Welcome to AP Chemistry. I hope you will find this course both challenging and exciting. The following syllabus will explain the class policies and expectations. Please read the entire document with your parents.

Course Design

AP Chemistry will challenge you to the limits of your academic ability. You will be forced to think, apply concepts to new situations, and develop your problem-solving skills. This course will prepare you for the higher level of thinking that is required in college. AP Chemistry is not for the weak. AP stands for “Advance Placement”, not average performance. If you want to be successful, you cannot fall behind.

This course is a 2nd year advanced chemistry course designed to prepare students for the AP Chemistry Exam, which ALL students enrolled must take in May. This course covers the equivalent of a 1st year college level “General Chemistry” course. The first quarter will be spent reviewing concepts learned in the 1st year Honors/CP Chemistry course, with the rest of the class devoted to new topics. During the last quarter, students take practice AP Exams to help increase test-taking strategies.

Students in this course must be self-motivated to learn and study, as well as have the analyzing abilities and problem-solving skills, to do well. AP Chemistry uses a college text, performs advanced labs, and will be taught like a college level chemistry course. **Students in AP Chemistry should spend at least five hours a week in individual study outside of the classroom - YOU CAN NOT FALL BEHIND IF YOU WANT TO BE SUCCESSFUL!!!**

**Important:** In addition to the AP Chemistry lecture course, students are required to enroll in the “Special Projects- Science Lab” course where all labs will be performed. Lab experience is an essential part of the AP Chemistry curriculum and provides an in-depth look into the curriculum so students can have a complete understanding of their application to practical situations. **Students meet every day to perform weekly labs and write up lab reports. Students will earn an additional 10 units of credit (See lab section).**

**Prerequisites**

- 11th -12th grade only
- C or better in Chem CP or Honors both semesters
- C or better in IM2 both semesters &
- Concurrent enrollment in IM3, PreCal/Trig, AP Cal, or AP Stat
Online Resources:

1. Mrs. Rodriguez website: [www.NRChemistry.com](http://www.NRChemistry.com)

   It is the student’s responsibility to visit the site regularly to download course materials. In addition to the course materials, you will find other helpful information like homework assignments, lots of tutorial videos, and practice AP Chemistry quizzes.

2. Nina Rodriguez YouTube channel – lots of videos to help you with topics and practice problems.

3. Great “You Tube” Videos – we will use these 2 teacher videos A LOT
   - Michael Farabaugh
   - Chemistry with Doc Dena

“Remind” for AP Chem 2020-2021

“Remind” is a simple way for you to stay informed and up-to date with what is happening. By joining “Remind” messaging, you will receive text or email messages. Don’t worry your phone number will not be shared with your teacher or anyone in the club.

For phones:
1. Download the “remind” app. IT’S FREE!!!
2. Enter the phone number: 81010
3. Enter the code into the message: @bbgd3g

For email:
1. Send email to bbgd3g@mail.remind.com
2. Leave the subject and message blank.
**Course Topics**
Students should have a solid background knowledge of the following topics from Honors & CP Chemistry:

- Matter and Measurements
- Physical and Chemical Properties
- The Atom and the Periodic Table
- Elements vs. Compounds
- Ionic vs. Molecular Compounds: Names and formulas
- Chemical Bonding
- Chemical quantities
- Chemical reactions
- Stoichiometry
- States of Matter, Water, and Solutions

This will allow for more time to cover the following difficult and unfamiliar concepts:

- Intermolecular Forces
- Gases and their Properties
- Chemical kinetics
- Equilibrium
- Thermochem/Thermodynamics
- Redox reactions
- Acid/base reactions, pH, & buffers

**Course Materials**
The following items need to be purchased before school starts in August:

- Lots of pencils and blue/black pens (lab).
- Erasers
- Notebook lined paper
- Highlighters (lots of colors)
- Post-Its
- LOTS of Single Subject Spiral-Bound Notebook: college-ruled lined paper with holes already punched. **(Probably about 8-10 for the year)**
  
  *Your spiral bound notebooks will be used for HMWK.*
- 3-ring binder (at least 3-4 inches wide) with about 25 dividers. This binder will keep all our work organized to help prepare us for AP Exam. Refer to the “Notebook Organization Guide” handout for information on the organization of the notebook.
- 3-ring binder (1 inch) for Lab reports
- Flash drive for lab reports
- White Computer paper
- Graphing calculator: **TI-83 or TI-84 (most used).** You can check one out from library (if available). Get checkout form from me.

**Textbook:**
- AP Review book
Course Requirements

❖ Summer Assignment
At the end of May, students can check out the AP Chemistry textbook. Each student must meet with me before they leave for summer break to obtain their summer assignment.

❖ Notes Review Packet
Students will watch review videos from MICHAEL FARABAUGH YouTube channel to help them review material each chapter.

❖ AP Daily (AP Classroom)
Students will watch Collegeboard videos to help them review material and prepare for AP Exam. Students will create a one pager of notes from video and show all sample problems.

❖ Homework – Kept in Spiral-Bound Notebook
Homework will be assigned daily. Assigned problems are begun in class and finished at home. Solutions to problems are reviewed in class the following day. Homework will be checked EVERYDAY!! - It will be stamped on the day it is due and checked for completeness.

- Do not write the questions!!!
- HOWEVER, if it asks you to explain then you need to answer in complete sentences. WORK ON EXPLAINING – EXTREMELY IMPORTANT TO AP!!!
- For any math calculations, you must show all work, units, correct sig figs, and circle your answer.
- Be sure to check your odd numbered problems for the answers in the back of the book. If you do not understand a question, circle the problem number so you remember to ask me about it the next day in class. BUT YOU STILL MUST ATTEMPT THE PROBLEM FOR CREDIT!!!

All homework for the chapter will be graded on the day of the chapter exam.

❖ Exams/Quizzes
Students will be given at least one quiz a week on the material covered in class. Chapter Exams will consist of multiple-choice questions and free response questions (just like the AP Exam in May).
❖ Exam Corrections (MAX of 4 per Sem)

Students may increase their test grade up to 5 percent (maximum grade of 80%) by doing exam corrections.

**In order to perform corrections, students MUST attend tutoring sessions after school BEFORE the exam has been given and exam corrections must be done after school on the day (within a week after the exam has been administered) the teacher has designated.**

❖ Labs

Lab Experience is an integral part of any AP Chemistry course, so students have a complete understanding of topics and have hands-on experience. Lab work will be done both individually and in small groups of two or three people. When performing experiments, students will collect, process, and manipulate data taken from physical observations, both measured and unmeasured, and then formally develop their own conclusions. A detailed description is provided in the “Special Projects- Science Lab” syllabus

❖ AP Chemistry Exam

We have LOTS to learn.
AP Exam has 9 Big Units with a total of 91 Learning Objectives.

<table>
<thead>
<tr>
<th>Big 9 Unit Topics</th>
<th>AP Exam Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atomic Structure &amp; Properties</td>
<td>7-9%</td>
</tr>
<tr>
<td>Molecular/Ionic Compound Structure &amp; Properties</td>
<td>7-9%</td>
</tr>
<tr>
<td>Intermolecular Forces &amp; Properties</td>
<td>18-22%</td>
</tr>
<tr>
<td>Chemical Reactions</td>
<td>7-9%</td>
</tr>
<tr>
<td>Kinetics</td>
<td>7-9%</td>
</tr>
<tr>
<td>Thermodynamics</td>
<td>7-9%</td>
</tr>
<tr>
<td>Equilibrium</td>
<td>7-9%</td>
</tr>
<tr>
<td>Acids &amp; Bases</td>
<td>11-15%</td>
</tr>
<tr>
<td>Applications of Thermo and Electrochem</td>
<td>7-9%</td>
</tr>
</tbody>
</table>

EVERY student enrolled in AP Chemistry must take the AP Exam in May. Two-three weeks before the AP Exam, students will review practice problems, essays, equations, and multiple-choice questions from past AP Exams.

If a certain score (3, 4, 5) is achieved, you may receive college credit, depending on the policies of the college. You need to contact the school you may be considering finding out if they accept the test and what credit they may give.

**There will be after school review sessions to review concepts and 4 Saturday sessions in April/May for students to take practice exams that are identical in format and administration to the actual AP Exam.**

**Bonus Incentive:** When you pass the AP Chem Exam, I will change your 2nd semester grade by the following criteria:

Score of 3 = increase by 4%
Score of 4 = increase by 7%
Score of 5 = increase by 10%
However, if you score a 1 on the AP Chem Exam, your 2\textsuperscript{nd} semester grade will decrease by 3%. Also, if you had an A at end of 2\textsuperscript{nd} Semester and do not pass AP Exam, your grade will be lowered to a B+.

\textbf{Final Exams}

1\textsuperscript{st} Semester: Students will take an exam of key concepts learned at the end of the first semester.

2\textsuperscript{nd} Semester: Three parts to the exam.

1) Honors Demo’s. You will come in after school during 2\textsuperscript{nd} Semester (April) to assist Honor’s students with their demo. Demo must work to receive full credit.

2) Review quizzes in April/May on topics that were covered during the year.

3) Those students who take the AP exam are exempt from the final! Those students who do not take the AP exam will take an old version of an actual AP exam.

\textbf{Late Homework and Make-Up Exams}

- Late homework/assignments are accepted ONE DAY late after due date. HOWEVER, late work will receive a maximum of 75\% credit. Homework due during an EXCUSED absence must be turned in on the first day back to school. If a student does not turn in assignment within the time allowed, then the student will receive a ZERO for that assignment.

- Make up exams must be made up after or before school within 1 day from the day the regular exam was given. These makeups are only for students who have an EXCUSED absence for the day the regular exam was given. Any exams not made up within the time limit will be assigned a ZERO. Make sure that you inform parents, employers, coaches, and/or other teachers of this obligation so you may reschedule any conflicting activities, as well as plan for transportation, if necessary.

\textbf{Grading Assessment and Scale}

Each student will be evaluated according to the criteria below. Grades are determined by summing the percentages earned in each of the following weighted categories:

\begin{center}
\begin{tabular}{|l|c|}
\hline
\textbf{1\textsuperscript{st} Semester} & \textbf{2\textsuperscript{nd} Semester} \\
\hline
End of Chapter Exams & 50\% & End of Chapter Exams & 50\% \\
Final Exam & 10\% & Final Exam: AP Review Quizzes & Project & 10\% \\
Quizzes & 20\% & Quizzes & 20\% \\
Homework & 15\% & Homework & 15\% \\
Notes/Notebook & 5\% & Notes/Notebook & 5\% \\
\hline
\end{tabular}
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Work habit grade is based on attendance, participation, effort, and quality of work.

Citizenship grade is based on classroom behavior.

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\begin{tabular}{|c|c|c|c|c|}
\hline
Grade & 97-100 \% & 94-96.9 \% & 90-93.9 \% & 87-89.9 \% & 84-86.9 \% & 80-83.9 \% & 77-79.9 \% & 74-76.9 \% & 70-73.9 \% & 67-69.9 \% & 64-66.9 \% & 55-63.9 \% & 0 - 54.9 \% \\
\hline
A+ & 77-99.9 \% & 74-76.9 \% & 70-73.9 \% & 67-99.9 \% & 64-66.9 \% & 55-63.9 \% & 0 - 54.9 \% \\
A & 74-76.9 \% & 70-73.9 \% & 67-99.9 \% & 64-66.9 \% & 55-63.9 \% & 0 - 54.9 \% \\
A- & 70-73.9 \% & 67-69.9 \% & 64-66.9 \% & 55-63.9 \% & 0 - 54.9 \% \\
B+ & 67-99.9 \% & 64-66.9 \% & 55-63.9 \% & 0 - 54.9 \% \\
B & 64-66.9 \% & 55-63.9 \% & 0 - 54.9 \% \\
B- & 55-63.9 \% & 0 - 54.9 \% \\
\hline
\end{tabular}
\end{center}

\textbf{F = Not acceptable (You will not receive credit for the course)}
**Classroom Rules:**

- Be on time and ready to learn. This means in your seat with materials out, ready to go. Stay in your seat until the bell rings at the end of class.
- Attend to personal needs before coming to class.
- Bring all required materials EVERYDAY (paper, pencils, pens, calculator.)
- Write neatly. I will not hire a CSI handwriting expert to decipher your writing. If I cannot read it, then I cannot grade it which means a zero on assignment.
- Leave the classroom clean. It was clean when you arrived, so it makes sense to leave it the way you found it. This applies especially on lab days.
- Keep all hats and electronic devices (CELL PHONES, iPods, MP3s, PSPs, headphones, etc.) turned off and out of sight! If I see them, I will take them, and you will have to retrieve them from security.

**Additional Help**

AP Chem is an accelerated chemistry course. This means that it may be the toughest class you have taken so far. However, this does not mean that it is an impossible class, only that more effort is needed to meet this challenge.

- **Before School:** Mon – Fri 8:00 - 8:50
- **After school:** Mon/Tues/Thurs/Fri 3:00 - 4:00pm. (no Tues = CSF meetings)
- **After School:** Wednesdays 12:45-3:00pm.