Chesapeake Math & IT Academy



CMIT South Honors Chemistry Syllabus 2018-2019

Teacher: Ms. Anna McAllister

Room: 332

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Course Description: This course is designed to explore the study of matter and its interactions through laboratory investigations, scientific discussions, and phenomena based instruction. Students will apply science and engineering practices and crosscutting concepts of the Next Generation Science Standards (NGSS) to explain the structure, function and interactions of matter, at the macroscopic and the molecular-atomic levels. Students are expected to develop an understanding of chemical reactions, including rates of reactions and energy changes in terms of collisions of molecules, and the rearrangements of atoms as they make sense of their physical world through real world connections. Emphasis is placed on important biological and geophysical phenomena that support student explanations of the formation and abundance of elements, chemical bonding, radioactivity, and the release of energy. Students will apply an understanding of the process of optimization in engineering design to chemical reaction systems. This course will also involve students developing solutions to authentic problem-based physical science issues and investigations, while exploring career opportunities in Science, Technology, Engineering, and Mathematics (STEM).

Textbook & Required Materials:

Text: Pearson Chemistry (ISBN 9781323202296)

Edmodo Codes: Section 95: di5u5i Khan Academy Code: 82DHS3QC

Materials:

These items must be brought to class EVERYDAY

- See below for explanation on notes and note-taking
- ➤ Binder with dividers for *handouts and returned assignments WITH loose leaf paper* (PLEASE make sure you have a binder!). As an organizational tip please label binder dividers as follows
 - o Warm-Ups (DNA)
 - o Notes/Handouts
 - o Homework / Classwork
 - Tests and Quizzes
 - o Labs
- Composition book (for classwork and labs) this will stay in the classroom
- > Scientific Calculator
- > Pens (blue or black) or Pencil and sharpener

- > Set of colored pencils/ or crayons/ or thin multi-color markers
- ➤ Glue stick
- ➤ Scissors

Students will need these additional materials regularly

- Laboratory Safety Goggles (For Labs)
- > Internet and Computer Access (For notes, mandatory digital homework, and projects)
- Microsoft Office (Word) for writing papers/ lab reports

***If a student does not have the required materials on a daily basis, they may be docked SIS points for being unprepared to class. ***

Class Rules:

- 1. Respect yourself, others, and property
- 2. No food, drinks, or gum in the laboratory
- 3. Electronic devices must be turned off, and toys must stay in lockers
- 4. Be prepared and on time with a positive attitude
- 5. Raise your hand and wait to be acknowledged
- 6. Remain seated during class
- 7. Follow CMIT uniform policy

Consequences:

Students are expected to follow school and class rules. The following consequences will be issued if students choose not to comply with class rules.

- > 1st Offense Verbal and/or written warning
- > 2nd Offense Teacher/ Student Conference/Deduction of SIS points
- > 3rd Offense Parental Contact/Lunch Detention/Deduction of SIS points
- > 4th Offense Office Referral/Parental Contact

Rewards:

Wall of Fame: Students who earn high scores on assessments, and/or finish the quarter with a top SIS balance or grade in the class will be put on the wall of fame. With this reward, students will earn 10 tickets.

Students will also have the opportunity to earn tickets for outstanding work performed, and may use the tickets earned to the following privileges:

- 1. 3 Tickets: 5 points of Extra Credit on one Homework assignment
- 2. 5 Tickets: 5 points of Extra Credit on one Classwork assignment
- 3. 10 Tickets: 5 points of Extra Credit on one Assessment assignment

How to earn tickets?

- > Students who go above and beyond to help classmates.
- > Students who got perfect score (100%) on any quiz or test will receive a ticket.
- > Students who show outstanding work in any classwork or class activity will receive a ticket.
- > Additional incentives will be announced by Ms. McAllister along the school year.

Keys To Course Success

- Maintain your notebook! It WILL be graded and contains critical information, notes and handouts.
- > **Study regularly**! Science is an intense subject that covers a broad range of topics and all concepts relate to one another- If you struggled with an early chapter- it will come up again in a later one.
- > Keep up to date with the weekly science updates released by Ms. McAllister
- > Ask for help if you need it! My classroom is almost always open to students for lunch tutoring.
- ➤ Work collaboratively, sometimes other students can explain something in a way I am not able to.

Ms. McAllister's Note-Taking

- > Students are required to take notes during every class unless otherwise specified during that class.
- > As noted above, students are required to have a binder or folder with loose leaf paper for notetaking.
- > Notes should include:
 - o The date
 - O The topic of the day or continuation from the previous day
 - o Notes, questions, important information

Ms. McAllister's Assignments

- > Students are required to submit all assignments by the assigned due date.
- ➤ I will make every effort to post all assignments and reminders online via Edmodo.
- For large assignments, I will send emails and post on the newsletter to remind parents and students of upcoming due-dates.
- All assignments must have name and class on them. Assignments with no name will not be graded and will result in a "0" with the comment "Not turned in" in SchoolMax.

Make-up Work:

If the student misses class with an excused absence, it is <u>his or her responsibility</u> to retrieve the missed work from <u>Ms. McAllister's Make – Up Work Folder</u>, and submit it within *2 days* of their return. <u>Email notification is required for missed assignments so there is a written record of absence and request for work</u>. Work submitted past this deadline will not be accepted. (For example, if you missed school on Tuesday, you would pick up the work you missed on Wednesday, and hand it in by Friday.) If you are absent on a test or quiz day, you have 3 days from the date of your return to take the test.

<u>Late work will not be accepted</u> <u>without an excused absence</u>, and will be marked as a "<u>0</u>". This applies to homework assignments as well.

Absences and Tardiness

Students must present a valid note or pass to indicate that their absence from school is excused. Students will not receive credit for make-up work for unexcused absences. Students arriving late to class must bring an excused pass from the office or a teacher, and will be required to sign in on the tardy log.

Honor Code

Students are expected to abide by the Prince George's County Public Schools Code of Conduct at all times. Cheating, copying someone else's work, plagiarizing, sharing information about assessments, etc. will result in a grade of '0' on that assignment, followed by parent and administrator contract.

Grading Policy:

The grading scale that will be used in this class:

A (90%-100%); **B** (80%-89%); **C** (70%-79%); **D** (60-69); **E** (59% and below)

The final grade is based on the combination of three weighted categories: **classwork**, **homework**, and **assessment**. Please use School Max to check for grades.

***Teacher reserves the right to decide which assignments to grade. ***

Do not ask for grade adjustments 72 hours before grades are due, missing work should be completed before this time

Factors	Brief Description	Percentage per Quarter
	This includes all work completed in the classroom setting.	
Classwork	Assignments may include, but are not limited to:	35%
	 Developing and using models 	
	 Engaging in argument from evidence 	
	 Individual and whole class discussions 	
	 Planning and carrying out investigations 	
	 Projects (include parts of the STEM Fair process) 	
	 Hands-on and lab experiences 	
	 Asking questions (for science) and defining problems (for engineering) 	
	Obtaining, evaluating, and communicating information	
	 Constructing scientific explanations (for science) and 	
	designing solutions (for engineering)	
	This includes all work completed outside the classroom. Assignments	
	may include, but are not limited to:	

	Developing and using models	
Homework	 Obtaining, evaluating, and communicating of information 	15%
	 Constructing scientific explanations (for science) and 	
	designing solutions (for engineering)	
	In accordance with CMIT Academy Public Charter School's	
	homework policy, late homework assignments will be given a grade	
	of 0% unless the student has an excused absence.	
	This category entails both the traditional (exams and quizzes),	
Assessment	announced or unannounced, and alternative (presentations, projects,	50%
	portfolios) methods of assessing student learning:	
	 Pre/post assessments, final exams, quizzes, final essays/reports, 	
	portfolios	
	Analyzing and interpreting data, using mathematics and	
	computational thinking	
	 Oral or written evaluation that reflects the student's 	
	performance on a summary of a lesson, chapter or unit	

Topics Covered **

- 1. Introduction to Chemistry, Measurement, and Classification of Matter (Chapters 1-3)
- 2. Atomic Structure and the Periodic Table (Chapters 4-6)
- 3. Nomenclature, Formulas, and Bonding (Chapters 7-9)
- 4. Measuring Matter: The Mole (Chapter 10)
- 5. Chemical Reactions (Chapter 11)
- 6. Stoichiometry (Chapter 12)
- 7. Solutions, Acids, and Bases (Chapter 19)
- 8. Thermochemistry (Chapter 17)
- 9. States of Matter (Chapter 13)
- 10. Gas Laws (Chapter 15)

^{**} Please note that the textbook materials will not always be covered sequentially in the textbook but will be grouped on relevancy and based on what works best for understanding.