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, in order to do well. AP Chemistry uses a college text, performs advanced labs, and will be taught similar to 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/AP Stat
Online Resources: Mrs. Rodriguez website

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.

Great “You Tube” Videos – we will use these 2 teacher videos A LOT

- Michael Farabaugh
- Chemistry with Doc Dena

“Remind” for AP Chem 2019-2020

“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: **@328993**

For email:
1. Send email to 328993@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
- Subject Spiral-Bound Notebook: college-ruled lined paper with holes already punched. (You will need a notebook for HMWK and one for notes)
  Your spiral bound notebooks will be used in this class daily to help you sort, categorize, and remember new knowledge that you’re gaining.
- 3-ring binder (at least 3-4 inches wide) with about 20 dividers. Each student will be required to maintain a notebook that demonstrates the student’s learning and development in the course. 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 commonly used)**. You can check one out from library (if available). Get checkout form from me.


Course Requirements

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

- **Notes Spiral-Bound Notebook**
  Taking good notes is one of the keys to doing well in Honors Chemistry. Most will come from my lectures (TN) in class and readings from the book. Use Focus Notes to organize your notes to help you recall infomation.

**Remember these are your notes…these are supposed to help you (not me).**

Directions for Excellent Focus-Notes:
*Always start you notes on a new page in your spiral notebook.*

1. Title: BN Ch 1.1
a. Read the section from the book and find all key facts from the section.
b. Use different color pens and highlighters to keep information organized.
c. DRAW and COLOR any illustrations/charts/pics that teacher has requested. AP Chem Exam has illustrations on almost every question. (Make these BIG)
d. Include any pics/graphic instructed by teacher.
e. Use the following to guide you when taking notes:
   - NUMBER/BULLET notes
   - SPACE your notes out so when we go over them in class the next day you can fill in some missing information
   - HIGHLIGHT vocab/key terms
   - UNDERLINE main ideas
   - BOX with HIGHLIGHTER math equations
   - ??? (Margin) – Identify points of confusion to clarify by asking the teacher
   - *** - Identify very IMPORTANT Information that will definitely be on quiz, lab, exam, etc.
   - Include 1 HIGHER LEVEL QUESTION and SUMMARY (2-3 sentences) for EVERY SECTION.

Notes will be graded on the day of Chapter Exam!

❖ Homework – Kept in Spiral-Bound Notebook
Homework will be assigned on a daily basis. 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.

   - Don’t write the questions!!!
   - HOWEVER…if it ask 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 don’t 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 85%) 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. 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 to find 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 2nd semester grade will decrease by 3%. Also, if you had an A at end of 2nd Semester and do not pass AP Exam, your grade will be lowered to a B+.

❖ **Final Exams**

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

2nd Semester: Three parts to the exam.
1) Honors Demo’s. You will come in after school during 2nd Semester (April) to assist a Honors student with their demo. Demo must work to receive full credit.
2) Review MC quizzes in April/May on topics that were covered during the year.
   o Lowest MC will be dropped 😊
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.

**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 50% credit. Homework due during an EXCUSED absence must be turned in on the first day back to school. If a student doesn’t 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 makeup's 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 make arrangements for transportation, if necessary.

**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:

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Notes/Notebook</th>
<th>5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>End of Chapter Exams</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>Final Exam</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>2nd Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quizzes</td>
<td>20%</td>
<td>50%</td>
</tr>
<tr>
<td>Homework</td>
<td>15%</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Quizzes: 20%  
Homework: 15%  
Notes/Notebook: 5%

Work habit grade is based on attendance, participation, effort, and quality of work. Citizenship grade is based on classroom behavior.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage Range</th>
<th>Grade</th>
<th>Percentage Range</th>
<th>Grade</th>
<th>Percentage Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>97-100%</td>
<td>B+</td>
<td>87-89.9%</td>
<td>C+</td>
<td>77-79.9%</td>
</tr>
<tr>
<td>A</td>
<td>94-96.9%</td>
<td>B</td>
<td>84-86.9%</td>
<td>C</td>
<td>74-76.9%</td>
</tr>
<tr>
<td>A-</td>
<td>90-93.9%</td>
<td>B-</td>
<td>80-83.9%</td>
<td>C-</td>
<td>70-73.9%</td>
</tr>
<tr>
<td>0-54.9%</td>
<td>F = Not acceptable</td>
<td></td>
<td>55-63.9%</td>
<td>D-</td>
<td></td>
</tr>
</tbody>
</table>

(You will not receive credit for the course)