

College Prep Chemistry (40.0510001) Mill Creek High School Mrs. Gallogly Room # 1.507



School Website: www.millcreekhighschool.org E-mail: Sandra_Gallogly@gwinnett.k12.ga.us

Course Philosophy

The underlying themes of problem solving, reasoning, communication that bridges everyday language to scientific language, and connections to real life situations are woven through the chemistry curriculum. Emphasis will be placed on open-ended exploration, modeling, and investigations.

Course Text

^{Glercoe}Chemistry: Matter and Change. A fee of \$54.99 will be assessed for any damaged or lost text and/or CD.

Materials

- The following materials and your textbook must be brought to class DAILY.

 ➤ Loose leaf, 3-ring binder, and page dividers (Notes, HW/CW, Labs, Tests/Quizzes)
- Tests/Quizzes)
 Composition Notebooks (2)
 You will use one composition book to complete your questions of the day, every day. The second will be your AKS log book; if you completed one last year, you will not need to purchase another—we will simply continue from your work in biology.

 Scientific calculator (one may be purchased for around \$10)



- Blue or black pen and pencil

Grading

The final grade in this course will be determined by the following distribution.

Course Weight	Grading Scale
30% Tests and Projects	A 90-100
20% Daily (CW, HW, Quizzes)	B 80-89
30% Labs	C 75-79
20% Final Exam	D 70-74
	F below 70

Course of Study

Topic/Content	Textbook Chapters	Expected Time
Characteristics of Science	all	On-going
Matter	3, 13.3, 15	4 weeks
Atomic Theory	3, 4, 5, 25	5 weeks
Periodic Table	6, 7	2.5 weeks
Bonding	8, 9, 13.2	4.5 weeks
Chemical Equations	10	2 weeks

AKS

- --Characteristics of Science

 Design and conduct scientific investigations

 Apply standard safety practices for all classroom laboratory and field investigations

 Use technology to collect, observe, measure and manipulate data and findings

 Use valid critical assumptions to draw conclusions

 Apply computation and estimation skills necessary for analyzing data and developing conclusions

 Communicate scientific investigations clearly

 Read scientific materials to establish context for subject matter

 Discuss the importance of curiosity, honesty, openness, and skepticism in science and exhibit these traits in efforts to understand how the world works

 --Academic Knowledge

- in efforts to understand how the world works
 --Academic Knowledge

 Analyze the nature of matter and its classifications

 Evaluate how the Law of Conservation of Matter is used to determine chemical composition in compounds and chemical reactions

 Use the modern atomic theory to explain the characteristics of atoms

 Use the organization of the periodic table of elements to predict the properties of elements

 Predict how various factors affect the rate of a chemical reaction

 Predict how or and behavior of atoms and molecules in chemical and physical processes

 Analyze properties that describe solutions and the behavior of acids and bases