Grade 9 Science Course Outline 2019-2020



TEXTBOOK

Glencoe Science - Physical Science with Earth Science

DESCRIPTION OF COURSE

Grade 9 Science will promote curiosity in the scientific streams of physics, chemistry, Earth science, and space science through a variety of interactive and hands-on activities.

The science course helps students to develop abilities and skills that are useful in everyday life, encourages safe working practice and promotes effective communication. It provides constant opportunities for students to identify valid sources of information, work effectively as group members and use technology to access, filter and retrieve information effectively.

EXPECTATIONS IN CLASS

For each class, please bring:

- 1. Pencil
- 2. Eraser
- 3. Textbook
- 4. Science Binder
- 5. Lab Book

Getting ready: When you come into class, get all of your materials out on the table in front of you, including your homework. To be on time for class, you must be at your desk with your materials out by the end of the bell. Please put any personal equipment in your bag and then put your bag safely under the table.

Homework: Please write your homework task down in your planner.

Leaving the room: Please do not leave the room without asking.

Late Assignments: Any assignments/projects/lab reports that are late, without having made arrangements with the teacher at least one week prior, will have 5% of their total mark for that assignment deducted for each day it is late.

Tests: If you miss a test and did not discuss your absence with the teacher at least one week before the test or have a note explaining your absence, you will receive a zero on that test.

GRADING

Your grade will be determined by your work in these categories:

1) Prepared/Punctual/Productive. Positive/Pleasant/Polite - 10% of your grade.

This is a grade you receive for your performance during every class.

2) Daily work - 25% of your grade.

Daily work is anything we complete in class including practical experiments, worksheets, and discussions.

3) Projects – 25% of your grade.

Projects are longer tasks, designed to practice skills including research, organization, group work, and presentation. They will usually take more than one class period to complete and will involve completing some of the work outside of class time.

4) **Quizzes** – 20% of your grade

Short assessments between 5-10 questions, taking 5-10 minutes to complete. Used to check your progress throughout the course.

5) Tests – 20% of your grade

Chapter exams cover all the material learned in one chapter. They will be completed without using your notes.

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Letter grade	Mark range	
A+	97-100	
A	92-96	
B+	88-91	
В	83-87	
C+	79-82	
С	74-78	
D+	70-73	
D	65-69	
F	64 or below	

PLAGIARISM POLICY

Students who hand in school work that is not their own are guilty of plagiarism. Students who plagiarize will be dealt these consequences:

First offence:

- phone call to parents and the work redone and the grade reported
- explain to parents consequence for second offence

Second offence:

- phone call to parents and the work redone and assessed, with the grade of "0" recorded
- explain to parents consequence for third offence

Third offence

- phone call to parents and the work redone and assessed, and a grade of "0" recorded
- Saturday School assigned by school administration
- explain to parents the consequence for fourth offence

Fourth offence

- phone call to parents and the work redone and assessed, and a grade of "0" recorded
- 2 day Out of School Suspension by school administration
- preamble with parents expulsion on fifth offence

Fifth offence

- expulsion

COURSE CONTENT

Note: course content and test dates are subject to change throughout the year.

Unit 1: Introduction to Science (Chapters 1, 2, 3 and 4)

- The nature of science
- Science, Technology and Society
- Motion, Acceleration and Forces
- The Law of Motion

Unit 2: Energy (Chapters 5, 6, 9, 13, 14 and 16)

- Energy
- Work and Machines
- Thermal Energy and States of Matter
- Electricity
- Magnetism
- Energy Sources and the Environment

Unit 3: Waves (Chapters 10, 11, and 15)

- Waves
- Sound
- Electromagnetic Waves
- Light
- Mirrors and Lenses

Unit 4: Earth (Chapters 17, 20 and 21)

- Earth the inside story
- Earth's Materials: Rocks and Minerals
- Earth's Changing Surface
- Weather and Climate

Unit 5: Matter (Chapters 18 and 19)

- Solids, Liquids and Gases
- Classification of Matter
- Properties of Atoms and the Periodic Table
- Elements and their Properties

Unit 6: Space, the Final Frontier (Chapters 7, 8 and 26)

- The Earth Moon Sun System
- The Solar System
- Stars and Galxies