Name: _____ Date: _____

Physical Science 20 Syllabus – Fall 2018

Course Specifics

Instructor: Ms. Hilary Hayduk
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Website: www.haydukps20.weebly.com
Textbooks: Glencoe Physics: Principles and Problems
Glencoe Chemistry: Matter and Change

Course Description

The aim of Physical Science 20 is to give students an introduction to topics in chemistry and physics in an integrated manner. Students will gain understanding of theoretical concepts, develop scientific skills and literacy and practice critical thinking and reasoning. Students will have the opportunity to participate in projects and hands-on activities to further their understanding. Additionally, there will be some study of careers and industries related to topics studied in class.

Outcomes

The course grade for Physical Science 20 will be determined based on each student's proficiency in the curricular outcomes. There are five main areas of learning, each with one or more outcomes (learning goals):

1. Properties of Waves (30%)
    - Investigate properties of one-, two-, and three-dimensional waves.
    - Examine how waves reflect from a variety of barriers.
    - Analyze how waves refract at boundaries between different media.
2. Foundations of Chemistry (30%)
    - Predict products of the five basic types of chemical reactions and evaluate the effect of these reactions on society and the environment.
    - Develop an understanding of the mole as a unit for measuring in chemistry.
    - Use stoichiometry to determine the relative amounts of substances consumed and produced in chemical reactions.
3. Heat (25%)
    - Analyze the effect of heat on matter during temperature changes and changes of state.
    - Determine quantities of heat involved in chemical reactions through experiments and calculations.
4. Student-Directed Study (10%)
    - Create and carry out a plan to explore a topic of interest relevant to Physical Science 20 in depth.
5. Career Exploration (5%)
    - Explore physical science related occupations in Saskatchewan, Canada and the world.

Assessment

All assessments will be categorized into one of the course outcomes. This means that unit tests and the final exam will not have one overall mark, but one mark for each outcome being assessed on that evaluation. Grades will also be entered in PowerSchool by outcome.

Student assignments will be evaluated on a proficiency rubric. Scores are shown in the table below. Each level is described in more detail in the course lab manual.

Score	Abbreviation	Percentage
Advanced	A	100%
Proficient	P	85%
Functional	F	70%
Developing	D	55%
Insufficient Evidence	IE	0%
Not Submitted	NHI	0%

An assignment will be given a grade of IE for the following reasons:

Reason	Solution
Missing significant parts of the assignment, or assignment has many major errors	Assignment must be redone and resubmitted, but will receive a late mark.
Assignment was not submitted by the late deadline	Student may choose to do an alternate assignment for that grade, but will receive a late mark.
Assignment was plagiarized (see below)	For the first offense, the assignment must be redone and resubmitted, will receive a late mark and will be given the grade of the original assignment. For subsequent infractions, the assignment will be given a mark of zero (R).

Quizzes, unit tests and the final exam will be marked using traditional point-based marking.

Class Expectations

YOU ARE EXPECTED TO:

- Be in class every day.
- Be respectful at all times to other students, teachers, staff and yourself.
- Bring all of your supplies to every class and come dressed appropriately on lab days.
- Eat your breakfast/lunch/snack prior to entering the lab on ANY day. No food is allowed in the lab.
- Keep up with the class in terms of homework and assignments. You will be more successful in Physical Science 20 if you keep up with the content.
- Participate and ask questions in class. Ask for help when you need it.

Class Policies

Homework

Students should expect to have homework every day. There are no marks for completed homework. There will be one quiz per week on the material from the previous week's homework, in addition to any labs or activities done in class.

Late Work

Due dates for assignments are on the Google Calendar on the class website. Students are expected to hand in work by the due date. Work that is submitted within five school days of the due date will be given a "late" designation in PowerSchool, if the student has not made arrangements in advance for an extension.

The late deadline for an assignment is five school days after the due date, at the beginning of class. Graded work will be handed back on the day of the late deadline. At this point, that assignment will no longer be

accepted. Students may be given the option to complete an alternate assignment to earn credit for the missing assignment, if it is reasonable to provide that option.

Graded Work
Students may schedule time with Ms. Hayduk to review corrected assignments and tests; however, the mark for an assessment as it was originally submitted (with the exception of marking errors) will stand. Students will have the option of doing two quiz rewrites during the semester. These rewrites must be done before school or at lunch, and will replace the mark of the original quiz. Quiz rewrites must be done by the second last Friday before finals.

Missed Classes
Make-up labs must be scheduled within one week of the original lab date, and cannot be completed during class time. Due to the nature of the shared lab space, lab equipment cannot be reserved for extensive periods of time. Students are responsible for scheduling a time for their make-up lab.

Missed tests and quizzes must be written the day a student returns to school, unless alternate plans were made in advance. Missed tests and quizzes must be written outside of class time.

Attendance Incentive
As with all other classes, students earn the attendance incentive in this class by having:

- No unexcused absences and seven or fewer excused absences;
- Three or fewer lates;
- No missing assignments and three or fewer late assignments; and,
- All assignments completed in a satisfactory manner (no zeroes).

For the purposes of this class, an assignment will be considered to be completed in a satisfactory manner if they have demonstrated, at minimum, a developing level of proficiency on the assessment.

Helping Yourself
Ms. Hayduk is available for extra help before school and at lunch, by request. She can be found in the science office, across the hall from the classroom. She is not available after school.

It is much easier for Ms. Hayduk to help you if you come with specific questions. There is no limit on questions (but keep in mind that, "I don't get it," is not a question)!

If you are struggling with a whole topic or unit, please make use of the many resources on the course website, as often a different explanation may help to get you on track. Keep in mind that learning new things can be a "mentally uncomfortable" process; it may take some time, effort and many strategies before something clicks.

Please plan to come in well before the deadline of an assignment if you are having trouble.