

Physical Science

Grades:	6th – 8th
Day:	Tuesday
Time:	11:00 am – 12:30pm
Length of Class:	20 Weeks
Semester:	Fall and Winter
Tuition:	\$400.00
Class Dates:	

Week 1: Week of September 11

Week 2: Week of September 18

No classes from September 25 – October 6, 2023 – Jewish Holidays

Week 3: Week of October 9

Week 4: Week of October 16

Week 5: Week of October 23

Week 6: Week of October 30

Week 7: Week of November 6

Week 8: Week of November 13

No classes from November 20 – 24 – Thanksgiving Holidays

Week 9: Week of November 27

Week 10: Week of December 4

Make-Up Days: Week of December 11

Week 11: Week of January 8

Week 12: Week of January 15

Week 13: Week of January 22

Week 14: Week of January 29

Week 15: Week of February 5

Week 16: Week of February 12

Week 17: Week of February 19

Week 18: Week of February 26

Week 19: Week of March 4

Week 20: Week of March 11

Make-Up Days: Week of March 18

Instructor's Name: Heather Getson
Instructor's Email: jhgetson@gmail.com
Instructor's Phone: (517)442-9015
Office Hours: By Appointment

Description of Class:

This class is an introduction to the physical sciences including basic chemistry, geology, astronomy and physics. These sciences make the world go around and having a strong introduction in the field will help students succeed later on with their science studies.

Class Approach:

Instructional strategies include modeling exercises, laboratory experiments, virtual labs, projects, class discussions, and problem-solving exercises.

Goals:

At the end of this course, students will be able to

- Demonstrate specific knowledge about scientific concepts and themes
- Evaluate scientific claims and issues that affect daily life
- Critically read scientific material
- Communicate effectively about physical science subjects

Textbook:

Excerpts from other texts will be provided via Canvas as PDF downloads

Science Fusion – Model H – Matter and Energy

Science Fusion – Model I – Motions, Forces and Energy

Science Fusion - Model J – Sound and Light

Additional Supplies/Resources Needed:

Students are expected to come to class prepared with a

- pencil
- ruler
- eraser
- a notebook
- loose-leaf and/or printer paper

Students should have a headset with microphone, a webcam, a computer and stable internet connection. Access to a printer is also required.

Materials will be required for labs (will mostly be household materials) and you will be notified about these materials 1-2 weeks prior to the lab via Canvas announcement.

It is recommended that parents supervise their children during labs. Please note that some labs will be completed only by the teacher, while the students observe.

Requirements:

Students are expected to take part in class discussions and demonstrate a knowledge of their weekly reading assignment completed beforehand.

Weekly Homework:

Weekly homework will be a combination of reading, writing, research, and questionnaires. Occasionally, short laboratory procedures will be part of the weekly homework as part of the inquiry-based framework of the course. Clear instructions (including video when needed) will be provided for these labs.

Homework Policy:

Late assignments will be penalized 5% per day, for a maximum of 3 days. After 3 days, the student will not receive any marks for late homework. Late quizzes and exams will not be accepted.

If you will have an issue meeting a deadline, please contact me to discuss.

Additional Policies:

Attendance is expected at all classes. Students are expected to be respectful to one another during class debates and discussions. Students must practice safe lab procedures during laboratory activities.

There will be a strict zero-tolerance policy in regard to plagiarism and cheating. "Cheating" is defined as unauthorized help on an examination or assigned course material. A student must not receive from any other student or give to any other student any information, answers, or help during an exam. "Plagiarism" is defined as the taking of a person's ideas, words, or information and claiming those properties as one's own. The use of all ideas, words, or information from any source must be properly referenced and due credit must be given to its author. All cheating and plagiarism infractions will result in a grade of "0" for the assignment.

Evaluation:

In-Class Participation – 5%

Weekly Assignments – 25%

Unit Tests and Projects – 25%

Midterm Exam – 20%

Final Exam – 25%

Grading Scale:

Percentages/Grades

100-90: A

89-80: B

79-70: C
69-60: D
59 – 0: No effort: F

Anticipated **Weekly Course Schedule:**

Week	Topic
Week 1	Introduction, Syllabus Review and Matter
Week 2	Energy
Week 3	Energy - Lab
Week 4	Atoms and the Periodic Table
Week 5	Atoms and the Periodic Table Cont.
Week 6	Interactions and Matter
Week 7	Solutions, Acids and Bases
Week 8	Solutions, Acids and Bases - Lab
Week 9	Motions and Forces
Week 10	Motion and Forces - Lab
Week 11	Work, Energy and Machines
Week 12	Work, Energy and Machines - Lab
Week 13	Electricity and Magnetism
Week 14	Electricity and Magnetism - Lab
Week 15	Introduction to Waves
Week 16	Sound
Week 17	Sound - Lab
Week 18	Light
Week 19	Light - Lab
Week 20	Wrap - Up