



Syllabus: Practices & Policies

2021-2022













Franklin High School

Section 1: Course Overview

<i>Course Title</i>	Biology NGSS
<i>Instructor Info</i>	Name: Scott Barrentine Contact Info: sbarrentine@pps.net
<i>Grade Level(s)</i>	10th-12th grade
<i>Room # for class</i>	Room: S-020
<i>Credit</i>	Type of credit: Science # of credits per semester: 0.5, so 1 total Science Credit
<i>Prerequisites (if applicable)</i>	NGSS Physics, NGSS Chemistry
<i>General Course Description</i>	<p>Welcome to NGSS Biology. This course covers the foundational principles of modern life science as outlined in the Next Generation Science Standards (NGSS). We will learn the content and applications of Biology by using science and engineering practices utilized by professionals in STEM fields.</p> <p>Students will work in small teams to complete investigations during the course, sometimes contributing data to ongoing research projects.</p> <p>Additionally, there will be a focus on how we can utilize the tools of biology to solve problems identified at the local level - from air pollution to climate change - and how those local solutions can contribute to global progress on such issues.</p>

Section 2: Welcome Statement & Course Connections



<i>Personal Welcome</i>	I'm excited to work with our students to become more thoughtful citizens!				
<i>Course Highlights</i> <i>(topics, themes, areas of study)</i>	<p>Units of Study:</p> <p>Unit 1 - Ecosystems & Biodiversity</p> <p>Unit 2 - Biomolecules</p> <p>Unit 3 - Cells to Organisms</p> <p>Unit 4 - Genomics</p> <p>Unit 5 - Evolution</p> <p>Unit 6 - Matter, Energy, & Climate Change</p>				
<i>Course Connections to PPS Relimagined Vision</i>	Relative to a biological lens and science literacy, students of this course will foster their ability to grow as compassionate critical thinkers, able to collaborate and solve problems, and be prepared to lead a more socially just world.				
Section 3: Student Learning					
<i>Prioritized Standards</i>	<p>The following skills will also be our grading categories in this course:</p> <table border="1" data-bbox="506 805 1797 1289"> <tr> <td data-bbox="512 810 821 1284"> <p style="text-align: center;">Design</p>  <p style="text-align: center;"><i>Setting up experiments and using engineering design</i></p> <p>"I can use the practices of science to investigate phenomena and design solutions through inquiry and engineering."</p> </td> <td data-bbox="827 810 1136 1284"> <p style="text-align: center;">Analyze</p>  <p style="text-align: center;"><i>Analyzing data and arguing from evidence</i></p> <p>"I can use data to identify patterns and make evidence-based claims."</p> </td> <td data-bbox="1142 810 1451 1284"> <p style="text-align: center;">Explain</p>  <p style="text-align: center;"><i>Scientific content and knowledge</i></p> <p>"I can use scientific language and models to explain how something works and answer questions"</p> </td> <td data-bbox="1457 810 1791 1284"> <p style="text-align: center;">Apply</p>  <p style="text-align: center;"><i>The impacts of science and engineering</i></p> <p>"I can explain how science and engineering are applied to address problems or issues in the world"</p> </td> </tr> </table>	<p style="text-align: center;">Design</p>  <p style="text-align: center;"><i>Setting up experiments and using engineering design</i></p> <p>"I can use the practices of science to investigate phenomena and design solutions through inquiry and engineering."</p>	<p style="text-align: center;">Analyze</p>  <p style="text-align: center;"><i>Analyzing data and arguing from evidence</i></p> <p>"I can use data to identify patterns and make evidence-based claims."</p>	<p style="text-align: center;">Explain</p>  <p style="text-align: center;"><i>Scientific content and knowledge</i></p> <p>"I can use scientific language and models to explain how something works and answer questions"</p>	<p style="text-align: center;">Apply</p>  <p style="text-align: center;"><i>The impacts of science and engineering</i></p> <p>"I can explain how science and engineering are applied to address problems or issues in the world"</p>
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<i>PPS Graduate Portrait Connections</i>	<p>I will help students grow their knowledge and skills in the following aspects of PPS's Graduate Portrait:</p> <p>The Design skill helps students become inclusive and collaborative problem solvers, as well as resilient and adaptable lifelong learners.</p>				



	<p>The Analyze skill helps students become inquisitive critical thinkers with deep core knowledge</p> <p>The Explain skill helps students become powerful and effective communicators and influential and informed global stewards.</p> <p>The Apply skill helps students to be reflective, empathetic, and transformative equity leaders who will shape a better future.</p>
<p><i>Differentiation/ accessibility strategies and supports:</i></p>	<p>I will provide the following supports specifically for students in the following programs:</p> <p><i>Special Education: Per student's IEP, I will make reasonable accommodations including but not limited to time for assignments, modes of content delivery, and methods of assessment.</i></p> <p><i>504 Plans: Per student's 504 Plan, I will make reasonable accommodations including but not limited to time for assignments, modes of content delivery, and methods of assessment.</i></p> <p><i>English Language Learners: Attention is given to making instructions explicit through visual and auditory means. Students may have access to a supportive peer, if appropriate and accommodations during assessments, as needed.</i></p> <p><i>Talented & Gifted: Communication with student and family to identify specific strengths and specify opportunities for enrichment throughout each unit.</i></p>
<p>Section 4: Cultivating Culturally Sustaining Communities</p>	
<p><i>Tier 1 SEL Strategies</i></p> <p><i>Shared Agreements</i></p>	<p>I will facilitate the creation of our Shared Agreements that respects and celebrates each student's race, ability, language, and gender in the following by surveying students about:</p> <ul style="list-style-type: none"> ● What goals they would like to pursue as a class ● What positive communities have looked like for them ● What they need to feel safe and comfortable in the classroom. <p>We will practice group work and then reflect on what worked and what didn't. Throughout our time together, I will affirm the validity of all perspectives - public school is a unique opportunity to be around a wide variety of backgrounds and cultural values. Our diversity is a strength!</p> <p>I will display our Agreements in each week's slideshow and a poster in the classroom. I hope to use our class goals to help students see why these agreements are important. I plan to use follow-up surveys and discussions to assess the effectiveness of our agreements.</p>



<p><i>Student's Perspective & Needs</i></p>	<p>I will cultivate culturally sustaining relationships with students by:</p> <ul style="list-style-type: none"> ● Asking them questions ● Validating all perspectives as a product of environment and experiences. <p>Families can communicate their student's needs with me by answering the 'back to school' survey, emailing me, or messaging me through Remind.</p>
<p><i>Empowering Students</i></p>	<p>I will celebrate student successes by:</p> <ul style="list-style-type: none"> ● Creating an environment where students feel comfortable sharing their ideas and products with each other so that we can all celebrate. ● Affirming that success is based on effort and time spent. ● Helping students see the intrinsic reward of challenging your brain so that it can grow stronger. <p>I will solicit student feedback on my pedagogy, policies and practices by:</p> <ul style="list-style-type: none"> ● Asking students to reflect on my class at regular intervals, both in surveys and conversations. ● Checking in regularly with students. ● Exit tickets <p>When class agreements aren't maintained (i.e. behavior) by a student, I plan to start the discussion with restorative justice questions that ask students to reflect on their thoughts, feelings, and the results of their actions. What can we do to pursue our goals for our community? How can you repair the current action and do better next time?</p>
<p><i>Showcasing Student Assets</i></p>	<p>I will provide opportunities for students to share and showcase their work with group work, gallery walks, and well-supported presentations to their peers.</p>
<p style="text-align: center;">Section 5: Classroom Specific Procedures</p>	



Section 6: Course Resources & Materials	
<i>Safety issues and requirements (if applicable):</i>	Emergency procedures for special scenarios are printed and hung in each room.
<i>Coming & Going from class</i>	<p>I understand the importance of students taking care of their needs. Please use the following guidelines when coming and going from class:</p> <p>Students are greeted when they arrive. They have a seating chart so they know where to sit. Classes maintain routines that are predictable for students.</p> <p>To leave the room, a student must have a hall pass.</p> <ul style="list-style-type: none"> ● One person at a time may leave to use the restroom or get water. ● Students may leave to visit the nurse or get tech support, etc.
<i>Submitting Work</i>	<p>I will collect work from students in the following way:</p> <ul style="list-style-type: none"> ● Paper ● Online - Formative, Student Desmos, Canvas <p>If a student misses a deadline, I will partner with the student in the following ways so they have the ability to demonstrate their abilities:</p> <p>Deadlines are not strictly enforced in this class. Students are encouraged to revise in order to improve and continue to demonstrate their learning.</p>
<i>Returning Your Work</i>	<p>My plan to return student work is the following:</p> <p><i>Timeline:</i> Within ONE WEEK for most assignments. Within two weeks for longer projects and exams.</p> <p><i>What to look for on your returned work:</i> Student will find their grade, along with feedback for how to improve.</p> <p><i>Revision Opportunities:</i> Ongoing</p>
<i>Formatting Work (if applicable)</i>	Directions on how to format submitted work (ex. formal papers, lab reports, etc) can be found here: n/a
<i>Attendance</i>	<p>If a student is absent, I can help them get caught up by:</p> <p>Students should view the Weekly Plan on Canvas to see what they missed.</p> <p>In-person, students can get notes they missed from a classmate.</p> <p>Missed quizzes can be retaken before or after school, or during Tutorial.</p>
Section 6: Course Resources & Materials	



<i>Materials Provided</i>	I will provided the following materials to students: lab equipment
<i>Materials Needed</i>	<p>Please have the following materials for this course:</p> <ul style="list-style-type: none"> • Chromebook and charger <p><i>Franklin can help with any materials you may need as well. Please reach out to me privately and I will help you get what you need.</i></p>
<i>Course Resources</i>	Here is a link to resources that are helpful to students during this course: See Canvas course
<i>Empowering Families</i>	<p>The following are resources available for families to assist and support students through the course:</p> <ul style="list-style-type: none"> • ParentVUE
Section 7: Assessment of Progress and Achievement	
<i>Formative Assessments</i>	<p>As students move through the learning journey during specific units/topics, I will assess & communicate their <u>progress</u> in the following ways:</p> <ul style="list-style-type: none"> • Warm Up Activities • Walking around listening to student talk • Exit tickets
<i>Summative Assessments</i>	<p>As we complete specific units/topics I will provide the following types of opportunities for students to provide evidence of their <u>learned</u> abilities:</p> <p>There are multiple ways for students to demonstrate proficiency throughout the unit, including through lab participation and analysis, major projects. This class does not have quintessential 'unit tests.'</p>
<i>Student Role in Assessment</i>	<p>Students and I will partner to determine how they can demonstrate their abilities in the following ways:</p> <p>Rubrics are created based on the standards and skills being covered in class.</p>



Section 8: Grades

Progress Report Cards & Final Report Cards

<p><i>Accessing Grades</i></p>	<p>Students & Families can go to the following location for <u>up-to-date</u> information about their grades throughout the semester:</p> <p>ParentVue and StudentVue in Synergy will be the location of up-to-date, official grades.</p>
	<p>I will update student grades at the following frequency: Grades will be updated weekly (in Synergy)</p>
<p><i>Progress Reports</i></p>	<p>I will communicate the following marks on a progress report:</p> <p><i>Mark: HP</i> <i>Meaning of the mark: Highly Proficient</i> <i>-The student demonstrates a sophisticated understanding of the concepts and/or science practices</i></p> <p><i>Mark: PR</i> <i>Meaning of the mark: Proficient</i> <i>-The student demonstrates a complete understanding of the concepts and/or science practices</i></p> <p><i>Mark: CP</i> <i>Meaning of the mark: Close to Proficient</i> <i>-The student demonstrates a partial understanding of the concepts and/or science practices</i></p> <p><i>Mark: DP</i> <i>Meaning of the mark: Developing Proficient</i> <i>-Assignment is incomplete and the student is still developing their ability to show proficiency</i></p>
<p><i>Final Report Card Grades</i></p>	<p>The following system is used to determine a student's grade at the end of the semester:</p> <p>At the semesters (January and June), your average proficiency score will be translated to a letter grade that will be posted to your transcript based on the following numbers:</p> <p>A= 3.5+ B= 3.0+ C= 2.5+ D= 2.0+ No pass for less than 2.0</p>
	<p>The Biology department at Franklin High School uses a proficiency based grading system to communicate with students their <i>understanding</i> of the concepts and skills being learned and explored in class. Rubrics are created based on the standards and learning targets being covered in class. Each proficiency score given will correspond to the assignment rubric so that students are aware of why they received a particular score.</p>



The final letter grade that will be on a student's transcript will represent an average of the overall scores of each skill in Synergy.

