

GRADE 9 COURSE OUTLINE

Students in Grade 9 Science work safely with chemicals to explain, interpret and extend their understanding of chemical theory. They also design, test and evaluate electrical devices that transfer and transform energy, and they explore the role of genes and DNA in the diversity of life. Students study space exploration and how science and technology are related.



PERSONAL DEVICES FOR LEARNING:

WH Croxford is a 1-to-1 school. Students should bring a personal device that will support working and learning in this environment. A laptop or tablet are considered appropriate learning technologies. Cell phones are NOT appropriate learning devices.

**Devices should be charged, updated, and ready to use at the start of each day.**

UNIT PROGRESSION:

- **Matter and Chemical Change** - (approximately 5 weeks)
  - Students investigate Chemical and Physical properties of matter, study the Periodic Table of Elements, examine types of chemical reactions, and practice naming chemical compounds.
- **Environmental Chemistry** - (approximately 3 weeks)
  - Students investigate the role of substances in the environment and their effects on living things.
- **Electrical Principles** - (approximately 3 weeks)
  - Students examine electrical devices, analyze how they convert types of energy, practice calculating energy efficiency and study the environmental impacts of generating and using electricity.
- **Biodiversity** - (approximately 3 weeks)
  - Students study examples of diversity within and among species. They will examine the roles that reproduction and genetics play in establishing or limiting biodiversity, identify the significance of genetic diversity in the survival of a species, and look at ways that Humans can influence diversity for either the benefit or detriment of a species.
- **Space Exploration** - (approximately 2 weeks)
  - Students examine the roles that technology plays in the exploration of space, and explore other ways that Humans can benefit from this technology.

**COURSE EVALUATION:**

All evaluation will be directly connected to the core outcomes in each subject area, and according to the following criteria:

Mastering	Advancing	Progressing	Emerging	Beginning	Limited	Not Met
Can apply the learning to complex tasks independently .	Can apply learning to increasingly difficult tasks.	Can apply the learning to moderately challenging tasks with some support.	Can apply the learning to basic tasks with support.	Can apply the learning to simple tasks with direction.	Can not yet apply learning to simple tasks. Extensive support required.	Not enough evidence to show achievement of outcome.
90-100%	80-89%	70-79%	60-69%	50-59%	40-49%	< 40%

Summative reporting of student achievement will take place at the end of the Semester and ongoing student achievement will be communicated regularly via Power School. Please contact your teacher if your mark has not been updated in a couple of weeks.

### **PROVINCIAL ACHIEVEMENT TESTS**

Rocky View Schools has decided to opt out of PATs this year. There may be a cumulative final exam at the end of the Semester.

### **COMMON GRADE 9 EXPECTATIONS:**

- Students are to respect each other's right to learn in a safe and respectful environment. Personal attacks or insults based on personal, religious, cultural etc. beliefs will not be tolerated.
- Students will respect the teacher's right to teach. This includes paying attention when we are speaking and treating us as you would any other adult in the school.
- Students will come to class ready to learn and participate to the best of your ability. This includes being ready with supplies for the day, and a willingness to learn.
- This is a professional work environment. You are expected to dress and act accordingly, and exercise maturity and self-control.
- Students will use materials and technology in an appropriate and respectful manner. Use of your devices are a privilege, not a right—if you are using them inappropriately, you will be asked to put them away. This includes having devices open when I, or anyone else, is speaking to the class, inappropriate or explicit images or text, ringing, or alerts during class, etc.
- **It is the student's responsibility to make up missed work.** All assignments will be available in our Google Classroom. Parents may contact me at any time for an informal update regarding students' completed work.
- All assignments **MUST** be completed. If an assignment is missed, not completed, or not handed in, you will be required to complete this assignment for homework or to complete an alternate assignment that demonstrates your learning of the same outcomes.
- If you are ill or unable to hand in an assignment on the due date, you are to contact the teacher **prior to the date**, to make arrangements for completing the work.
- If you know that you are going to miss a due date or test date due to absence, it is your responsibility to **contact your teacher** to let him/her know.

### **Items to bring EVERY CLASS:**

Students should bring the following items with them EVERY CLASS!!

<ul style="list-style-type: none"><li>● a positive attitude</li><li>● pencils, pens, binder with paper</li><li>● graph paper</li><li>● a simple calculator</li><li>● ruler or geometry set</li></ul>	<ul style="list-style-type: none"><li>● a Personally Owned Device such as a laptop or tablet computer (cell phones are NOT acceptable PODs for working)<ul style="list-style-type: none"><li>○ a charger for their POD</li></ul></li><li>● headphones for watching instructional videos</li></ul>
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**Online Course Access:** It is expected that all students are aware of due dates, test dates, and daily assigned work. To facilitate this, my teacher page on the W.H. Croxford website as well as the Google Classroom (classroom.google.com) will have all of this information shown on a calendar, digital and/or physical. **Students should access the Google Classroom, School calendar, PowerSchool and school Gmail EVERY DAY.**

**Use of Class Time:** Students are expected to be ready to work when class begins, to use all class time effectively, and to complete any unfinished work on their own time.. All assigned work is relevant and important, and practice is needed to become proficient. *All assignments must be completed.*

**Extra Help/Focus:** Students who would like individual assistance should see me to book a time to come for help before or after school. Individual assistance will be provided to any student who shows a good work ethic and who uses class time effectively.

**Homework:** Any work not completed in class must be done outside of class time. Students are required to complete all assigned work. Work should be submitted on the due date. Late submissions may not be accepted after they have been marked and returned to students. An alternative assignment may be given to make up the missing grade.

**Missing Quizzes and Tests:** Students must write all quizzes and tests. Students who miss a quiz or test will receive a mark of "NM" (or Not Met) for those learner outcomes, unless I have been notified in advance or the absence is excused through the office. When necessary, quizzes/tests can be made up on a case-by-case basis.

**REGARDING PLAGIARISM:**

Students are expected to exercise academic honesty and acknowledge the sources (print and internet) used in completing various tasks throughout the year. Sources of information must be cited using an appropriate format for giving credit where credit is due, such as a bibliography or works cited list ([www.citationmachine.com](http://www.citationmachine.com)). To submit work that is not completely your own is plagiarism. If you are ever unsure, check with your teachers before you hand work in. Plagiarized work will be returned and not included for course credit until it is corrected and resubmitted.

**If you have any questions or concerns about this class, please don't hesitate to contact me!**

**Mr. Neil Sandham**

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