



# AP Chemistry

Mrs. Bingham – binghamr@fultonschools.org



**TEXT:** *Chemistry: Zumdahl (7<sup>th</sup> ed.); Houghton Mifflin*

**COURSE DESCRIPTION:** This is a two semester sequence course designed to provide college-level chemistry instruction to high school students. The three major goals of this course are 1) to provide college-level chemistry instruction; 2) to provide college-level laboratory experience; and 3) to prepare students for the AP Exam in such a way that they will have the best possible chance for success.

Chapters– 1 <sup>st</sup> Semester	Unit Title	Approximate Time
Ch. 1, 2, 3 (summer assignment)	Chemical Foundations, Atoms, Molecules, and Ions, Stoichiometry	5 days
Ch. 4	Types of Chemical Reactions and Solution Stoichiometry	10 days
Ch. 5	Gases	9 days
Ch. 6	Thermochemistry	8 days
Ch. 7	Atomic Structure and Periodicity	9 days
Ch. 8, 9	Bonding: General Concepts and Covalent Bonding: Orbitals, some organic enrichment here	11 days
Ch. 11	Properties of Solutions	9 days
Ch. 10	Liquids and Solids	10 days
Ch. 12	Chemical Kinetics	10 days
Equations, etc.	Miscellaneous information units for AP exam	5 days throughout year
<b>Chapters – 2<sup>nd</sup> semester</b>		
Ch. 13	Chemical Equilibrium	10 days
Ch. 14	Acids, Bases and Salts	15 days
Ch. 15	Application of Aqueous Equilibria	15 days
Ch. 16	Spontaneity, Entropy and Free Energy (Thermodynamics)	10 days
Ch. 17	Electrochemistry	10 days
Supplemental materials	Reactions and Equations, Ch. 19, 20, 21 – Groups 1A – 4A, 5A – 8A, Transition Metals and Coordination Chemistry (overview), Nuclear Chemistry (overview)	5 days throughout the semester
Qualitative Analysis lab	With unknowns	~ 5 days following AP exam

## CLASSROOM RULES

1. Come to class on time, prepared, and ready to learn. This means having all supplies necessary for class that day.
2. Be in your seat and ready to work when the bell rings.
3. Be polite and respectful to all people in the class. Treat others and their property as you would like to be treated. This includes any materials in the classroom that are not yours.
4. Listen when someone else is talking – you might just learn something!
5. Unacceptable behavior during a lab or class activity or failure to clean up after a lab or activity will result in an unrecoverable grade of **ZERO** for that activity. Be responsible!
6. Cell phones may not be used during class time and must be kept “put away”. This also applies to Chromebooks unless you are actively taking class notes. While you are allowed to use your cell phone or other personal device to access WebAssign, etc., it may only be used when permitted. If you choose to pull your cell phone out during class, you choose to have it taken up and returned at the end of the day. Phones will be turned off and “parked” in a designated area during assessments. Bottom line: phones and laptops are tools, and you must use them appropriately.
7. Food and canned/bottled drinks are not to be consumed in the classroom. Only water in bottles with lids will be allowed. **No food, drink, or gum of any kind will be permitted in the lab area.**
8. No profanity – this is a courtesy issue.
9. Obey all school rules.

## CLASSROOM PROCEDURES

**Required Supplies:** 3-ring binder, text book, paper, writing utensil(s), composition book (for lab investigations), calculator (graphing recommended), responsible attitude.

**Communication:** I use Google Classroom to post class notes, content calendars and other class-wide information. I also use Remind to send out class-wide announcements as needed. The best way to ensure a direct response to a direct question is to email me: [binghamr@fultonschools.org](mailto:binghamr@fultonschools.org). Information about access to class online resources will be communicated in class.

**Tardy/Absent Students:** Students must be in their seats and ready to begin work when the bell rings. The NHS tardy policy is spelled out in the Student Handbook and you should be familiar with it. If you are absent on the day before an assessment, be prepared to take it as scheduled. If you are absent on the day of an assessment, be prepared to take it as soon as you return, unless other arrangements are made ahead of time. I will be expecting to see your re-admit slip from the Attendance Office, also.

**Turning in Assignments:** All assignments will be placed in the period-specific inbox at the beginning of the class on the day the assignment is due or end of lab if appropriate. Assignments will be considered late if not turned in by the end of your class period and this will be reflected in the grade received for that assignment. If you are absent when an assignment is due, you are expected to hand it in as soon as you return.

#### **Suggestions for Success:**

1. Come to class prepared. This means that you have done your assignments, reviewed notes from previous lessons, and read the assigned text. This class will move VERY fast, and we won't always have time to stop and wait for you.
2. Get a "Study Buddy". This could be someone you know, or you can form a study group. This strategy is wonderful for covering material when you are absent. Exchange email/phone numbers with as many people in the class as possible – networking is good. In previous years there have been Facebook pages for this class.
3. Stay on top of your work. Assignments are generally going to cover current material, so if you stay current, so will your understanding. Cramming information into your head the night before an assessment is a poor way to keep up. I am always willing to hold help sessions – just let me know ahead of time so I can be available. Remember, the only stupid question is the one you don't ask.
4. Get a review book, but not until second semester. We will be covering so much material that the review book may be overwhelming before you are ready for it. I do not recommend any particular book – the best book for you is the one you will use.
5. Unit plans, outlines of chapters, class notes, and any additional material I can think of will be posted on Google Classroom. Check it early and check it often.

**Homework:** WebAssign will be used as the primary homework vehicle. It grades your homework from the computer and gives instant feedback. Much more about WebAssign later! There will be the occasional homework assignment that I will collect.

**Quizzes:** Quizzes will be used to periodically check the students' level of understanding. Quizzes will generally be given mid-way through a chapter to assess your understanding – this quiz may be called a "Quest" and may count as a partial test grade (or a test of less than 100 points), depending upon the amount of material being assessed.

**Tests:** There will be a test after completion of every chapter or a group of chapters. It will be common for previous material to be included on each test, so do not forget what we have already mastered.

**Labs:** AP labs are designed to closely replicate the college lab experience. In recognition of this aspect of the class, the expectations for lab performance, safety, and behavior are necessarily beyond the expectations normally associated with a high school level class and more in line with college expectations. Chemicals, equipment, and procedures are elevated as well. Students and parents must be aware of these expectations and agree to behave appropriately. Occasionally lab time may run over regularly scheduled class time and the lab will need to be finished before or after school. If you are not present on the day that a lab is conducted, it is **your** responsibility to either make arrangements to make up the lab before or after school (within one week of the lab) or obtain the data from your lab group. Either way, you are responsible for the lab material and the lab report.

**Late Work:** You have to do your homework! The purpose of homework is reinforcement of concepts learned in class. Homework will be generally a WebAssign, but there may be some additional practice as well. Late work for major grades such as lab reports, projects, and summative assessments will be penalized 20% for each day late until no credit is possible. Homework will not be accepted late unless you are absent on the day it is due. WebAssign due date extensions must be requested individually.

**Help Sessions:** Help sessions are available before and after school, so please inform me a day before help is needed. Sometimes the very best way to learn something is in 1-on-1 sessions. Don't be afraid to ask for help – I may be scary, but I don't bite.

**Make-up Work Policy:** It is the student's responsibility to find out what they missed due to an absence of any kind. The Make-Up policy is clearly outlined in the student handbook.

**Make-up Tests and Quizzes:** must be scheduled with me and completed within the number of days absent as per NHS policy (in Student Handbook). **Extra-Curricular activities are not an excuse for not having time to do make-ups. Make up the test or make a zero!**

**Make-up Labs:** because this class moves very quickly, labs will not be available for make-up indefinitely. If you are absent for a lab, you will need to make arrangements either to make it up within a week of the performance of the lab in class or obtain the data generated by your usual lab group. Your lab report will still be due 1 week after your return unless there are verifiable extenuating circumstances. Otherwise, a grade of zero will be entered for that lab. You will always know the dates for labs ahead of time, so ignorance of the date of a lab is not an excuse.

**Honor Code Policy:** In an effort to encourage good study habits, fair competition, and positive development in the area of academics, the Northview faculty supports a strong policy on cheating. Cheating is defined as “giving or receiving in any form, information relating to a gradable experience, either inside or outside class.” I will strictly enforce the honor code policy as described in your student handbook. Violations of the honor code will result in a zero for the assignment and an honor code violation form placed in the student’s disciplinary file. Read the student handbook carefully to fully understand what constitutes an honor code violation. For major graded assessments such as tests and quizzes, a formal honor code statement will be signed.

**Dress Code Policy:** The dress code is clearly spelled out in the student handbook. You are expected to follow it. If you walk into my class, and I believe that you are in violation of the policy, you will be sent to the appropriate Administrator. Closed-toed shoes and appropriate clothing are required for all labs, so be prepared.

**Conference Information:** If a parent or guardian desires a conference, please email me, and we can schedule a time to meet at our convenience.

**Grading Procedure:** Tests: **40%** Labs: **15%** Quizzes: **20%** Homework (WebAssign, etc.): **10%** Final Exam: **15%**  
Grading Scale: A: 90-100 B: 80-90 C: 70-80 F: 0-69

**Recovery Policy:** Recovery is for students who, despite a conscientious effort and communication with their teachers, have failed to demonstrate satisfactory understanding of course standards. It is not for the student who has been failing for many weeks and then wishes to recover during the final days of the course. Opportunities for students to recover from a 74 or below *cumulative* average will be provided when all work required to date has been completed and the student has demonstrated a legitimate effort to meet all course requirements. *Students who have not attempted to complete all course requirements are not eligible for recovery.*

Students may initiate recovery on major assessments starting with the second major assessment of the semester as long as they have made a legitimate effort to meet all course requirements including attendance. Unexcused absences may prevent this opportunity.

So that students stay focused on the content at hand and don’t become overwhelmed and fall too far behind, they must initiate recovery on a major assessment within five school days of being informed of the grade on that assessment and its impact on your cumulative average. Recovery work must be completed within ten school days prior to the end of the semester. The nature and type of recovery assignment is given at the discretion of the teacher.

**Progress Reports:** Students may inquire periodically as to their progress in the class. It is recommended that parents sign up for Home Access Center at the school, to keep on top of their children’s academic and attendance performance.

**End of Period:** I will let the students know when they may begin putting materials away. No student is allowed to get out of his or her seat before the bell rings.

**Home Access Center:** Parents have access to their child’s grades through the Home Access Center (HAC). Major assignments and their due dates may be entered well in advance, so please look at the due dates.

**Please read the above information carefully. If you have any comments or concerns please email me at [binghamr@fultonschools.org](mailto:binghamr@fultonschools.org). The best way to reach me is by email!**