**Environmental Science Course Syllabus**

**Mrs. Natasha Capell**

**253-2377**

**2016-2017 School Year**

Students, Parents, and Guardians,

Welcome to Environmental Science at TCHS! I have spent the last 20+ years learning new and exciting things in science and I am looking forward to helping students learn the skills to “think like a scientist.”

I have a Bachelor’s degree in Biology and two Master’s degrees (Biology & Science Teaching). I taught high school biology for 7 years at Unity High School before taking some time off to begin my PhD in science education. I am actively involved in science curriculum development with researchers at UIUC and I will be bringing many of these curriculum units to my new classroom in Tuscola.

You can find science news in the headlines every day. In my class, students will be learning about current topics in environmental science and engaging in units that will allow them to critically evaluate science-themed news that they encounter in their daily lives. In these units students will study topics including: how range shifts of insect vectors and changing habitat modification is leading to the emergence and spread of infectious disease, ecosystem wellness and invasive species, importance of wetlands, and how we can use ecological concepts to guide engineering design.

**Materials needed:**

* Binder (1”) – for class handouts (dividers would be helpful)
* Notebooks to record science ideas, concept maps, lab data
* Colored pencils (for concept maps, drawings, scientific modeling)
* Pen/pencil
* Ruler
* Access to Google classroom

Bring materials to class every day. You will receive many handouts in this class (we are not using a textbook) and you need to stay organized.

**General Grading policies:**

**Your grade in Environmental Science will come from the following:**

* In-class group work (majority of work will be done in groups)
* Presentations
* Discussions
* Homework assignments – including weekly science news summaries
* Lab work
* Quizzes, tests, semester exam

**THINK, WORK, BE AN ACTIVE PARTICIPANT, BE CURIOUS**

**Class philosophy:**

This class is all about active learning. The only way you will develop your ability to think like a scientist will be to practice science skills. You will be engaged in science activities with your peers each day. Being a passive observer is not an option.

Science is not reading a textbook and memorizing facts. The goal of this class will be to help you learn how to think like a scientist. As such you will be engaged in activities that will support this.

**Science activities you will be engaged in:**

* designing and carrying out investigations (experiments)
* collaboratively working with your peers to design and revise models
* providing thoughtful and science-based feedback for the work of your peers
* analyzing and interpreting data
* engaging in argument from evidence
* communicating scientific information to others (verbally & written).

Almost all of the activities we will be engaged in during class will be done in groups. As such, students need to be good team players.

**To develop the skills needed to be a great team player you need to:**

* come to class ready to be engaged
* work with others in a positive way
* share ideas
* constructively critique the work of others – critiques should be based on sound science reasoning, not opinions
* contribute equally in activities
* be respectful of all others in the classroom – this does not mean that you have to agree with your peers
* strive for understanding – you will need to work with your peer to develop a good understanding of science concepts.
* ask when you need help – if you don’t understand something just ask. If your group is all struggling with the same thing, ask another group. If you are still struggling ask me.

**Classroom procedures:**

**At the beginning of each class:**

1. Upon entering the classroom turn the ringer off on your phone and place it in the “Phone Zone” cubby on your table. Phones must stay in the cubbies unless we are using them for a class activity.
2. Follow the instructions on the front board to get ready for the day.
3. Hand in any homework (if assigned). Put in the correct bin on the table by the windows.

**At the end of each class: Leave your table how you found it: clean & organized**

* Clean up your area:
* Wipe down whiteboards (use provided erasers)
* Put markers back in containers

**Class Policies:**

**Late work** is defined as work that is not turned in at the BEGINNING of class on the assigned due date. Late work that is handed in by the end of class or up to one day late will be graded for **½ credit.**

**Make-up work:** Students are responsible for arranging make-up work resulting from an absence. Students will have the number of days absent to complete the make-up work for full credit.

**Cheating**: Cheating includes any form of plagiarism, copying, or falsification of work. Both parties involved in the offense will receive zero credit for the assignment in question. Copying a peer's assignment or allowing a peer to copy your assignment is an equal offense.

**Lab safety & behavior:** Laboratory investigations and other activities are the backbone of science courses. Students must conduct themselves with respect for the activity, other persons, and the equipment. If any student is acting in an inappropriate manner they will be warned unless the infraction is too severe in which case the student will be removed from the lab and assigned a replacement assignment.

**Respect:** Science should be fun and engaging, but this is only possible in a classroom atmosphere of mutual **respect and cooperation**. It is expected that students work with each other and the instructor to achieve a respectful and cooperative classroom. You will spend a large amount of time working with partners this year. I fully expect each student to contribute during activities and labs.

**Disciplinary Procedures:**

1st offense: Verbal warning

2nd offense: Parent contact & detention

3rd offense: Disciplinary Referral

**Please return this page to Mrs. Capell**

I have read and understand the procedures and policies for Environmental Science. I understand that this is a class that requires active participation and I will come to class prepared to work with my peers in a positive way each day.

**Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Student Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Parent Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Parent Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**