

SUBJECT AREA: Marine Biology/HE3AT Pilot

GRADE LEVEL: 9

SEMESTER: 1 and 2

Please note that HE3AT is a pilot program and some units are still being developed with teachers from other schools

| UNIT TITLE/ESSENTIAL QUESTION(S) | UNIT SKILLS AND CONTENT (Skills should be identified from core content skills identified in Vertical Planning) | CORE TEXTS AND MATERIALS | FORMATIVE & SUMMATIVE ASSESSMENTS | COMMON CORE/CONTENT STANDARDS |
|---|---|---|---|---|
| Unit 1: Solving threats to our oceans by 2030...Can it be done? *needed to be paused due to starting HE3AT* | <ul style="list-style-type: none"> Read and identify a scientific claim from a scientific text, data table, diagram, or reference table. | Please see unit plan linked here: unit 1 plan marine | <ul style="list-style-type: none"> - learning objectives assessed to determine mastery of content/skills via nearpod. -students will monitor their own understanding and explain what they have learned, what they are confused on, etc via nearpod. - asynchronous work accompanied with success criteria via nearpod. During Live Zoom meetings, students collaborate in breakout rooms to practice specific skills such as analysis of graphs. Example linked here: Example Breakout room Activity | <p><u>Next Generation Science Literacy Standards</u></p> <p>RST1: Cite specific evidence to support analysis of scientific and technical texts, charts, graphs, diagrams, etc. Understand and follow a detailed set of directions.</p> <p>Research to Build and Present Knowledge:</p> <p>WHST5: Conduct short as well as more sustained research projects to answer a question (including a self-generated question), analyze a topic, or solve a problem; narrow or</p> |

| | | | | |
|--|--|--|---|--|
| | | | | <p>broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.</p> <p>Writing: WHST1a: Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence.</p> |
| <p>Unit 1: HE3AT Issues revealed by the COVID-19 Pandemic</p> | <ul style="list-style-type: none"> • Students will be able to identify the parts of a diagram, equation, chart, reference table, or model. • Read and identify a scientific claim from a scientific text, data table, diagram, or reference table. | <p>Please see unit plan linked here: HE3AT Unit 1 plan</p> | <p>please see linked plan (formative assessments included for each learning target)</p> | <p>Next Gen Priority Literacy Standards</p> <p>R1 : Read closely to determine what the text says explicitly/implicitly and make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn</p> |

| | | | | |
|--|--|---|--|--|
| | | | | <p>from the text.</p> <p>W7: Gather relevant information from multiple sources, assess the credibility and accuracy of each source, and integrate the information in writing while avoiding plagiarism.</p> |
| Unit 2: HE3AT: Due to another member of the pilot team from a different school, writing this unit, it is not finalized | TBD | TBD | TBD | TBD |
| Unit 3: HE3AT | TBD | HE3AT Unit 3 plan | please see linked plan (formative assessments included for each learning target) | TBD |
| Unit 4: HE3AT | TBD | HE3AT Unit 4 plan | please see linked plan (formative assessments included for each learning target) | TBD |
| Unit 2: Marine: after HE3AT program is finished: : Can humans and marine organisms survive climate change? Justify with evidence. | <ul style="list-style-type: none"> Read and identify a scientific claim from a scientific text, data table, diagram, or reference table. Students will be able to identify the parts of a diagram, equation, chart, reference table, or model. | <ul style="list-style-type: none"> Peer-Reviewed Text: The Arctic is melting, so what? Peer-Reviewed Text: How do we track changing Arctic Sea Ice? | <ul style="list-style-type: none"> - learning objectives assessed to determine mastery of content/skills via nearpod. -students will monitor their own understanding and explain what they have learned, what they are confused on, etc via nearpod. | <p><u>Next Generation Science Literacy Standards</u></p> <p>RST1: Cite specific evidence to support analysis of scientific and technical texts, charts, graphs, diagrams, etc.</p> <p>Understand and</p> |

| | | | | |
|--|--|--|--|---|
| | | <ul style="list-style-type: none"> ● Text: Arctic sea ice loss vs Antarctic sea ice gain ● Peer Reviewed Text: Computing the climate ● Article: Are we powering our way into a climate crisis? ● Article: Who should pay to fix climate change? ● Article: How can we make more people care about climate change? | <p>- asynchronous work accompanied with success criteria via nearpod.</p> <p>Summative Assessment: Unit 2 summative project</p> | <p>follow a detailed set of directions.</p> <p>Research to Build and Present Knowledge: WHST5: Conduct short as well as more sustained research projects to answer a question (including a self-generated question), analyze a topic, or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.</p> <p>Writing: WHST1a: Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence.</p> |
|--|--|--|--|---|

| | | | | |
|--|--|--|--|--|
| | | | | |
|--|--|--|--|--|