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**Course description:** In this inquiry-based course, students will explore life and physical science concepts. There are six major units of study (see table below). These investigations will provide meaningful opportunities for students to make connections to other disciplines including mathematics, engineering, and art. Daily lab experiences will promote the development of technology, literacy, and communication skills. Working as scientists, students in this course will conduct and design experiments, make observations, record and analyze data, read and develop scientific explanations. Through these experiences, students will develop the content knowledge, critical thinking skills, lab protocols, and safety procedures necessary to excel at the high school level.

Timeline	Unit	Essential Questions
Aug-September	Natural Systems	In what ways are the organisms in an ecosystem interconnected?
October-November	Diversity	How are the characteristics of an organism related to its genes and the environment?
December through Mid-January	Physical Properties of Matter	How do the properties of materials determine their uses?
Mid-January through mid-February	Mixtures and Solutions	What roles do mixtures and solutions play in our daily lives?
Mid-February through March	Elements, Compounds, and Chemical Reactions	What types of substances are pure? Which reactions are the most common?
April-June	Structure and Function of Living Systems	How do our bodies work?

**Materials:** Spiral notebook (green, single subject, but student will need multiple throughout the year), binder, student planner, writing utensil

**Homework:** Students can expect a range of one to three homework assignments per week. Due dates will reflect the complexity and nature of the assignment – shorter assignments will be due day after they are assigned, students will have additional time for longer assignments. Homework will count for 20% of the student's grade. You will be able to access the upcoming week's homework by Sunday night on MyMPS. You will need your child's username and password. There is a link on my webpage.

**Learning targets:** Learning targets are the essential concepts and skills students will master in this course and are closely aligned with Minnesota state standards for science. There are 24 long-term

learning targets that students will be assessed this year, and these will count for 80% of the student's grade. More information about these targets can be found on my webpage. Daily learning targets will be posted in our classroom. Like steps on a staircase, the daily targets will support students in progressing towards mastery of the long-term targets.

**Re-do's, retakes, revising policy:** Students may revise their work or re-take a learning target assessment in order to demonstrate increased learning. **Before re-taking an assessment, students will be asked to demonstrate additional practice on the learning target,** and the assessment may occur in a different format than the original assessment. All re-do's, retakes, and revisions are due by two weeks within the end of the unit.

**Standards-based grading:** The purpose of standards-based grading is to align grading with the mastery of state content standards as measured by consistent student achievement data and common criteria for grading. The primary goal of SBG is to better communicate what each student knows and is able to do, as well as to inform the teacher, student, and parent what may be next steps for areas for growth. Assignment and Learning target grades will be based on the JPS 4-point Standards-Based Grading Scale (shown below). The Student/Parent Portal then translates those grades into overall letter grades. Please see the separate handout about SBG and letter grades for details.

<p style="text-align: center;"><b>4</b> <b>Exemplary</b></p>	<p style="text-align: center;"><b>3</b> <b>Proficient</b></p>	<p style="text-align: center;"><b>2</b> <b>Partially proficient</b></p>	<p style="text-align: center;"><b>1</b> <b>Not proficient</b></p>
<p style="text-align: center;">Wow! No errors Extremely thorough Fully developed Fully supported Exceeds criteria Sophisticated understanding Most effective</p>	<p style="text-align: center;">On target Complete Few errors Meets criteria Adequately developed Adequately supported Mastery level Satisfactory skills</p>	<p style="text-align: center;">Almost there Errors detract from mastery Progressing Meets some criteria Partially developed Partially supported Partial understanding Not yet mastered</p>	<p style="text-align: center;">Keep trying! Not accurate Inappropriate Does not meet criteria Minimally developed Minimally supported Inadequate or incomplete Beginning level mastery</p>

**Questions? Comments?** Email is the best way to contact me. Please do not hesitate to send questions or comments!

Sincerely,  
Kate Holland