

Chemistry 2024 - 2025

Instructor: Mr. Johnson, room E110

Help Session Hours: before school select days; Period 1 – Tutorial time)

Grading: 92% - A
83% - B
74% - C
65% - D
64% and below – F

Help & Resources: I am using the **LearnBPS website** (regular school login) for notes, video tutorials that I have personally made, resources for help and studying, and more! I strongly encourage you to use this resource for help and for class. Parents can log in as “guest” to follow the curriculum and progress: <http://learnbps.bismarckschools.org>

Absences:

Because each day builds upon what we learned the previous day, absences are a concern. If you are absent, you are responsible for making up the notes, assignment, etc. Whenever possible, make things up ahead of time!

Assignments/Lab Work/Tests:

Grading: For this class, know that homework is submitted online and due the next day in order to practice skills that build upon each other. **I encourage students to address any mistakes and resubmit for a higher score before the due date.** Because of the scaffolding nature of the course, no credit will be allowed on any assignments after the test. If tests are going poorly, we need to have a serious discussion as to which components were weak and why. In class, we emphasize all learning objectives each day and reference them in LearnBPS. I have video tutorials created for each type of problem we do for help while at home. The work we do each day in class (homework, labs, and practice work) align to the questions on the tests, so there really should not be any reasons why students are caught unprepared.

Lab work will be graded for accuracy and depth of explanation. Labs will be a combination of quantitative (measurement-based) and qualitative (observation and solving for unknowns) experiments. My goal is to give you many hands-on applications of what you are learning as possible to help you to understand the material! **You may choose your own lab partner as long as you work productively and safely together.**

Tests will cover topics practiced directly in the book, in class discussion, and in lab. There are no “new” questions on the tests – you will have seen them before! Grading will be based largely upon the process of problem solving, not the answer alone. **This means that you must show all of your work to receive full credit!** If you are struggling with tests, you need to meet with me to see how you can better prepared – there are no “surprises” on tests!

The final test is worth 15% of your final grade. A review guide is ready to go in the LearnBPS folders to help you to prepare. You are strongly encouraged to take at least the first semester’s final!

Most importantly:

Positive attitude! Have fun!

Chemistry Topics

Chemistry terminology

Metric system, measurement & estimation/significant figures

Problem solving technique – “factor-label”

Atomic structure and periodic table

Electrons – configurations, orbitals, quantum theory

Chemical naming, a smattering of organic, and formulae

Chemical quantities –The Mole!

Chemical reactions (equation writing, classifying, and balancing)

Stoichiometry (a summation of the previous chapters)

Gas laws

Bonding – covalent & ionic. VSEPR theory

Solutions – concentrations via different measurements/uses

Periodic trends

Acids and bases

NOTE: In chemistry, we only talk in metric system and we always use proper rounding techniques for our final answers!

A friendly word of advice: If you get a little behind, the issue never goes away. Little problems become HUGE obstacles if you put them off; my biggest request is that you seek help sooner rather than later.

Lastly, many of our labs will be “qualitative”, or forensics-based labs. The goal for these is to implement the skills chemists use in identifying chemicals/compounds. You will learn what chemists do in their work from these and how chemistry is used in all forms of everyday science. These can be challenging, for you must rely solely on your developing skills and observations to arrive at the identities of unknown substances.