Physical Science Syllabus

2026-2027

Instructor: Georgia Crandall

Course Description: The purpose of this course is to allow you to gain a deeper understanding of the universe. By doing so, we unlock the capabilities to not only understand the world around us, but also the societal changes that can be and have been governed by scientific discovery.

Required Materials:

- A place to take notes (large notebook or digital notebook)
- A writing utensil
- Your school issued iPad
- Your best effort each day

Classroom Rules & Expectations

1. Follow the Student Code of Conduct.
2. Do not bring cell phones into the classroom under any circumstances.
3. **Be respectful and kind to yourself, your classmates, and your teacher.**
4. Do your best.
5. Be curious and ask questions often.
6. Understand that you as students, and I as your teacher, are *on the same team.*

Course Outline & Objectives:

Unit 1: Forces, Motion, Energy
Unit 2: EM Spectrum, Light, Electricity, Magnetism
Unit 3: Chemistry and Properties of Matter
Unit 4: Nuclear Chemistry, Earth and Space Science

The objectives for this course follow the Nebraska Science Standards which can be found here.

SC.HS.1.1 Gather, analyze, and communicate evidence of forces and interactions
SC.HS.2.2 Gather, analyze, and communicate evidence of the interactions of waves.
SC.HS.3.3 Gather, analyze, and communicate evidence of the structure, properties, and interactions of matter.
SC.HS.4.4 Gather, analyze, and communicate evidence of the interactions of energy.
SC.HS.5.5 Gather, analyze, and communicate evidence of chemical reactions.

Grading Plan

Assessments:

Quizzes: There will be occasional quizzes/ ‘mini-exams’ to assess your understanding of the material covered.

Exams: There will be an exam around the end of each quarter over the material covered in that quarter. You will be expected to leave your backpack and all personal belongings in your locker, in the hallway, or at the front of the classroom by my desk on exam days. Understand that having a phone, smart watch, smart/Meta glasses, or any other electronic device on your person, in your pocket, or at your table will result in an automatic zero in the gradebook for that exam with no exceptions.

Classwork:

Classwork: In this class you will be expected to participate in all in-class activities. These will include lecture notes, large group discussions, think-pair-share activities, writing and speaking activities, and various other items. It would behoove you to take good notes during lectures, as this is going to be your primary source of study material for exams.

Group Work: Each week there will be a day that you are expected to work with a small team of your peers to complete an assignment consisting of challenging critical thinking and problem solving questions. These assignments will be due at the end of the period, and they will be graded based on correctness and full faith effort. Be prepared to receive a **zero** in the gradebook if you are not focused during the time I so graciously give you in class to complete these assignments. You may also be subject to further disciplinary action.The expectation is that you and your team work together equally on each question; no one gets left behind, and no one works ahead. You will lose minimal points for not finishing the assignment if it is clear to me that you and your team worked hard and tried your best for the *entire* period, otherwise I will grade accordingly.

Homework: Homework will be assigned throughout the year as a tool to assist you in preparation for exams and Group Work. These homework assignments will range from reading assignments, critical thinking questions, problem solving questions, and vocabulary assignments. These will be graded primarily based on a full faith effort.

Labs/Projects:

Labs: You will be expected to participate in all laboratory activities. If you feel that you cannot perform a lab, please talk to your teacher so we can plan an alternative lab activity for you. You will be graded for completing the lab, following the scientific method, and potentially producing a lab report. You are expected to follow all lab safety

protocols and follow all lab instructions. Violations of the safety protocols will result in loss of points, dismissal from the lab with 0 points, detention, or dismissal from class.

Projects: You will complete 2 research projects throughout the year. These projects are meant to give you the opportunity to research something about Physical Science that interests you. Feel free to utilize topics you find in your textbook, something you think of on your own, or something you find after discussing your options with your teacher. In any case you will be required to find a topic and clear it with your teacher *before beginning your research*. Both of these projects require you to write a formal research paper covering that topic following the requirements listed below:

- Times New Roman font size 12
- 3-5 pages double-spaced
- At least 5 reliable sources cited in text and also in a works cited page
    - Title of article/book/website
    - Author name
    - Publication date

Reflection Papers: You will be expected to write 4 reflection papers in this class. These are short, relatively informal writing assignments that are meant to help you bring your learning into your long-term memory. These will be approximately 1-page, Times New Roman size 12, single spaced essays that allow you to reflect on your learning in each unit. I don't want students to stress about these papers, however I expect you to put in your best effort and follow the prompt outlined in the assignment in google classroom. These will be graded based on a full-faith effort.

Understand that the use of generative AI for any written work in this class will result in an automatic 0 in the gradebook with no exceptions.

Evaluation

Q1 + Q2 = 90% of 1st Semester Grade; Semester Test = 10%
Q3 + Q4 = 90% of 2nd Semester Grade; Semester Test = 10%

Assessments: 50%
Classwork: 20%
Labs/Projects: 30%

Extra Credit will not be given.

Cheating/Plagiarism

Cheating and plagiarism will not be tolerated under any circumstances. The use of Generative AI to complete assignments is also prohibited. Students who violate this policy will receive an automatic 0 in the gradebook for that assignment, quiz, or exam, and MAY be subject to further disciplinary action. Follow the guidelines outlined in the Student Code of Conduct. Best rule of thumb: **just do your own work**.

Attendance/Absences

It is crucial that you are in class. Many of the topics covered in class act as building blocks for new material and it is important that you are present for each step of the process. Refer to the Student Handbook for the attendance policy. Work that is missed due to pre-excused or school related absences must be turned in BEFORE you are gone.

Late Policy

Late work will not be accepted for full points unless an extension has been granted to you by your teacher. If you feel that you need an extension on an assignment, please request one at least 24 hours before the due date by asking your teacher in person before or after class, where we will discuss your options. Note that requesting an extension does not guarantee that you will receive one. If you do not have an extension on an assignment, you can submit it up to 3 days after the due date for a maximum grade of 50%. After the 3 day window late assignments will no longer be accepted.

IF YOU ARE ABSENT:

<u>GENERAL ABSENCES:</u> Any unplanned absence

1. All labs must be made up before or after school WITHIN 2 DAYS without exceptions. All labs that are not made up within this time frame will result in a 0 in the gradebook.
2. It is your responsibility to find out what you missed, come in before or after school to ask your teacher.
3. If you miss an EXAM/TEST/QUIZ it is up to the student to arrange a time to make up the assessment within **2 days.**
    a. **Tests/assessments missed due to an activity/pre-excused absence you must take the assessment prior to the absence. Failure to do so will result in a loss of 10% from the test score for each day after the test is given.**

4. It is your responsibility to turn in all make up work as soon as possible. If your teacher does not have your work, expect to see a 0 in the gradebook. Once it is turned in, a maximum grade of 50% is achievable.

Extracurricular Activities Absences:

All absences that are due to activities must be cleared at least 24 hours prior to the absence. Students need to complete the Activities Absence Form at least 24 hours prior to the absence. All work due before the absence must be turned in before departure to receive full credit. Failure to do this will result in a 0 in the gradebook for that assignment until the assignment is turned in, after which a maximum grade of 50% is achievable. Students who do not communicate absences and get them cleared by their teacher will have detention the following school day.