

Course Description - This course is designed 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 solutions for resolving or preventing them. Environmental science is interdisciplinary; it embraces a wide variety of topics from different areas of study and includes indoor and outdoor investigations/activities. A complete outline of the course can be found at <https://secure-media.collegeboard.org/digitalServices/pdf/ap/ap-environmental-science-course-description.pdf>

Tutoring - Tuesdays and Thursday after school. Your success in this class is my top priority and I will do everything within my power to help. My email is robbinhallford@misdmail.org or parents can call the school at 682-314-1600. Get with me to make arrangements for tutorials. Do not wait until the last minute! Study groups are important to success in higher education and I encourage you find a group of people to work with. As we approach the AP exam there will be additional tutoring times available based on schedule availability of the student. Some labs may require time outside of class as well.

Textbook: Environment: The Science Behind the Stories, 3rd Edition, Brennan and Withgott. Your student will be allowed to check this book out and will have access to them in class. Students must also register for the online resource at: www.phschool.com/access. The access code is: SSNAST-TREAD-COMIC-ASWAN-NOBBY-VOTES. We will do this in class so that any challenges in registering can be immediately addressed.

Three websites that will be vital for your success this year:

- (1) Skyward: <http://www.mansfieldisd.org/skyward.htm> This is our grade book system. Your grade should be monitored frequently - there should be **no surprises!!!**
- (2) Our class website: <https://mansfieldisd.instructure.com/login/ldap> **Students are strongly encouraged to have their iPad or a laptop every day. Cell phones will not be allowed as a replacement for an iPad or laptop.**
- (3) Bozeman Science - <http://www.bozemanscience.com/ap-environmental-science> This website contains video lessons we will utilize. It has an enormous amount of information!!!

PLEASE UTILIZE THESE RESOURCES!!!

Classroom Expectations – Both you and I will abide by these policies as well as those established by Mansfield Independent School District and Frontier High School.

- **Respect**
 - for yourself – come to class prepared with your materials and assignments.
 - for others – classmates are learning and I am guiding that learning, so distracting behavior is not acceptable
 - for your environment – no food, drinks, or other pollutants (specifically NO PERFUMES)
 - for property – clean up after yourself and be careful with items that are placed in your care
- **Responsibility** – taking care of assignments and other business at appropriate times
- **Reliability** – be present, prepared (by having required materials and student ID on and visible), & punctual

Other General Policies and Procedures will be followed per the Mansfield ISD Policies indicated in the Student Handbook. Each student will receive a handbook; additionally, a digital copy is located on the school website.

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Electronics – All electronics, including but not limited to cell phones, laptops, and mp3 players will ONLY be utilized when deemed appropriate by the instructor. Cell phones are not to be seen in any class. Discipline shall be:

- 1st offense: warning and parent contact
- 2nd offense: teacher hold it for class period and parent contact
- 3rd offense and beyond: teacher takes up and turn phone into AP. Student pays \$15 fine. AP contacts parent.

If the student forgets iPad or laptop, they cannot use phone instead. The following procedure will be in place:

- 1st time to forget their laptop they may borrow one for the class period. This will be a warning.
- 2nd time to forget they may borrow a laptop and parent contact will be made.
- 3rd time and beyond to forget will be a referral to their Associate Principal.

Recommended Materials - iPad/laptop, pencils (required for all quizzes & tests), highlighter(s), binder for notes, 1 box of tissues OR 4-pack of AAA batteries. Other items may be required throughout the year.

Course Outline - APES is interdisciplinary; it embraces a wide variety of topics from different areas of study. Yet there are several major unifying constructs, or themes, that cut across the many topics included in the study. The following themes provide a foundation for the structure of the APES course.

1. Science is a process.
2. Energy conversions underlie all ecological processes.
3. The Earth itself is one interconnected system.
4. Humans alter natural systems.
5. Environmental problems have a cultural and social context.
6. Human survival depends on developing practices that will achieve sustainable systems.

The dates on this document are approximate and is dependent on the students understanding of the material. Expect weekly quizzes and 2 major grades each grading period.

Grading Period 1	Grading Period 2	Grading Period 3
<p>Lab Safety & Scientific Processes will be reviewed & ongoing</p> <p>Earth System Evolution of present earth system Geologic time scale Biological evolution and extinctions Earthquakes & volcanoes Plate tectonics and the rock cycle</p> <p>Terrestrial Ecology Population dynamics Communities and niches Terrestrial biomes Energy flow and pyramids Biogeochemical Cycles Energy flow concepts</p> <p>Benchmark Exam</p>	<p>Soil and Land Use Soil formation/composition Physical and chemical properties Types Food production & land use Erosion and other soil degradation Forestry and rangeland management Related legislation</p> <p>Aquatic Ecology Freshwater biomes Water chemistry Surface and groundwater issues Saltwater biomes Conservation</p>	<p>Biodiversity Species diversity and related descriptors Preservation, remediation, mitigation, restoration Habitat loss Alien, endangered and extinct species Forests and deforestation Fishing techniques and overfishing Economic impacts and management Related legislation</p> <p>Human Populations Human population sizes & distribution Distribution & fertility rates Growth rate and doubling times Demographic transitions Age structure diagrams</p> <p>Benchmark & Semester Exam</p>

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Grading Period 4	Grading Period 5	Grading Period 6
Nonrenewable Resources/Energy Energy forms, units and conversions History and global energy use Mining Fossil fuel resources and use Nuclear energy Renewable energy Energy conservation Economic impacts and decisions Related legislation Meteorology & Climatology Atmospheric structure and chemistry Stratospheric ozone and ozone depletion Seasons, solar intensity and latitude Atmospheric and oceanic circulation Weather ENSO Climate Change Related Legislation	Air Pollution Classifications of air pollution Sources and chemistry Human health risks Acid deposition Economic impacts Clean Air Act and related legislation Water Pollution Sources and chemistry Surface and groundwater issues Cultural Eutrophication Ocean pollution Water purification Sewage treatment Human health risks Economic impacts Clean Water Act and related legislation Benchmark Exam	Toxicology and Human Health Risks and Hazards Bioaccumulation and biomagnification Types of pesticides Cost and benefits of pesticide use Integrated Pest Management Solid Waste disposal and reduction Hazardous waste Related legislation REVIEW & PREPARE Post Test Activity/Project

Assessment Policy – each grading period shall be evaluated as follows:

Major Grades.....50% Labs.....30% Daily Work/Quizzes.....20%

The semester grade will be calculated as follows:

$$(1^{\text{st}} \text{ 6-wks} \cdot 26\%) + (2^{\text{nd}} \text{ 6-wks} \cdot 27\%) + (3^{\text{rd}} \text{ 6-wks} \cdot 27\%) + (\text{Semester Exam} \cdot 20\%) = \text{Semester Grade}$$

Due Dates: Work will be due by the end of the class period on the due date assigned. **Late Work - Students may be assessed a penalty of no more than 30 points per day for up to one class period before a zero may be given for work not turned in on time.** Work turned in the day due but after the end of class will be considered late work and assessed a 30-point penalty (if you scored a 100 you will get a 70). Late work turned in the next scheduled class period will be assessed a 60-point penalty (if you scored a 100 you will get a 40).

Reading/Writing: Critical reading and writing is an essential skill to be successful in any AP course, AP Exam, college course, and in the work force. There will be reading and writing assignments that are crucial to participating in class discussion and activities.

Quizzes: There will be a weekly reading quiz as well as quizzes on notes or labs. Be prepared by completing daily assignments and taking good notes. I reserve the right to give unannounced pop quizzes.

Laboratory and Field Work: Lab safety is of the utmost importance and is handled separately. **A lab safety contract signed by a parent or guardian will be required and will count as your first lab grade.** See lab list provided for lab details.

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Major Assessments: There will be two major grades each grading period. Major grades are test or projects. Tests will be multiple choice, short answer and FRQ's. We will also have timed tests on occasion. There will be a comprehensive final exam given at the end of each semester unless the student is qualified for an exemption. It is important to keep all old quizzes and tests to use as a study tool for exams. The district's exemption policy will be strict.

Students who fail a major test/assessment (below 70%) will be allowed to retake or correct up to a 70% grade. This does not include semester examinations. The student must come to a minimum of 1 tutorial session after school or during advisory and must complete the retest prior to the end of the grading period unless the student meets district criteria from the district's absent/make-up guidelines. Retest will be taken after school unless arrangements have been made between myself, the parents, and the Academic Associate Principal.

Absences/Tardies – See student handbook for district attendance policies. It is YOUR responsibility to get any missed information, which includes but is not limited to warm-ups, notes, and assignments. **Being absent on a review day does not entitle you miss the test or quiz the following class.** You will still be expected to take the test. Make-up for daily work/homework will follow the district's guidelines: *When absent, the student is afforded the number of days missed plus one additional day to turn in makeup work. [A/B Block Example: A student misses Monday and Tuesday of the week and he/she returns on Wednesday of that same week. Student work from Monday's absence would be considered late after Friday and student work from Tuesday's absence would be considered late after the following Monday.]* A student who does not make up assigned work within the time allotted by the teacher will receive a grade of zero for the assignment. It is imperative you attend tutorials if you are absent!

All tardies after 3 will result in a referral and the assistant principal will determine the appropriate course of action. Be aware of the following statement in the student handbook: **Excessive tardies may result in an alternative placement. Five tardies or more within a 6-month period may result in truancy charges being filed with the juvenile courts. (TEC 25.095)*

- NOTE:
- Tardies are cumulative per semester
 - "No show" to D Hall will result in additional disciplinary action which may include AC Placement
 - Two tardies in one day = may be placed in AC for one day

Academic Dishonesty: Cheating and plagiarism will not be tolerated. Assignments that use the internet as a source must include a citation/credit if information is copied and pasted. Lab discussion and conclusions MUST be in your own words. District policies as outlined in the student handbooks will be followed.

Miscellaneous - Get your sleep at home and not in my class. Put your make-up on at home and not in my class. Do not brush your hair or spray perfume in my classroom. No one will be permitted to go to the bathroom during instructional time unless it is an emergency. Unless permission you may not have on earphones/buds. I will confiscate them until the end of the period. No food or drink other than bottled water. During labs you may not have bottled water.

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**THE INFORMATION BELOW IS IMPORTANT TO MAINTAINING GOOD COMMUNICATION.
PLEASE COMPLETE ALL THE INFORMATION TO THE BEST OF YOUR ABILITY**



PARENTS, read the information in this letter carefully. Please follow the link <http://goo.gl/1a7GSh> or scan the QR code to complete a GoogleDoc information sheet by Friday, September 2, 2016. Your response will count as $\frac{1}{2}$ of your student's first daily grade. I will reply to each submission. *If you do not receive a reply, please re-submit!*



STUDENTS, read the information in this letter carefully. Please follow the link <http://goo.gl/wpcc5t> or scan the QR code to complete a GoogleDoc information sheet by Friday, September 2, 2016. Your response will count as $\frac{1}{2}$ of your first daily grade. I will reply to each submission. *If you do not receive a reply, please re-submit!*

