



# SCIENCE 7

	<p><b>GRIMSHAW PUBLIC SCHOOL</b> <i>"Inspiring Our Students Today For Tomorrow's Future"</i></p> <p><b>Science 7 Course Syllabus</b> <b>2021-2022</b> Teacher: Erin Taje</p>	
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**Classroom**  
**7B - P149 Day 1**  
**7A - P149 Day 2**  
**tajee@prsd.ab.ca**

### **Welcome to Science 7!**

Science 7 is an exciting course that aims to prepare students to use critical thinking to solve problems, expand their scientific curiosity, appreciate and value the world around them, make connections between science and their everyday life and become scientifically literate adults.

### **Course Outline and General Outcomes**

<p><b>Unit 1: Plants for Food and Fibre</b> (September-October)</p> <ol style="list-style-type: none"><li>1. Investigate plant uses</li><li>2. Investigate life processes and structures of plants</li><li>3. Analyze plant environments</li><li>4. Identify and interpret the relationships among human needs, technologies, environments, and the culture and use of plants as sources of food and fibre</li></ol>
<p><b>Unit 2: Interactions and Ecosystems</b> (October-December)</p> <ol style="list-style-type: none"><li>1. Describe relationships between humans and their environments</li><li>2. Trace the flow of energy and materials within an ecosystem</li><li>3. Monitor a local environment, and assess the impacts of environmental factors on growth, health and reproduction of organisms</li><li>4. Describe relationships in maintaining life-supporting environments</li></ol>
<p><b>Unit 3: Heat and Temperature</b> (January-March)</p> <ol style="list-style-type: none"><li>1. Illustrate how human needs have led to technologies for obtaining and controlling thermal energy</li><li>2. Describe the nature of thermal energy and its effects on different forms of matter</li><li>3. Apply an understanding of heat and temperature in interpreting natural events and technological devices</li><li>4. Analyze issues related to the selection and use of thermal technologies, and explain decisions in terms of advantages and disadvantages for sustainability</li></ol>
<p><b>Unit 4: Structures and Forces</b> (March-April)</p> <ol style="list-style-type: none"><li>1. Describe and interpret different types of structures and identify materials from which they are made</li><li>2. Investigate forces within structures, and forces applies to them</li><li>3. Investigate the properties of materials used in structures</li><li>4. Describe processes used in building structures to meet human needs with a margin of safety</li></ol>
<p><b>Unit 5: Planet Earth</b> (April-June)</p> <ol style="list-style-type: none"><li>1. Describe methods used in the scientific study of Earth and its component materials</li><li>2. Identify evidence for the rock cycle and explain the characteristics of particular rocks</li><li>3. Investigate and interpret evidence of major changes in landforms and rock layers</li><li>4. Describe, interpret and evaluate evidence from the fossil record</li></ol>

## COURSE EVALUATION

A variety of instructional and assessment strategies will be used throughout this course. The course includes a Final Exam worth 20% of your final grade. The 80% class mark is evaluated over the term as follows:

School Evaluation		Individual Unit Evaluation	
Unit A	16 %	Unit Exam	35 %
Unit B	16 %	Quizzes	15 %
Unit C	16 %	Unit Project	15 %
Unit D	16 %	Assignments & Labs	35 %
Unit E	16 %	<i>Unit Total</i>	100 %
Final Exam	20 %		
<i>Course Total</i>	100 %		

## MISSED/LATE WORK POLICY

Circumstances may arise where students miss assignment due-dates, lab investigations, quizzes or unit exams. Missed assessments must be made up and handed in at the earliest possible time. Missed labs **MUST** be made up at another time outside of classroom hours. It is the responsibility of the student to arrange a time with the teacher. Chronic absences are a cause for concern. Regular student and parent monitoring of the student's progress is recommended through PowerSchool, which is accessible via the GPS website.

**Assignments and Labs** are a component of every unit and are to be handed in no later than the specified due-date. At the teacher's discretion, a student handing in a past-due assignment will receive a completion credit in place of a numerical grade (i.e., students will receive an "excused" once they complete a past-due assignment, which neither helps or hinders their overall grade).

**Quizzes** are a component of every unit and must be written on the date specified. If a chapter quiz is missed *with a valid excuse*, it must be written the following day during either Flex or after school. No retests will be permitted.

**Unit Exams** are comprehensive tests that cover the content from the entire unit. If a unit exam is missed *with a valid excuse*, it must be written the following day during either Flex or after school.

**Final Exam:** The final exam is a cumulative test at the end of the year that covers the content from the entire course.

## REQUIRED RESOURCES

The **textbook** for Science 7 is *Science Focus 7 by McGraw-Hill Ryerson*. Students are required to bring their textbook to class each day.

## CELLPHONES AND MOBILE TECHNOLOGY

Mobile technology can be an effective tool for learning. When a mobile device becomes a distraction in any way, the student will be asked to turn in their device for the duration of the class. Any ongoing concerns will be addressed seriously.

## PLAGIARISM

All students' work is required to be a product of their own thinking and ideas. It is encouraged that students use outside credible academic sources to further their understanding and knowledge and if those resources are used in an answer, proper citation is required. Students are not to copy from their peers. If it is found that this has occurred, both parties will either receive an incomplete for the assignment or be given the chance to redo the assignment within a deadline.

## CLASSROOM EXPECTATIONS AND STRATEGIES FOR SUCCESS

1. **Come to class, every single day.** Coming to class involves more than just showing up; you must be prepared to think hard and work hard. Also, please be on time.
2. **Participate wholly in class.** Learning is not the rote memorization of facts. In-class activities provide an opportunity to make connections and gain a deep understanding of material. If you make a choice to not participate actively, you are wasting these opportunities as well as your time. Challenge yourself to think, focus and *do*.
3. **Do not let yourself get distracted.** This includes your friends and your cellphone. This is a waste of your time spent in class. Learn the material while it's being taught and discussed in-class, not the night before the exam. By the same token, do not distract the people around you; allow them to succeed.
4. **Ask questions.** Be curious, desire to learn more, and never be afraid to ask questions. Clear up any misunderstandings early and as they arise, not the night before the exam.
5. **Review material every day.** A considerable amount of learning happens during reflection. Take time every night to review your notes and reflect on what we learned in class that day. Even a few minutes every night will help. If you did not understand something that day, challenge yourself to figure it out (look at the textbook, find videos online, ask someone else in the class, and of course, come see me the next day).

Science is an exciting field with a lot of hands-on laboratory work. Students are required to listen diligently to instructions before engaging in any lab activities in order to ensure their safety. Safety will be covered before all lab activities, but know that the following rules apply to student conduct in the laboratory environment:

- Shoes are to be worn and tied at all times.
- Goggles will be provided when required.
- All equipment must be handled carefully and respectfully.
- Absolutely no unsafe behaviour will be tolerated at any time.

I have high, positive expectations of every student, and every student should have the same expectations of themselves. All work should be completed with pride and to the best of your ability. I am always available to help. I believe you can succeed.

*GPS: The Right Direction*