Quizzes</b> – give you an opportunity to see how well you know the material; can be replaced by the test if it is a higher grade; [formative] <b>Book Problems</b> – will be assigned so you will be able to check answers in the back for immediate feedback ; [formative] <b>Webassign</b> – will give you the opportunity for calculation practice, with immediate feedback; commonly used by many colleges/universities [formative] <b>AP Practice Questions</b> – released FRQ's will be assigned as appropriate <b>Help Sessions</b> – 7:45-8:15 most mornings; review sessions will also be scheduled as needed. A calendar with exact times will be available to sign-up in class. <b>Tests</b> – The tests are meant to prepare you for the AP Exam. They will be composed of two parts and they will be timed. Part 1 will be non calculator multiple choice, and Part 2 will be free response. The tests will always have material from previous units. A review checklist will be provided before the test. For recovery, you will be given the opportunity to earn ¼ of missed points back by doing test corrections. Test corrections must be done in the morning or after school – tests will not be allowed to leave the room. [summative]</p>
<p><b>Grading</b> <b>Course Average =</b> 50% (1<sup>st</sup> semester) + 50%(2<sup>nd</sup> semester) Midterm and Final Exam each count as 2 summative assessments. A:90-100;B:80-89;C:70-79;Fail&lt;70</p> <p><b>1<sup>st</sup> and 2<sup>nd</sup> semester Course work</b> Summative (75%) - Unit Tests, labs Formative (25%) – homework; quizzes</p>	<p><b>What I expect from you for the course:</b> #1- Use the unit calendar to keep up with <b>reading and book problems every night</b>. Waiting until the night before will not help you in this course and you will very quickly feel overwhelmed and behind. #2 – Attend help sessions as needed and never hesitate to ask when you need help. The day before the test is too late to truly get the help you need (see point #1!) #3 – Always follow the safety rules and specific guidelines for each lab. #4 – Come to class <b>each day</b> ready to go. We will always have something to do (and you will know what it is because it is on the calendar!) #5 – Turn work in <b>on-time!</b>[1,2 days late: -30%; after 3days: -50%; after unit test: Opts]</p>
<p><b>“Office Hours”</b> A sign-up calendar will be posted every week in class. My schedule may change from week to week, so always check the class calendar. The following is a guideline.</p> <ul style="list-style-type: none"> <li>• Monday - Wednesday 7:45 – 8:15</li> <li>• By Appointment</li> <li>• Review Sessions - TBA</li> </ul>	
<p><b>Make-Up Work</b> All missed work and assessments are the responsibility of the student when they are absent from school. A student who is absent on the class day before a regularly scheduled assessment will be responsible for completing the assignment on the regularly scheduled day and time. Students who have been absent more than two consecutive days (including the assessment day) will be given five (5) school days to make up the assessment and/or other assignments. This does not include major projects, research papers, etc., where the deadline has been posted in advance. The teacher has the discretion to grant a longer period of time to make up work if there are extenuating circumstances.</p>	

# General Course and Pacing Guide

\*\*See course descriptive outline on the website for a more detailed representation of topics.

\*\*This is a tentative guide. Labs, number of days, and order of topics is all subject to change. You will be notified of changes.

Unit	Unit Topic	Days	Exam Date
<b>1</b>	<b>Fundamentals Review</b>	<b>11</b>	
	Ch 1: Matter and Measurement (Review)		Tuesday, August 27th
	Ch 2: Atoms Molecules and Ions (Review)		
	Ch 3: Stoichiometry: calculations (Review)		
	Ch 4: Aq Reactions & Solution Stoichiometry		
<b>2</b>	<b>Atomic Structure</b>	<b>12</b>	
	Ch 6: Electronic Structure of Atoms		September 18 <sup>th</sup> or 19 <sup>th</sup>
	Ch 7 : Periodic Properties of Elements		
<b>3</b>	<b>Bonding and IMF</b>	<b>12</b>	
	Ch 8: Basic Concepts of Bonding		October 9 <sup>th</sup> or 10 <sup>th</sup>
	Ch 9: Molecular Geometry and Bonding Theories		
	Ch 11: Intermolecular Forces		
<b>4</b>	<b>Gases&amp; Solutions</b>	<b>11</b>	
	Ch 10: Gases		October 30 <sup>th</sup> or 31 <sup>st</sup>
	Ch 4/13: Properties of Solutions		
<b>5</b>	<b>Thermodynamics</b>	<b>20</b>	
	Ch 5: Thermochemistry		December 11 <sup>th</sup> or 12 <sup>th</sup>
	Ch 19: Chemical Thermodynamics		
	<b>Second Semester</b>		
<b>6</b>	<b>Kinetics</b>	<b>13</b>	
	Ch 14: Chemical Kinetics		January 29 <sup>th</sup> or 30 <sup>th</sup>
<b>7-9</b>	<b>Equilibrium</b>	<b>29</b>	
	Ch 15: Chemical Equilibrium	8	February 12 <sup>th</sup> or 13 <sup>th</sup>
	Ch 16: Acid- Base Equilibrium	14	March 12 <sup>th</sup> or 13 <sup>th</sup>
	Ch 17: Aqueous Equilibrium	7	March 26 <sup>th</sup> or 27 <sup>th</sup>
<b>10</b>	<b>Electrochemistry</b>	<b>7</b>	
	Ch 20: Electrochemistry		April 16 <sup>th</sup> and 17 <sup>th</sup>
	<b>Review</b>	<b>8</b>	
<b>11</b>	Ch 25: Organic		
	FINALS		
<b>AP EXAM – Monday- May 5, AM EXAM</b>			