Welcome to the Advanced Placement® Chemistry course!

Dear Future AP Chemistry Students,

We are excited to meet all of you and begin our studies! AP Chemistry is a challenging college level course that requires dedication. To get the most out of AP Chemistry, we highly encourage you to begin your preparations now. The course includes a demanding inquiry-based laboratory sequence and a full year of freshman level college chemistry curriculum. The AP Chemistry Examination is on Monday, May 7th, 2018.

Attached is a summer assignment that will help you begin the year on the right foot. We look forward to seeing you in the fall, and best of luck in your studies!

~ AP Chemistry Teachers

AP Chemistry Summer Assignment:
We recognize the value of time spent with your family and loved ones. Summer vacation should be the optimal time to relax, rejuvenate, and re-connect to what you are passionate about. The AP Chemistry Summer Assignment is meant to foster and encourage your learning and strengthen your foundation in preparation for the AP Chemistry course.

- Do NOT cram the summer assignment all at once - spread it out!
- Do NOT stress about "getting the right answers" - we will have time in September to go over the answers and correct mistakes
- Do NOT copy each others' answers - this is summer review for YOU, only YOU will be taking the AP Chemistry Exam on May 7th, 2018. It is for your benefit that you try these problems on your own, and ask your friends and peers for help, without copying their work.
- DO access all available resources - the textbook, the internet, other AP Chemistry classmates - ask each other questions, look up information, we expect ACTIVE learning, not passive memorization
- DO try every problem - even if you are not sure of the answer, putting down a partial thought process will show us how you are thinking - this is important
- DO help each other out - you are all in AP Chemistry together, and the best support you will have is each other. Get to know your AP Chemistry classmates and you will not only learn some chemistry, you might have some fun!

Please utilize all available sources to complete the following problems, including: internet resources; textbook (Brown & Lemay and other suggested authors); and AP review resources. The URLs below represent a fraction of the available chemistry addresses available. Please feel free to expand the list and find other web sites that help prepare you for the coming year. We recommend that you complete as many online quizzes as possible, take detailed notes (optional), and practice the items indicated in the packet.

Completed work must be submitted by Friday, SEPTEMBER 8th
Required Completion:

1. Read Chapters 1-3 and 10 in the Brown & LeMay: *Chemistry the Central Science, 11th ed* textbook. Reading notes are recommended but not required.

2. Watch the following videos:
   - Bozeman Science - #14 Gases - [http://www.bozemanscience.com/ap-chem-014-gases](http://www.bozemanscience.com/ap-chem-014-gases)

3. Complete the following problems from Chapters 1-3 and 10. Answers are provided at the back of the textbook for all problems in red.
   - Chapter 1: 1.1, 1.11, 1.15, 1.29
   - Chapter 2: 2.1, 2.4, 2.6, 2.35, 2.47, 2.49
   - Chapter 3: 3.1, 3.3, 3.5, 3.13, 3.21 a&c, 3.23 a, 3.25a, 3.43 a, 3.45 a, 3.47a, 3.63, 3.71, 3.73
   - Chapter 10: 10.3, 10.6, 10.8, 10.9, 10.32, 10.59, 10.121

4. Complete Chapters 2-4 in the Ultimate Chemical Equations Handbook
   - PDF Handout is only accessible on Schoology with your NPS password
   - Log into schoology.newton.k12.ma.us
   - In the top toolbar, click on “Course” tab
   - Click on “Join”
   - Enter the Access Code: TG9XR-DZ6C4
   - Click “Join”

5. Complete the following Significant Figures Online Review – Do as many or as little as you like until you feel you have mastered the rules of significant figures.

Recommended Online Quizzes for Significant Figures:

- [https://www.khanacademy.org/math/arithmetic/decimals/significant_figures_tutorial/e/significant_figures_1](https://www.khanacademy.org/math/arithmetic/decimals/significant_figures_tutorial/e/significant_figures_1)
- [http://ths.sps.lane.edu/chemweb/unit1/problems/significantfigures/](http://ths.sps.lane.edu/chemweb/unit1/problems/significantfigures/)
- [http://www.chemistrywithmsdana.org/wp-content/uploads/2012/07/SigFig.html](http://www.chemistrywithmsdana.org/wp-content/uploads/2012/07/SigFig.html)

Additional Resources:

College Board AP Chemistry Website: [https://apstudent.collegeboard.org/apcourse/ap-chemistry](https://apstudent.collegeboard.org/apcourse/ap-chemistry)

About the AP Chemistry Exam:
[https://apstudent.collegeboard.org/apcourse/ap-chemistry/about-the-exam](https://apstudent.collegeboard.org/apcourse/ap-chemistry/about-the-exam)

General First Year Chemistry Review: [http://www.sciencegeek.net/APchemistry/APtaters/directory.shtml](http://www.sciencegeek.net/APchemistry/APtaters/directory.shtml)