

Environmental Science Issues – Hybrid

Virtual Before CI

Day	Time	Discussion Items	Activity and Deliverables <i>*Check-Off Item</i>
Orientation	Virtual (Pre CI)	<ul style="list-style-type: none"> • Introduction of Host • Introduction of Lead Teachers • CASE PD Participant Expectations • Area of Emphasis: CASE Navigation 	<ul style="list-style-type: none"> • CASE Curriculum Access (MyCASE) • Google Classroom Access
Pre-CI	Complete before the CI		<ul style="list-style-type: none"> • Unit 1 Review* • Create user accounts (Stella Online and ArcGIS) • Pre-read Teacher Notes for Day 1 (Lessons 1.1-2.1)

In-Person

Day	Time	Discussion Items	Activity and Deliverables <i>*Check-Off Item</i>
Day 1 (In Person)	10:00 – 12:00	<ul style="list-style-type: none"> • Welcome • Unit 1 Discussion • Lesson 1.2 Check for Understanding 	<ul style="list-style-type: none"> • <i>Set up Laboratory Notebooks</i> • Activity 1.1.1 Environmental Problems • Activity 1.2.4 Know Your Source*
	12:00 – 12:45	Lunch and Host Logistics	

Day	Time	Discussion Items	Activity and Deliverables <i>*Check-Off Item</i>
Day 1 (In Person)	12:45 – 5:00	<ul style="list-style-type: none"> Lesson 2.1 Environmental Observations 	<ul style="list-style-type: none"> Activity 2.1.1 Biodiversity Data Activity 2.1.2 Calculating Biodiversity Activity 2.1.3 Geographic Information* Activity 2.1.4 Reliable Data Activity 2.1.5 Technological Display Activity 2.2.1 Interdependent Organisms
	Homework:	Pre-read Teacher Notes for the following day (Lessons 2.2-3.2)	
Day 2 (In Person)	8:00 – 12:00	<ul style="list-style-type: none"> Area of Emphasis: Concepts and Performance Objectives Lesson 2.3 Ecosystem Problems Project 2.3.2 Space Invaders Project 2.3.5 Save the Atlantic Salmon (Anchor Assessment) 	<ul style="list-style-type: none"> Activity 2.2.2 Population Model* Activity 2.2.3 Productivity Prediction Activity 2.3.1 Moving to the Lake Activity 2.3.3 Population Management Activity 2.3.4 Salmon Scenario
	12:00 – 1:00	Lunch	
	1:00 – 5:00	<ul style="list-style-type: none"> Lesson 3.1 Energy Sources Area of Emphasis: APP Modalities Project 3.1.5 What's the Real Cost? 	<ul style="list-style-type: none"> Activity 3.1.1 Biomass Breakthrough* Activity 3.1.2 The Sun is Shining Activity 3.1.3 A Lifetime of Emissions Activity 3.1.4 The Way the Wind Blows Problem 3.1.6 Impact Statement Activity 3.2.1 Watt's Up?
	Homework:	Pre-read Teacher Notes for the following day (Lessons 4.1-4.2)	
Day 3 (In Person)	8:00 – 12:00	<ul style="list-style-type: none"> Area of Emphasis: Teacher Notes Project 3.2.3 Fracking in Our Town Lesson 4.1 Agriculture and the Environment Lesson 4.2 Ag Management Practices Activity 4.2.1 Sustainable Solutions 	<ul style="list-style-type: none"> Activity 3.1.1 Biomass Breakthrough (con't) Activity 3.1.2 The Sun is Shining (con't) Problem 3.2.4 Energy Audit* Activity 4.1.1 Food Gap Activity 4.1.2 Soil Diversity
	12:00 – 1:00	Lunch	
	1:00 – 5:00	<ul style="list-style-type: none"> Lesson 5.1 Pollution Sources 	<ul style="list-style-type: none"> Activity 4.2.2 Land Analysis* Project 4.2.3 Production Issues Activity 4.2.4 Precision Agriculture Project 5.1.1 Eutrophication (Anchor Assessment)
	Homework:	Pre-read Teacher Notes for the following day (Lessons 5.1-5.2)	
Day 4 (In Person)	8:00 – 12:00	<ul style="list-style-type: none"> Sensor calibration 	<ul style="list-style-type: none"> Finish Activity 3.1.1 Biomass Breakthrough Activity 5.1.2 The Source of Pollution Activity 5.1.3 Interactive Pollutants*

Day	Time	Discussion Items	Activity and Deliverables <i>*Check-Off Item</i>
			• Activity 5.1.4 Fertilizer Loss
Day 4 (In Person)	12:00 – 1:00	Lunch	
	1:00 – 5:00	• Lesson 5.3 Polluted Environments	• Activity 5.2.1 Toxic Water • Activity 5.2.2 Air Simulation • Project 5.2.3 Local Investigation*
	Homework:	Pre-read Teacher Notes for the following day (Lesson 5.3)	
Day 5 (In Person)	8:00 – 12:00	<ul style="list-style-type: none"> • Area of Emphasis: Materials • Project 5.3.1 Environmental Act • Area of Emphasis: CASE Navigation – Final Points • Preview Webinar Topic (<i>Lesson 6.1 Environmental Research Projects</i>) 	<ul style="list-style-type: none"> • Activity 5.3.2 Murky Water • Project 5.3.3 Pure Water* • End of CI Surveys • ESI Certification

Virtual Webinar (Optional – Open for All ESI Certified Teachers)

Day	Time	Webinar Topic
TBD (Virtual)	TBD 2024 – 2025 School Year	Environmental Research Projects <ul style="list-style-type: none"> • Take a deep dive into <i>ESI Lesson 6.1 Environmental Research Project</i>. How can you use research projects as a capstone experience for your environmental science coursework? Developing students who are self-motivated and independent thinkers is a goal of all educators. How does the alignment of this lesson prepare students for future careers and the National FFA Agriscience Fair?