

Advanced Placement Environmental Science Syllabus
Cypress Lake High School
Ms. Chaves–Nieves
2015–2016

Textbook: *Living in the Environment: Concepts, Connections, and Solutions* (16ed.) G. Tyler Miller and Scott E. Spoolman. Brooks/Cole, Cengage Learning. 2011.

1st Semester

TIME (WKS)	CHAPTER(S)	TOPIC(S)	Laboratories/Videos/CD's/Research Papers
1	1 and 2	Introduction to Environmental Science, Systems and Interactions; Basic Chemistry (Inorganic, Organic, Biochemistry, and Nuclear Chemistry)	Video Acid/Base/Salt Lab Half-Life Property of Radioactive Isotopes
4	3 and 4	Ecology and Ecosystems; Matter Cycling and Energy Flow in Ecosystems; Nutrient Cycles; Evolution and Biodiversity: Origins, Niches, and Adaptation	Owl Pellets Natural Selection Lab
1–2	5–1, 5–2, 5–4	Community Ecology: Structure, Species Interactions, Succession, and Sustainability	Predator Prey Population Biomass Lab Carrying Capacity
1–3	7 and 8	Climate, Weather, Biomes, and Aquatic Life Zones	Research Paper on an Assigned Biome/Life Zone
3	5–3, 6, and 22	Population Ecology, Human Population Dynamics, Human Demographics	Carrying Capacity Estimating Human Populations Survivorship Lab
2	15	Fossil Fuels Nuclear Power	Hidden Energy Use Energy Conservation Exercise Energy Practice Problems
1	16	Energy Efficiency: Alternative Energy Resources	Research Paper on Alternative Energy Resources

- Student is responsible for missed classwork, laboratories, & assessments. The student must inform & discuss all missing work with the teacher.
- Fifty percent (50%) per day will be deducted from late assignments and/or classwork.
- Some labs will be complete lab write-ups in an appropriate laboratory/data format and some labs will be simply handouts. Labs will be done in groups of 2, 3, or 4 students. EACH individual student in these lab groups is responsible for writing his/her own lab report.
- It is imperative that students follow the laboratory safety regulations. Labs are an important part of all science classes. Students MUST be present the day of the lab because it is not possible to do laboratory make-ups after an absence.
- All students are required to bring to class AT ALL TIMES, the following: textbook, calculator, paper, notebook, binder with required handouts, pen or pencil, and agenda. Calculators will be used on tests, in class work, for doing problems in the textbook, and in labs.

2nd Semester

TIME (WKS)	CHAPTER(S)	TOPIC(S)	Laboratories/Videos/CD's/Research Papers
2	12-3, 12-6, and 14	Geology, Minerals, Soils, and Soil Conservation	Soil Laboratories: Soil Texture, Porosity and Permeability, Soil text kits, Chemical and Physical Weathering Reading River Sediments Cookie Mining Exploring Physical Properties of Minerals Mine Pollution and Reclamation
1-2	12-1 through 12-4, and 17	Risk, Toxicology, Pesticides, Food Resources	Toxicology Lab LC ₅₀ Lab
3	9, 10, and 11	Land Management Issues: Forestry, Rangeland, and Terrestrial and Aquatic Biodiversity	Research Paper on Endangered Species Habitat: The Choice is Yours Impacts of Fire Lab
1	18 and 19	Air and Air Pollution Regional and Global Problems: Ozone Depletion, Acid Deposition, and Global Warming	Air Pollution Lab
2	13 and 20	Water and Water Pollution	Bacterial Examination of Drinking Water Using a Groundwater Simulator Groundwater Pollution Deposition of Sediments Water Testing
3	21, 23, 24, and 25	Solid and Hazardous Waste The Environment: Economics, Politics, and Ethics	Research Assignment on Current Environmental Regulations

- Grading: Assignments/Classwork/Required Materials–15%, Laboratories/Required Materials–10%, Tests–60%, Quizzes–15%,
- An AP practice exam will be held on a Saturday 1–2 weeks prior to the AP Exam. There will be review sessions after school prior to the AP Exam with daily quizzes to monitor progress.
- No cheating: Any self-aids not specifically designated as permissible by the classroom teacher or the appearance of giving or receiving help during a quiz, test, or exam will result in an AUTOMATIC FAILURE FOR THAT PARTICULAR ASSIGNMENT OR TEST.
- Homework assignments can be reading assignments, worksheets, review questions, take-home activities, or unfinished class work. Late homework assignments will be reduced 50% per day.
- Make-up work is to be discussed with the teacher. Make-up work may include alternative assignments, re-taking assessments, or both. Remember: it is not possible to do laboratory make-ups after an absence (you will have to do an alternative assignment or quiz to substitute for missing lab).