Brandywine Heights High School

AP ENVIRONMENTAL SCIENCE (H0208) – Syllabus 2025 – 2026

Teacher Information: Christa Heagerty Room 237

chrhea@bhasd.org 610-682-5102

Resources:

classroom.google.com class code: mwf77b6k

AP Classroom class code:

Withgott, Jay, and Matthew Laposata. *Environment: The Science behind the Stories.* 7th ed., San Francisco, Pearson Education, 2021.

This course is available for **Dual Enrollment**, information to follow.

AP Exam date: May 15, 2026 8 a.m.

COURSE DESCRIPTION: Environmental science is the study of various issues and interactions of earth's environments. This is an interdisciplinary course, drawing from overarching science concepts; specifics in biology, chemistry, and geology; calculations and graph interpretation; and sociological analysis of legal and cultural issues that relate to the environment and use of resources. This course covers the material typically encountered in a one-semester college Introduction to Environmental Science course. The goal, then, is to prepare students for the Advanced Placement Environmental Science exam. The class reviews topics recommended by The College Board: The Living World: Ecosystems and Biodiversity, Populations, Earth Systems and Resources, Land and Water Use, Energy Resources and Consumption, Atmospheric Pollution, Aquatic and Terrestrial Pollution and Global Change all in light of the role of human impact and current legislation and environmental policy.

RECOMMENDED COURSE MATERIALS:

Large 3-ring binder (2") Laptop

Lined paper or a notebook Earbuds/Headphones (optional)

Scientific calculator

COURSE WORKLOAD:

- Approximately 2 hours of homework each week
  - Topic outlines
  - AP Classroom questions
  - Case studies
  - Lab conclusions (lab activities typically compose one class period per week)
  - Data-based questions
  - Text and graph analyses
- Summative unit tests (follow AP formats)
  - 75% content knowledge, comprehension, and essential application (typically multiple choice format)
  - 25% complex application, analysis, extended response

GRADING POLICY:

- Summative assignments (a measure of student learning at the end of an instructional unit) are worth 60% of each marking period's grade.
- Formative assignments (an ongoing measure of student learning used by the teacher to guide instruction) are worth 40% of each marking period's grade.
- Assignments are due by 7:00 a.m. the Monday following when they are assigned.
- Students MUST communicate with their teacher in a timely manner if an assignment will be late, giving an alternative submission date no later than the Monday after the initial due date.
- Test corrections are required with our unit 1 test then made available for subsequent unit tests at student's request.
    - Test correction must occur within 2 weeks of test return (10 school days).
    - Test corrections must be completed within a time frame lasting 2 AIM periods (approximately 45 minutes).
    - Free-response question adjustment occurs during class time after peer grading for first quarter only.

COURSE CONTENT:

- The Living World (~8 – 9 weeks)
    - Ecosystems
    - Biodiversity
    - Populations
    - LAB WORK AND PROJECTS: biome speed dating, field study, tagging populations simulation, biodiversity lab survivorship lab, net primary productivity lab
- Resource and Energy Management (~10 – 11 weeks)
    - Earth Systems and Resources
    - Land and Water Use
    - Energy Resources and Consumption
    - LAB WORK AND PROJECTS: soil testing, cookie mining lab, tragedy of the commons simulation, timber lab, Kill-a-Watt data collection, sustainable agriculture presentation
- Environmental Issues (~11 – 12 weeks)
    - Air Pollution
    - Aquatic and Terrestrial Pollution
    - Global Change
    - LAB WORK AND PROJECTS: water testing, air testing, trash analysis, acid rain effects, LD 50% lab
- Final Project (dependent upon schedule and conflicts) – Greening Project

COURSE EXPECTATIONS AND POLICIES:

- Come to class prepared:
    - Be sure to have completed readings, notes, and assignments.
    - Bring your binder, a writing utensil, and your charged laptop.
    - Dress appropriately for any activities: labs, field trips, outdoor observations.
- Stay on top of communications (see first page for contact and class information).
- Make every effort to be present, both physically and mentally.
    - Check the student handbook for BHHS make-up work policies.
    - Signing out of the classroom should be minimized and done at appropriate times for bathroom use only.
- Always strive for maximum integrity.
    - Do what is asked of you.
    - Do what you know you should do even if it was not asked of you.
    - Complete your work only and encourage others to do the same.
        - If incidents of cheating (in any of its forms) are found:

            - Depending on the nature of the assignment, credit earned is divided amongst all parties upon first offense and parents/guardians are informed.
            - Any future offense is documented with a discipline referral through BHHS administration and handbook punitive actions are followed.
- Food, drink, and electronics policy:
    - Because of the nature of the course, no food is allowed in the classroom (barring special circumstances).
    - Beverages must be in closed containers, and there are circumstances where they will not be allowed.
    - Cell phones are to remain silent (no vibrations or lights to indicate notifications) and away.
        - If a phone is seen being used, the phone must be placed in the caddy until the end of class.
            - If students refuse to place their phone in the caddy, they will receive a discipline referral.
        - When students leave the classroom during the period, their phone must be placed in the caddy.
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    - Earbuds should not be used or seen unless required for a class activity.