

Supplement 1. Team Activities in Environmental Quality and Health (EQH)

Students enrolled in EQH were required to sign up for one of five discussion section times. Within each discussion section, students were divided into teams of approximately five people. The 50-minute weekly discussions sections were mandatory and were held seven times during the 10-week quarter between Weeks 2 and 9. Discussions were synchronous through video conferencing technology built into Canvas LMS [1,2]. Student teams worked in breakout rooms during the discussion and the instructional team, including the Instructor (insert name after blind review) and teaching assistants dropped in to these meetings multiple times each session to field questions and provide feedback and tips.

To support the student teams and provide structure for each of the weekly discussion section meetings, we provided students with a meeting agenda, including information about the team assignment for that week and substantive discussion prompts. These discussion prompts provided context around character discussions as well as hints about possible sticking points among the characters. Each week, we gave students a worksheet with details of the weekly assignment, which they were encouraged to write-up together as a team during the discussion section time. The Instructional Designer (insert name after blind review) created three interactive media-rich online lessons in Articulate Storyline (Articulate Global, LLC., 2023) that feature dialogue among characters, discussion questions, non-graded quizzes, and additional information about deforestation in the Amazon rainforest and climate change. Student teams could go through these lessons during the discussion sections on given weeks (Weeks 2, 5, and 7) for additional detail about the case study and context to be used in the assignment.

Student Learning Outcomes by Week

Week	Theme	Student Learning Outcomes
Week 1	Welcome and Class Introductions	<p>Navigate comfortably around this Canvas platform</p> <p>Calendar all the deadlines for course assignments</p> <p>Remember when your discussion section meets and block out that time during Weeks 2-5 and 7-9</p> <p>Know how to turn on and use your webcam. If you want to make sure that it works, there are many websites that will test your webcam. Just google it!</p>
Week 2	<p>Introduction to Environmental Quality and Health; Environmental Epidemiology</p> <p>Assignments: Character Biosketch Assignment (Individual) Biosketch Team Discussion Forum (Individual)</p>	<p>Understand the basics of environmental quality and health, and how the human population and environmental epidemiology are related to environmental quality and health.</p> <p>Locate Brazil on a map.</p> <p>Describe your role (your character) with respect to the issue of deforestation in the Amazon.</p> <p>Describe the landscape of stakeholders (who stands to gain or lose from rainforest deforestation?).</p> <p>Explain the "end point" of the class. Where does your team need to be in Week 10? It's a well-known life hack to "begin with the end in mind." Knowing this goal will keep your team on track and prevent you from getting lost along the way.</p>
Week 3	<p>Environmental Toxicology; Environmental Policy and Regulation</p> <p>Assignments: Hypothesis Assignment (Team)</p>	<p>Understand how environmental toxicology is important to the study of environmental quality and health.</p> <p>Understand the process of environmental policy and regulation.</p> <p>Identify what makes a hypothesis good or bad.</p> <p>Generate a testable hypothesis that pertains to deforestation in the Amazon rainforest in Brazil.</p> <p>Describe how your character views the issue of Amazon rainforest destruction.</p>

Week 4	Zoonotic and Vector-Borne Diseases	Understand how zoonotic and vector-borne diseases are important to the study of environmental quality and health.
	Assignments: Final Hypothesis Worksheet (Team)	Generate a stronger testable hypothesis that pertains to deforestation in the Amazon rainforest in Brazil.
		Describe what distinguishes an opinion from a hypothesis.
Week 5	Water Quality and Availability	Understand common issues with water quality, and the importance of water quality to human and environmental health.
	Assignments: Ecosystem Services Assignment (Team)	Understand the concept of ecosystem services, and give examples of the ecosystem services provided by the Amazon rainforest.
		Assess the validity of scientific evidence and sources of scientific evidence.
		Describe your character's perspective of readings about ecosystem services in the Amazon rainforest.
Week 6	Rainforest Protection and Source Credibility	Describe how people in Brazil view the Amazon rainforest.
	Assignments: Video Reaction Class Discussion Forum (Individual)	Understand the role FUNAI plays in protecting the Amazon rainforest in Brazil.
	Source Credibility Class Discussion Forum (Individual)	Assess if a news story is credible.

<p>Week 7</p>	<p>Air Quality; Global Climate Change</p> <p>Assignments: Rainforest Value Assignment (Team)</p>	<p>Understand common issues with air quality, and the importance of air quality to human and environmental health.</p> <p>Understand why global climate change is a threat to human and environmental health, and provide examples of proposed solutions to curb global climate change.</p> <p>Discuss why there is cause for optimism about the issue of global climate change.</p> <p>Describe the value of the Amazon rainforest in Brazil from the perspective of different stakeholders.</p> <p>Describe your character's perspective on the value of the rainforest and the hazards, risks, costs of continued rainforest destruction.</p>
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<p>Week 8</p>	<p>Local Approaches to Global Climate Change</p> <p>Assignments: Bending the Curve Assignment (Team)</p>	<p>Describe local efforts taking place at the University of California, in the state of California, and beyond to curb global climate change.</p> <p>Understand the University of California's efforts to "bend the curve."</p> <p>Describe why the University of California would commit to being carbon neutral.</p> <p>List the cities in Orange County that have signed on to the Paris Climate Agreement.</p> <p>Evaluate the impact that state and local efforts to curb global climate change may have on reducing carbon emissions.</p>

Week 9	Environmental Quality and Psychological Health	Understand the links between psychological health and environmental quality.
	Assignments: Decision-Making Assignment (Team)	Discuss how knowledge of global news stories is related to news sources.
		Discuss why humans have trouble being alone in today's technological society.
		Describe the ethical issues involved with Amazon rainforest deforestation in Brazil, as well as the links between rainforest deforestation and global climate change.
		Assess the relevance of the Precautionary Principle of environmental policy making to the problem of global climate change.
		Discuss the role of experts vs. climate change deniers in the policy-making process.
		Provide a policy solution to the problem of rainforest deforestation in the Brazilian Amazon.
Week 10	Class Wrap-Up and Future Directions	Describe what is meant by "planetary health," and the main points of the planetary health manifesto.
	Assignments: Reflection Assignment (Individual)	Discuss your contribution to the problem of deforestation in the Amazon rainforest in Brazil.
		Discuss your role in preventing future destruction of the Amazon rainforest in Brazil.
		Discuss your personal plan to help improve the environmental quality and health at different levels.
		Discuss how your team functioned as a group throughout the quarter.
		Discuss the processes of consensus building and staying in character.

References

1. Big Blue Button Inc. Big Blue Button. **2021**.
2. Instructure, Inc. Canvas by Instructure. **2023**.