<u>Course Description</u> - 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://drive.google.com/file/d/0BwJxzs-5FFJ_RnRCaDZ3cktXem8/view?usp=sharing

<u>**Tutoring</u>** - 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 <u>mariafechu@misdmail.org</u> 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.</u>

Textbook: Texas Environmental Science Student Edition by Heithous & Arms. You will be given student access online. I will notify you in the beginning of the year and update you on this.

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

- (1) Skyward: <u>http://www.mansfieldisd.org/skyward.htm</u> This is our grade book system. Your grade should be monitored frequently there should be **no surprises**!!!
- (2) Our class website: <u>https://mansfieldisd.instructure.com/login/ldap</u> 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 <u>http://www.bozemanscience.com/ap-environmental-science</u> This website contains video lessons we will utilize. It has an enormous amount of information!!!

PLEASE UTILIZE THESE RESOURCES!!!

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

- Respect
 - \circ 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)
 - o 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.

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.

<u>Recommended Materials -</u> 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.

<u>Course Outline</u> - 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
 Intro and Lab safety Review Biology and Chemistry Human Population (III-Population, B-Human Population, 1- Human Population Dynamics, 2-Population size,3-Impact of population growth) Population Distribution and Urbanization (IV-Land and Water Use, D-Other land Use, 1- Urban Development, 2-Transportation Infrastructure) Case Study: Megacity/Tragedy of the commons Ecosystems Introduction (II-The Living World, A-Ecosystem Structure,) Biodiversity (II-The living world, C-Ecosystem Diversity & VII-Global Change, C-Loss of Biodiversity, 1- Habitat Loss, 2-Maintenance through conversation, 3-Relevant laws) Case Study: Ecobottle/Aquaponics 	Population Concepts(III-Population, A-Population Biology Concepts)Flow of energy(II-The Living World, B-Energy Flow)Ecosystems Relationships(II-The Living World, A-Ecosystem structure)Ecological Disturbances & Succession(II-The Living World, D-Natural Ecosystem Change)Ecological changes: Native vs Invasive(VII-Global Change, C-Biodiversity Loss, 1-Introduced Species)Biogeochemical Cycles(II-The Living World, E-Natural Biogeochemical Cycles)Ecological Change and Conservation: (VII-Global Change, 1-Endangered and extinct species, 2-Maintenance through conservation, 3-Relevant laws and treaties)	 Water, and Water Pollution (I-Earth Systems and Resources, C-Global waters resources and Use & VI-Pollutions, A-Pollution Types, 3-Water Pollution & B- Impact on the Environment and Human Health& IV-Land and Water Use, F-Fishing) Review Earth Systems & Rock Cycles (I-Earth Systems and Resources, A-Earth Science concepts, D-Soil and Soil Dynamics) Case Study: Earthquakes and Volcanoes (TEKS 8A) and Midterm Review and Midterm

Grading Period 4	Grading Period 5	Grading Period 6

	ome to Ms. Chu's Environmental Syst	
Air, Atmosphere, Air Pollution, Global & Warming (I-Earth Systems and Resources, B-Atmosphere & VI-Pollution, A- Pollution types, 1-Air Pollution, 2- Noise Pollution, B-Impacts on the Environment and Human Health, 1-Hazards to human health, 2- Hazardous chemicals in the environment, & VII-Global Change, A-Stratospheric Ozone, B-Global Warming) Soil & Agriculture (I-Earth Systems, D-Soil and Soil Dynamics & IV-Land and Water Use, A-Agriculture, 1-Feeding a growing population, 2-Controlling pests, C-Rangelands) Case Study: Agriculture	 Land Management & waste Management (IV-Land and Water Use, B-Forestry, D-Other land use, 3-Public and Federal lands, 4-Land Conservation options, 5-Sustainable land-use strategies & VI-Pollution, A-Pollution Types, 4-Solid Waste) Nonrenewable Resources (V-Energy resources and Consumption, A-Energy Concepts, B- Energy Consumption, C-Fossil Fuel Resources and Use & IV- Land and Water Use, E-Mining) Renewable and Other Energy Resources (V-Energy Resources and Consumption, D-Nuclear Energy, E- Hydroelectric Power, F-Energy 	 Culminating End of Year Projects (All Topics) Review, AP test and Final Exam

<u>Assessment Policy</u> – each grading period shall be evaluated as follows:

The semester grade will be calculated as follows:

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

The district high schools use a weighted numerical grading system.* The following chart reflects the MISD grading system for grades 9-12:

А	90-100
В	80-89
с	70-79
F	Below 70

An "Incomplete" (I) reflects incomplete student work and is not considered an academic grade.

Welcome to Ms. Chu's Environmental Systems !

<u>Due Dates:</u> 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).

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

<u>Quizzes:</u> 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.

<u>Major Assessments</u>: 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 districts 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. Students are expected to make arrangements with the teacher to retake or correct a major test/assessment. Students are encouraged to participate in tutoring opportunities before retaking a test.

All retakes or corrections must be completed prior to the end of each six week grading period unless the student is afforded time, after the six week grading period, as a result of the district's absent/make-up guidelines.

<u>Absences/Tardies</u> – 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 Mondays absence would be considered late after Friday and student work from Tuesdays absent would be considered late after 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

Welcome to Ms. Chu's Environmental Systems !

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.

<u>Miscellaneous</u> - 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.

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. <u>I will reply to each submission</u>. 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 ½ of your first daily grade. <u>I will reply to each submission.</u> If you do not receive a reply, please re-submit! Welcome to Ms. Chu's Environmental Systems !

