AP Chemistry

Mrs. Baker, Room #501
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Welcome to your second encounter with the wonderful science of CHEMISTRY!!!

Not only will this class be interesting, it will also be very challenging. The College Board has written the AP Chemistry exam to cover a seemingly overwhelming amount of material but we will work to prepare you not only for the exam, but for the rigor of college coursework in general. This means that everyone will be expected to work hard and to the best of their abilities this year. You will be asked to work and think differently than you have in your studies before, but we will try to make this transition as smooth as possible. Having you all score high on the AP Exam is not my ultimate goal, though it would be a wonderful outcome. But more importantly, I want to prepare you for college-level chemistry and other college courses. This will hopefully make your first college chemistry class feel like a breeze, so that you have time to enjoy the many experiences and opportunities that college has to offer.

AP REQUIREMENTS

According to The College Board…"It is expected that a minimum of 290 minutes per week should be allotted for an AP Chemistry course. Of the total allocated time, a minimum of 90 minutes per week, preferably in one session, should be spent engaged in laboratory work." Obviously, due to the schedule here at Franklin Central, we only have 250 minutes of class time and will need to use multiple class periods to complete laboratory work. Keep in mind that this may mean that you have to come in before or after school to complete a lab if you are absent or fail to complete the lab during the allotted time. Due to these time constraints, you will need to work outside of class to make up for the remaining time so we can keep up with the material. The College Board also expects that, "the student will spend at least five hours a week in unsupervised individual study". Therefore, homework and textbook readings will be assigned to help you practice with the concepts outside of class.

You will also have brief assignments over all of our breaks, so please plan accordingly. These assignments will be designed to take no more than 5 hours of your time. By completing these assignments you can have one week of vacation and one week of our standard ~1 hour a day of chemistry. Trust me when I say that I wouldn't do this if I didn't have to, but it is the only way to get finished with all of the material before the AP test.

*****Important Note*** AP Chemistry is a fast-paced class that builds on previous content, so it is extremely important to keep up with the material and not get behind! If you have a question (no matter how small it may seem) please ask! If you feel you are getting lost in the material, let me know immediately. Do NOT wait until the day of or before a quiz or test to say you are confused. You may ask me for help both in class and outside of class. Please talk with me about my availability to provide help before and after school.**

MATERIALS

- Textbook: *Chemistry,* Eighth Edition, Advanced Placement Edition, Zumdahl/Zumdahl, Cengage Learning (included with textbook rental)
- 2, 1½ inch binders (1 binder for each semester)
- 1 notebook or package of loose-leaf paper
- Calculator - I highly suggest a graphing calculator if you have one
- Laboratory Notebook (will be provided) and Goggles (from first year chemistry) for lab days

COURSE INFORMATION

Course Topics:

- Chemical Reactions
- Stoichiometry!
- Chemical Kinetics
- Chemical Equilibrium
- Acids & Bases
- Quantum Theory
- Intramolecular Bonding
- IMF & States of Matter
- Gases & Gas Laws
- Thermochemistry
- Electrochemistry

Grades: All grades are based on the FCHS Grading Scale.

A	93-100
A-	92
B+	91
B	84-90
B-	83
C+	82
C	75-81
C-	74
D+	73
D	66-72
D-	65
F	0-64

Quarter Grades are calculated as follows:

Summative (65%): Tests, Summative Quizzes
Formative (35%): Formative Quizzes, Activities, Lab Reports, Homework, Journals

Inquiry:

The AP Chemistry curriculum created by the College Board emphasizes inquiry based learning. This turns the teacher into the "guide on the side" rather than the usual "sage on the stage". This puts the **student in the center of and in charge of their own learning**. Students are responsible to construct their own knowledge through experiences in and out of the classroom. They don't have to do it alone; the teacher is with them every step of the way guiding them to create a deeper and more stable understanding of all things chemistry. This guiding process may be frustrating to the student, as the teacher does not directly answer students' questions, but rather will use questioning to enable the student to arrive at or construct their own understanding to their question. This is a little different than what students (and their parents) are used to and can cause uncertainty. We will wade into this way of doing things slowly and work together. This will enable all students to achieve new and higher levels of critical thinking and academic success.

Lab Experiments:

Working with chemicals in the lab is a privilege and important responsibility. Participation in a chemical-based lab will be contingent upon the following requirements:

1. Completing a safety contract (signed by you and a parent/guardian).
2. Passing a safety quiz with a perfect score (FTCSC insurance requirement).
3. Completing any mandatory pre-lab assignments before coming to lab.
4. Completing daily class work. If a student has any missing work, they will forfeit their lab privileges. The student will still responsible for the analysis of provided data and any written lab report.
5. Following all lab safety rules, including wearing proper lab attire, which will be discussed in more detail before the first lab. Safety violations will result in a loss of lab privileges and a zero for the lab grade.

Late Assignments:

Just like college courses, **late work will NOT be accepted for a grade**. If you are absent the day an assignment is due, it is YOUR responsibility to turn it in the next day you are in class. You may turn in completed work late to be eligible to participate in lab, but will not earn any points in the grade book.

Attendance: Absences

- If you are absent the day an assignment is due, it is **your** responsibility to turn in the assignment at the **beginning of the period** on the day of your return.
- It is also your responsibility to obtain any papers or assignments missed while absent.
- You will be given the number of days equivalent to the length of your absence to turn in any work assigned while you were absent.

Assignments:

Formative Assessments: HW, Journals, Labs, Textbook Work, & Formative Quizzes (35%)

- **Homework** – Homework will be completed at home after in-class lecture. It is essential to complete as much of each assignment as possible, in order to provide yourself with more opportunities to realize if you need help and come in before/after school. Answer keys will be available for students to check their work. Homework will be collected before quizzes and tests.

- **Journals** – Journals are to be completed on the provided journal sheet during the first five minutes of class each day. They serve as review questions to highlight important concepts. Journals will be collected and graded.

- **Labs** - Labs are a HUGE part of AP Chemistry, so lab reports will also be an important part of the class. A separate outline of lab report requirements will be provided when we start our first lab. *Hint: Do NOT leave your lab report to the last minute.*

- **Textbook Notes & Quizzes** – Most days you will have required pages to read and take notes on from your textbook. You will have the opportunity to use these notes to complete unannounced formative quizzes that may be given from one to five times per week. Each week's quizzes may be amassed into one formative quiz score for the week.

Summative Assessments: Tests and Summative Quizzes (65%)

- **Summative Quizzes** – Each unit will have 1-2 summative quizzes to assess mastery of concepts covered in that unit. You will have access to the AP equation sheet, a periodic table, and use of your calculator. You will be required to make up any quiz missed due to absence before and/or after school **within 3 days** of your absence.

- **Tests** – Tests will be in "Mini AP Test Format": ~50% Multiple Choice and ~50% Free Response (show your work). Tests must be completed during the allotted class time. No extra time will be given. You will have access to the AP equation sheet, a periodic table, and use of your calculator. You will be required to make up any test missed due to absence before and/or after school **within 3 days** of your absence.

CLASSROOM RULES

1. ***Treat everyone in the classroom with respect.*** Insults, put-downs, and inappropriate language will *NOT* be tolerated.

2. ***Be in your seat working at the bell.*** Please pick up any papers by the door and sit quietly at your desk while you work on the daily journal question posted at the front. **Students not in their seats working** or who are walking in the door when the bell rings **will be marked as tardy.**

3. ***Be prepared for class every day*** and be ready to work for the entire class period. Note taking is required and necessary for the completion of homework and preparing for exams.

4. ***Stay in your seat working until your teacher, not the bell, ends class.*** Purses and backpacks need to be stored under your desk during class time. Packing up and standing before the teacher dismisses you (especially crowding the door) will NOT be tolerated.

5. ***Cell phones are NOT allowed to be seen, heard, or used during class without permission from the teacher.*** Bring a scientific or graphing calculator to use instead.

6. ***Food, candy, gum, or drinks are NOT allowed in the classroom.*** This is for your own safety.

7. ***Cheating:*** During a typical class period you are encouraged to work together unless otherwise stated. However, working together is different than cheating. Working together means that each person is communicating about the subject material, agreeing on how to solve the problem, but writing out your work separately. Cheating can exist in many forms. It includes but is not limited to: copying another person's work as your own, turning in identical papers, and/or allowing another student to copy your work and/or answers. Cheating also includes talking or using a cell phone during a quiz or test, as well as not participating in lab and copying down your partner's data. Even though students will work together to collect data and information for experiments, all written parts of lab activities and lab reports are to be completed individually in the student's own wording.

EXPECTATIONS

1. Complete ALL assigned work and textbook reading assignments. Failure to complete assignments will also result in a lack of knowledge and low scores on tests and quizzes which account for more than 65% of your grade.

2. Bring all your materials (binder, textbook notes, calculator, and pen/pencil) to class every day. You will also be expected to bring your laboratory notebook and goggles on lab days. Textbooks only need to be brought to class when asked.

3. Respect the rights of each and every person in the class (see classroom rules).

4. **Try Your Best!!!** You will do well in this course if you are willing to take the time and make the effort. YOU must discipline yourself to complete each assignment and master all objectives of each unit. I will be available to help you before and after school but you must make yourself available to be helped.

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This page must be read, signed, and returned to Mrs. Baker by Friday, July 28, 2017.

Student

I have read through the syllabus in its entirety and understand that the amount of work in an AP class is much more and in a different format than I may be used to doing. I will complete all work and get help when I need it. I am aware of Mrs. Baker's expectations and understand that my grade is ultimately my responsibility. I will do my best, which includes completing and turning in all of my work on time. I understand that the Classroom and Laboratory Rules are written for my safety and the safety of those around me. I have read and agree to follow these rules (and any additional rules specific to a given experiment) at all times and understand that the penalties for breaking these rules may result in removal from the lab for that day or permanently.

Student Name (Printed)	Student Signature	Date

Parent/Guardian

I have read through the syllabus in its entirety and understand that the amount of work in an AP class is much more and in a different format than my child may be used to doing. I am aware of Mrs. Baker's expectations, how the class is set up, and the help that is available from Mrs. Baker. I am aware of the Classroom and Laboratory Rules that my child will be expected to abide by while in Mrs. Baker's class. I understand that my child may be penalized and/or receive disciplinary action if my child chooses not to follow these guidelines.

Parent/Guardian Name (Printed)	Parent/Guardian Signature	Date

If you have any questions or concerns, please do not hesitate to contact Mrs. Baker using the provided contact information in the syllabus.