Naperville District 203  
AP Chemistry Syllabus  
2020 – 2021

To educate students to be self-directed learners, collaborative workers, complex thinkers, quality producers, and community contributors.

Course Description  
This AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first year of college. This course is structured around the six big ideas articulated in the AP Chemistry curriculum framework provided by the College Board. The subject matter will include topics in inorganic and physical chemistry. Concepts and skills are reinforced by a strong emphasis on hands-on laboratory experiences and the integration of other branches of science. Constructivist methods of teaching are employed to ensure the best possible comprehension and retention of science concepts. REQ: Chemistry; Honors Chemistry.

Course Topics

**Semester 1**
- Chapter 1: Introduction: Matter and Measurement
- Chapter 2: Atoms, Molecules and Ions
- Chapter 3: Chemical Reactions and Reaction Stoichiometry
- Chapter 4: Reactions in Aqueous Solutions
- Chapter 5: Thermochemistry
- Chapter 6: Electronic Structure of Atoms
- Chapter 7: Periodic Properties of the Elements
- Chapter 8: Basic Concepts of Chemical Bonding
- Chapter 9: Molecular Geometry and Bonding Theories
- Chapter 10: Gases
- Chapter 11: Liquids and Intermolecular Forces

**Semester 2**
- Chapter 13: Properties of Solutions
- Chapter 14: Chemical Kinetics
- Chapter 15: Chemical Equilibrium
- Chapter 16: Acids-Base Equilibria
- Chapter 17: Additional Aspects of Aqueous Equilibria
- Chapter 19: Chemical Thermodynamics
- Chapter 20: Electrochemistry

Grading Calculation

At Naperville North we define formative and summative work as follows:
- Formative work is used to monitor student’s learning to provide ongoing feedback that can be used by students to improve their learning. Examples may include: practice activities, homework, quizzes, etc.
- Summative work is used to evaluate student learning at the end of an instructional unit or segment of learning by comparing it against a standard or benchmark. Examples may include: quizzes, labs, tests, etc.

Grades communicate each student’s progress toward mastery of goals/standards for the course. Grades should not be reduced or inflated due to student behaviors outside of the standards.
- No extra credit will be issued.
- Formative assignments will be accepted up to the end of each unit.
- A zero on a summative assessment will only indicate that no attempt was made by the student.
  - Violations of the academic integrity policy will be consecution by administration in collaboration with the IC/teacher.
- Formative work submitted after the due date cannot be penalized more than a total of 10%.
- Summative work submitted after the due date cannot be penalized more than a total of 10% and must be submitted prior to the end of the next unit.

Your course grade will reflect what you have learned, not what you have completed.

**10% Final Exam**

- Formative
  - 5% Daily work (Homework, whiteboard presentations, Canvas practice quizzes, lab completion checks)
- Summative:
  - 45% Quizzes and Labs (Labs, lab practicals, lab quizzes, and content quizzes)
  - 50% Tests (Chapter exams)

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Students will be provided multiple and varied opportunities to demonstrate mastery of learning standards.

- The purpose of reassessment is to allow students to demonstrate mastery of course standards in which they remain deficient.
- Students will be required to engage in further learning and reassessment when students do not demonstrate sufficient learning of the course essential standards.
- Students who have demonstrated sufficient learning of the essential standards (but scored below 80%), will be allowed reassessment opportunities on summative assessments if they so choose. To be eligible for reassessment, students must
  - Demonstrate readiness for the summative assessment through completion of formative work.
  - Complete designated learning experiences as assigned by the teacher
- Any percentage lower than 50% will be put into the grade book at 50%, the lowest possible grade on completed work. (incomplete or work not turned in will receive a grade of 0 in the grade book.

**Academic Integrity**

Academic Integrity Students will be expected to submit only original work and follow the academic integrity policy described in the NNHS student handbook.

- Level 1 infraction will follow our reassessment policy, students will earn no more than – 80%;
- Level 2 infraction – 50%;
- Level 3 infraction – 0%

**Communication**

- As a high school student, it is strongly encouraged that you communicate directly with your teacher regarding questions. Meet with your teacher after class and arrange an appointment to meet or send an email to set an appointment.
- Teachers make every effort to respond to emails and phone calls within 24 hours during the work week.
- The best way to communicate with teachers is through email; however, if you haven’t received a response within 48 hours, please resend the email or call their voicemail. Your email may have been filtered.

- Make an appointment with your teacher.
- Peer tutors available before school and during lunch periods in the Lit Center.

— we need your help please!

Naperville North believes in a collective partnership with parents/guardians which provides students the best opportunities for academic success.

Some ways parents/guardians can support their student’s learning are:

- Actively check Infinite Campus for their student’s grade.
  - Infinite Campus is a tool to progress monitor student work until final course grade is posted.
  - Monthly progress grades are posted and represent the current grade of a student in the course at that moment in time.
- Discuss missing assignments, reiterate due dates, help organize folders, materials, assignment notebooks and review upcoming projects and assessments.

Khan Academy

**Science Department Contact Information**

Mr. McWhirter – Science Coordinator
amcwhirter@naperville203.org

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A : 90-100 %   B : 80-89 %   C : 70-79 %   D : 60-69 %   F : below 60%

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