Course Overview: Science
In this course, students will explore their connection to and place within the natural world by engaging in the practices of science.

Units and Activities: What will we be learning about and doing in this course?

Scientists are naturally curious and inquisitive. We will fuel our exploration with deep thinking questions. Although your questions and curiosity will drive our journey, we will use the following as a jumping off point:

- Climate change: How and why is our climate changing and what is my role in slowing climate change?
- Energy and our environment: How are matter and energy cycled through our environment?
- Life at the cellular level: How do cells act as the building blocks of life?
- Genetics and Evolution: How are genes passed from one generation to the next? How has life changed our Earth and how has our Earth changed life?

Standards: What skills will I gain by the end of this course?

This course will assess the knowledge and skills students build in key Anchor Standards:

- **Developing and using models:** I can make my thinking visible to others using a variety of modeling strategies.
- **Constructing Explanations and Designing Solutions:** I can make a claim supported by evidence and reasoning.
- **Obtaining, Evaluating and Communicating Information:** I can clearly and effectively present information in a variety of important formats.

Team Pathfinders is an interdisciplinary team that includes Global Studies, English, Science, and Math. We collaborate to meet the social, emotional, intellectual, and physical needs of 7th-grade students. Part of that is a set of common expectations. These include:

1. **Hydration!** Your brain needs water to function at its highest levels. Please bring a filled water bottle to class.
2. **Communication:** There may be times when you have to miss class. Please e-mail us or see us in person before or after school to check in about what you missed.
3. **Engagement:** We care deeply about your learning. Please help us by arriving on time with the materials you need to be fully present in class.

*The rest of this syllabus outlines school-wide grading and assessment practices and is a copy of the information found in the student handbook.*
Assessment of Learning

Assessment Types:
Three types of assessments will be used to determine if you have gained the necessary knowledge and skills of this course: Formative assessments, Summative assessments, and Habits of Work for Learning. Each is briefly described below:

**Formative Assessments:** *Formative = Forming my knowledge and skills.* Formative Assessments receive a weight of .1 in the overall grade. Formative assessments are information for teachers, students, and parents on the progress students are making as they practice gaining knowledge and skills found in Anchor Standards. Teachers use the results of these assessments as data to understand individual student learning needs, adjust instructional pathways, and modify lessons to help students better meet course standards. Students use the results of these assessments to determine how they are progressing and to plan steps to ensure their success.

**Summative Assessments:** *Summative = Summation of my knowledge and skills.* Summative Assessments can receive three different weights: 1, 1.5, or 2 depending on the size of the assessment, and therefore have the greatest impact on the Overall Course Mastery Grade. Summative assessments are used as a measure of independent student achievement in Anchor Standards. Throughout this course, summative assessments provide benchmark student achievement data. A summative assessment will always have clear scoring criteria for students to understand how they are performing.

**Habits of Work for Learning:** Habits of Work for Learning (HOWLs) are skills and dispositions that are essential to the learning process but do not provide evidence of what a student knows or can do in relation to content. WUHSMS teachers work to foster Habits of Work for Learning in three categories: preparation, participation, and perseverance.

Assessment Scoring:
Teachers will provide framing for summative assessment scores using proficiency level scoring criteria for grading similar to the example below:

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**Anchor Standard:** Computational Modeling

**Course Standards:** NGSS HS-L2-1 Use mathematical and/or computational representations to support explanations of factors that affect the carrying capacity of ecosystems at different scales. NGSS HS-LS2-4 Use mathematical representations to support claims for the cycling of matter and flow of energy among organisms in an ecosystem.

<table>
<thead>
<tr>
<th></th>
<th>1.0, 1.3, 17 NC, NC+, C-</th>
<th>2.0, 2.3, 2.7 C, C+, B-</th>
<th>3.0, 3.3 B, B+</th>
<th>3.7, 4.0 A-, A</th>
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</thead>
<tbody>
<tr>
<td><strong>Representation</strong></td>
<td>I can identify the components of a system.</td>
<td>I can represent the components of a system using numbers or variables.</td>
<td>I can show connections between components of a system using a computational model.</td>
<td>I can use mathematics and/or a computational representation to make predictions about how changing one variable or component will affect the system.</td>
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<tr>
<td><strong>Computational Modeling &amp; Analysis</strong></td>
<td>I can use a given computational model to explore relationships between components of a system.</td>
<td>I can use a given computational model as evidence to support a claim or explanation of a system.</td>
<td>I can create and/or revise a computational model and use it as evidence to support a claim or explanation of a system.</td>
<td>I can expand the computational model to illustrate how a change in a system component can impact all other relevant components.</td>
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**HOWL Scoring:**
HOWLs will be scored at least once per checkpoint, and will be based on the frequency with which students demonstrate each of the habits: preparation, participation, and perseverance.

**How is my Overall Course Grade Determined?**
Overall course grades will be reported as letter grades and will be comprised of:
- Formative & Summative Scores: 95%
- HOWLs: 5%

For more information, please see the WUHSMS student handbook.

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**Communication:**

**How Do I Know My Grades?**
- On Summative Assessments, a teacher will provide both a 4-point grade and a letter grade.
- You can monitor your progress in the following ways:
  - By reading feedback and scoring returned to students on summative assessments
  - By monitoring the scores and Overall Course Mastery Grade in the Parent/Student portal on JumpRope
  - By monitoring the grades sent home quarterly through report cards

**Where Can I Find This Syllabus during the School Year?**
- This syllabus will be available on the school website in each subject’s department tab once the school year is up and running.

**How Do I See What’s Past Due?**
- If a student is missing an assessment, it will be listed in the red “Missing Assessment” section of the JumpRope Parent/Student Portal along with any attachments.

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**Schoolwide Procedures:**

Please see the Student Handbook for Procedures and Policies related to: Due dates and deadlines, extra credit, retaking assessments, and turnaround time for grade entry.

**Personal Mobile Devices:** This class will follow the procedures outlined in the student handbook.
Ms. Fellows BY ___________________

I have read this syllabus, and I have contacted the teacher with any questions I have.

Student name (printed): ________________________________

Student Signed: ________________________________ Date: __________________

Parent/Guardian name (printed): ________________________________

Parent Signed: ________________________________ Date: __________________