

AP Environmental Science Syllabus

Instructor

Gina Niemann

Email

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Tutoring

Tuesday/Thursday @ 7:45 am and after school 3:35 to 4:15 – Students should sign up ahead of time.

Course Description

The A.P. Environmental Science course is designed to be the equivalent of a one-semester introductory college course in environmental science. Unlike most other college introductory-level science courses, environmental science is offered from a wide variety of departments, including biology, geology, environmental science, chemistry and geography. Depending on the department offering the course, different emphases are placed on various topics. Some courses are rigorous science courses that emphasize scientific principles and analysis, and that often includes a laboratory component; other courses emphasize the study of environmental issues from a political and sociological perspective rather than a scientific one. This A.P. Environmental course has been developed to be most like the former; as such it is intended to enable students to undertake, as first year college students, a more advanced study of topics in environmental science or to fulfill a basic requirement for a laboratory science course.

The goal of the APES course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems, both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solution for resolving and/or preventing them. Environmental Science is interdisciplinary; it embraces a wide variety of topics from different areas of study, yet there are several major unifying themes that cut across the many topics included in the study of environmental science.

Required Text

“Living in the Environment” Seventeenth edition, *G. Tyler Miller*
(replacement cost \$192)

Course prerequisites

Students are required to pass an introductory Physical Science Course, Biology course, and a Chemistry course. (*Exceptions can be made to the prerequisites on an individual basis.*)

AP Exam Expectations

Students are expected to take the AP Environmental Science Exam in May if it is offered free of charge.

This course is designed around the AP format recommended by the College Board.

Students will do:

- 2 long term projects. 1st Semester Group Project = Ecocolumns
- Article Scrapebook. Collect, read and summarize current articles highlighting environmental issues through the year.
- Weekly quizzes and AP-like unit tests.
- A two-hour final, like the actual AP test, is given at the end of each semester.
- Written Reports
- *We will be covering Chapters 1-25 as recommended by the College Board. Students will be expected to keep an organized notebook of lecture notes, field notes, labs, and homework assignments. These will serve as a valuable study guide for the AP exam.

1st Semester Course Schedule – 16 Weeks

(The syllabus is subject to change based on factors such as: conditions related to Covid, adequate supplies, weather conditions, or Instructor's professional opinion.)

Week	Subject	Chapters
Week 1	Intro to Environmental Science	Class guidelines, grading policy, text book introduction, syllabus, lab safety, Lab Activity
Week 2	History of Environmentalism	Chapter- 1, S6-S10
Week 3	Unit 1 – Ecosystems- Biogeochemical Cycles	Chapters- 2, 3, 7 and 8 S11-S17
Week 4	Unit 1- Ecosystems- Trophic Levels, Energy Flow, Food Chains & Food Webs	
Week 5	Unit 1- Ecosystems- Trophic Levels, Energy Flow, Food Chains & Food Webs	
Week 6	Unit 1- Ecosystems- Terrestrial, Aquatic, Biomes,	S20-S25
Week 7	Unit 2- Biodiversity- Biodiversity and Ecosystem Services (Begin Ecocolumn Project)	Chapters-4, 9, 10 and 11
Week 8	Unit 2-Biodiversity- Adaptations, Island Biogeography	

Week	Subject	Chapters
Week 9	Unit 2-Biodiversity -Natural Disruptions, Ecological Succession	
Week 10	Unit 3- Populations	Chapters- 5 and 6
Week 11	Unit 3- Populations	
Week 12	Unit 3- Populations	
Week 13	Unit 4- Earth Systems and Resources	Chapters-7,18,19 S26-S29
Week 14	Unit 4- Earth Systems and Resources	
Week 15	Review for Semester Exam	
Week 16	Finish Ecocolumn Project and Semester Exam	

Communication

Parent communication- An email contact makes staying in touch much easier. Please update contact information through the school. Students are required to join my Remind AP text group. Parents are encouraged also join! Infinite Campus gives parents and students the ability to monitor grades online and are updated weekly. I use Google Classroom giving assignments and communicating resources to students. This should be every student's first check point for what we are doing in class. I value communication and if you have questions or concerns, please contact me by email. If needed we can arrange conferences through our guidance department or I can arrange a phone or Zoom conference time with you.

Required Materials

1. Binder 2 inches, for science only!
2. Dividers for Binder
3. Notebook paper
4. Pencils
5. Highlighters
6. Colored pencils or crayons (diagrams/models will need to be colored)
7. Scissors (safety)
8. Glue Sticks
9. Personal Safety Goggles (We do have shared goggles that are sanitized but Dollar Tree also sells these.)
10. Calculator (We do have shared calculators but student will need to sanitize when they use them.)
11. 1 Gallon of Distilled Water per semester (for lab purposes)
12. 1 roll of paper towels per semester (for lab purposes)

Science Notebooks

Science Notebooks help students organize resource material, keep materials accessible for daily use, develop higher order thinking skills and document learning progression. I will periodically check notebooks and workbooks for completed work. Students are required to have it each day and keep it up to date. A master notebook is available for students to reference in the event they are absent from class. If a student loses his/her notebook they are responsible for replacing the work for the unit.

Rules and Procedures...The Important P's

Be **Prepared**. How does this look? Arrive on time, have all your required materials such as your notebook and chrome book. Immediately set up and start the day's instruction which is posted on the promethean board/Google Classroom.

- **You should have your Chromebook each day!**
- If you do not come prepared to class, you **ARE STILL EXPECTED** to participate in the activity for the day. Pencils & Paper are always available in the student center in my room. If you leave your Chromebook at home, you will be required to take notes of the material for the day and complete all required assignments by 11:59 pm of that day.
- A cell phone **DOES NOT COUNT** as an acceptable device for days when a student does not have their chromebook.

Be **Participate** in Class -Raise your hand, wait your turn, and be active in group discussions...Participation is a part of your grade!

Be **Polite** and respectful with everyone in this classroom-no name calling or inappropriate language will be tolerated.

Be **Patient** with each other and with your teacher. I'm here to help everyone and will assist you whenever possible.

Use Class Time **Productively!** This is a fast paced course with a tremendous amount of material to be learned. We work from Bell to Bell! Homework is given most nights and classwork that is not finished during your work time will become additional homework. Bathroom breaks should be quick and only during "student work time", not during direct instruction! This means NO asking during the first 5-10 minutes of class or last 5 minutes of class.

★ Safe Science Procedure- No eating or drinking in science classroom unless it has been approved by the instructor! During Breakfast or Lunch Time, the instructor will assure that the eating areas are secure and sanitized. Do not "sneak" food or drink in here. This is a major safety issue in a science classroom!

Procedures

- Wait in outside the classroom in a single file line along the wall. Do not block walkways. Keep your Social Distancing! When the room is empty and secured, you will be instructed to enter.
- Sanitize on your way in.
- Read the Promethean Board IMMEDIATELY. BEFORE you get seated! Basic Daily Instructions are posted here.
- Collect required materials for the day from the table under the promethean board **BEFORE** you go to your assigned seat.
- Each student is required to go directly to their assigned location and must remain there for the class period unless directed otherwise.
- At the end of the period, **MY** timer will go off before anyone begins the clean-up and pack up procedures.
- If you "borrowed" class materials **you will be directed** to get up and take them to their proper location where they should be wiped down before being returned.
- When bell rings, students will stand and **FILE** out of the room (sanitize as you pass the station). Any paper assignments needing to be turned in will get placed in a basket at this time. When you exit the class, **TURN RIGHT**. Stay to the right side of the hallway.

*Why do we have to follow these procedures? We are mindful of sanitizing and cleaning in addition to trying to decrease **MOVEMENT** and number of times we are passing each other. These procedures are in place to reduce the possible spread of the Covid virus through the hallways and classrooms.*

Work Ethic and Behavior

Each member of this class has the right to a positive learning environment. Students that are disruptive, off task or not prepared for class take away from our group learning time. **All District and School Policies will be enforced.** No destroying or defacing property. Do not touch lab supplies unless instructed to do so. This is a working lab and I teach many different courses. Lab Equipment Is Expensive! Community Supplies that I have provided need to be used correctly and put away properly. No profanity or disrespectfulness will be tolerated. If you ever have an issue that needs to be discussed, please arrange to speak with me before or after class. Students, please remember that you can also email me questions. This is very helpful when I need to look up grades on the computer! Please be a responsible member of this learning community!

Consequences for Inappropriate Behavior Issues:

1st offense: Warning

2nd offense: Warning/Parent Contact

3rd Offense: Parent Contact/Before School Detention

4th Offense: Written Referral

***Behavior that is interfering with the learning of others, is offensive, or dangerous will result in immediate student removal from the classroom.**

Honor code

Cheating is attempting to receive credit or helping someone else receive credit for work that was not personally done by the student. No credit will be given in a cheating situation. This also applies to the student that allows others to copy their work. Students must do their own work unless given permission to work collaboratively.

Grading

Please use class time wisely! I factor in time each class period so that students can complete assignments; work that is not completed during class time is expected to be completed at home! Most nights, students will have at least 15 minutes of homework. When there is a test or a project due, students will need to spend additional time outside of class to prepare. Quality work is expected. Work that does not meet expectations may need to be redone.

Grading Policy

60% of your grade=Tests, SAFEs (quizzes), Projects, Major Labs

*Please note: "Mastery Of Standards" is considered a 80% for all science classrooms. SAFEs can be retaken to achieve this mastery. If the retake grade is higher it will replace the previous grade.

40% of your grade

Participation grades (Unexcused absences and tardies effect your participation grade. If you are not here, you are not participating!), daily assignments, homework, minor labs/activities

*Please note:"Mastery Of Standards" is considered a 80% or higher for all science classrooms. SAFEs (quizzes) can be retaken in order to achieve this mastery. If the retake grade is higher it will replace the previous grade.

***The AP Exam is given at the end of 2nd Semester! All students should be prepared to take this test.**

Late Work

Most Daily classwork/homework assignments will not be accepted late. Major projects will have 10% deducted for each day late.

Absent students are required to turn in work when they return. A student that is absent one day will have one day to do the missed classwork assignment. If a student is absent for more than one day, please speak with me about due dates. Quizzes and tests will need to be taken before or after school within 3 days of an absence.

*Some Major assignments that do not reach an acceptable level of mastery can be redone within 7 days from when student receives the grade. I will add a note instructing the student to see me and redo/correct the assignment.

*SAFEs (quizzes) can be retaken if the student does not meet the minimum requirements. Students must fill out a retake request form and retakes must be completed within 3 days of original SAFE. It is recommended that students get additional help from me during tutoring in the morning or afternoon before retaking.

Virtual Learning Policies

- All Carroll County and THS Virtual Policies will be followed.
- Virtual learners must correspond with teachers using their student email Google accounts.
- Virtual learners must submit work according to deadlines.
- Replies to emails Monday thru Thursday will be answered within 24 hrs. (Usually 7:45-8:00 am or 3:45 to 4:15)
- Virtual learners can arrange Zoom meetings. These can be arranged for in the morning or after school.
- New instruction in a course will be videos and/or recorded lessons and linked to the Google classroom.
- Virtual learners must submit a Google check-in form daily.
- Virtual learners' make-up window is three days.
- Penalties for late or missing assignments will be assessed the same for virtual learners as they are for face-to-face learners.
- Assessment of submitted classwork by virtual learners will be based on the quality of the work and its adherence to standards.
- Work that is submitted which is copied directly from another student's work or outside source [plagiarism] will result in no credit for that assignment for the student or students involved.
- Virtual learners who experience technical issues or have extenuating circumstances arise should contact me immediately.

Make-up Policy

With an Excused Absence Only:

Students that are absent during a lab or major learning activity will have to do an alternate assignment. Labs are usually announced a day or two in advance.

It is the students' responsibility to get assignments when they are absent. Assignments are posted in Google Classroom. Any worksheets or papers that are not assigned digitally can be found in the bin at the front of the classroom. Students should still check-in with me when they return. Tests must be arranged to be taken with me within 3 days at before or after school tutoring. Daily assignments are given an extended period equal to the number of days that the student missed. It is the STUDENT'S RESPONSIBILITY to get work, arrange for help or arrange to take a test.

Extra Help

A sign at the front of the class will inform students of my available times for tutoring. These do change weekly based on School meetings and coaching duties. During those times students can make up missed instructional time due to an absence, get extra help with learning the material or with a project, retake a quiz or to makeup a test. Do not wait until the week before the semester ends to seek help as the outcome in those cases is never good. It is amazing how much we can do to improve your grade if you take care of problems early on! Come by and see me at the first sign of trouble!

I'M LOOKING FORWARD TO WORKING WITH EACH OF YOU THIS YEAR. GO TIGERS!

Sincerely,

Gina Niemann

Biology, Honors Biology & AP Environmental Science Teacher

Temple High School

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***VIP**

Please use your Carroll County School Email Account to join:

Google Classroom gc7ttypc

Remind Group <https://www.remind.com/join/e728ea>

***When you have joined the google classroom, joined Remind AND Read the Class Syllabus with a parent/guardian, please go to the following link and complete the form to document that you received and reviewed the class syllabus.**

<https://forms.gle/q8oEicTLdob99sXt7>

Thank you so much for taking the time to complete these tasks!