

**Level I: Environmental Science and Natural Resource Management**  
**Fall Semester 2015**

Center of Applied Technology-North  
Environmental Resource Management Center

Parents and Students: Please read the following with your student and sign, then keep in the three ring binder.

Teacher: Capt. Diana Lynn Muller  
Email: [dlmuller@aacps.org](mailto:dlmuller@aacps.org)  
Phone: 410-969-3100

Textbook: Environmental Science by Holt

Credits: 0.5: Environmental Science , 0.5: Environmental Resource Management

Then Environmental Resource Management Center is comprised of a classroom, two locker rooms, two large working laboratories, three greenhouses, campus wetland bog, campus forest, and campus outdoor gardens, the entire CAT-North campus is 40 acres.

**Required Supplies Clothing and Fees:**

- Flash (thumb) drive
- 1 Composition books (hard cover)- this is the Laboratory/Field Notebook
- 3-ring binder
- Black pen, red pen, pencils, colored pencils
- Shoes, work gloves, work boots, rain boots, rain coat (weather appropriate clothing for all conditions)
- **For safety reasons flip-flops, open-toed shoes, heels, ect. are not allowed in the field and laboratory**
- Locks are needed for the lockers to keep items safe.

**Brief Description**

This is a semester long course on Environmental Science, Natural Resource Management and Agricultural Sciences, which will provide students with the basic concepts and “hands-on” applications of: water resources, water quality, fisheries and wildlife management, soil analysis, agricultural science (organic vs non-organic), Farm to Table, forest management, watershed restoration, energy, and green technology. We will use a textbook for the basic outline of the principles and concepts fundamental to environmental science, with supplemental readings. .

**Objectives**

- Students will be able to perform professional basic environmental field and laboratory procedures using EPA and State of Maryland methodology.
- Students will be able to calibrate and use basic water quality field instruments.
- Students will be able to demonstrate knowledge of First-Aid, laboratory safety and basic OSHA regulations.
- Describe natural resources and management in the context of ecosystems.

- Students will be able to identify and perform basic nutrient analysis in water and soils.
- Students will be able to explain and demonstrate the fundamental concepts of Aquatic Ecosystems. Examples: freshwater systems, saltwater systems, oceanic systems, Chesapeake Bay system
- Students will be able to demonstrate the use of D-nets, kick-nets and plankton nets.
- Students will be able to demonstrate the basic identification of Maryland Chesapeake Bay Watershed plants, trees, animals
- Students will be able to explain the difference between invasive and native species.
- Students will be able to describe environmental issues, and different stakeholders.
- Students will be able to demonstrate basic mapping techniques.
- Students will be able to demonstrate basic laboratory and field safety.
- Students will collect and record data in field/laboratory notebook.
- Students will demonstrate the ability to analyze and interpret scientific data as it relates to natural resource management.

### **Grading Scale**

- A (90-100%)
- B (80-89%)
- C (70-79%)
- D (60-69%)
- E (59-50%)

### ***Category Weights***

- 15% Worksheets (class, field, lab)
- 40% Field and Laboratory Projects and Notebook
- 10% Homework (Quarter)
- 10% Quizzes
- 10% Quarter Exam
- 15% Work habits

### ***Due Dates / Late Work***

All assignments will have a due date. Assignments submitted after the due date will be penalized on a sliding scale basis. The outside date for late work to be submitted shall be five school days from the original due date.

### ***Sliding Scale***

Minus ten points for each day after the due date to a minimum grade of 50% will be assigned to assignments or assessments for which the student made a good faith effort, as determined by the teacher, to meet the basic requirements. If a student does not work on an assignment or assessment, the teacher will assign a grade of zero.

### ***Minimum Grades***

A minimum grade of 50% will be assigned to assignments or assessments for which the student made a good faith effort, as determined by the teachers, to meet the basic requirements. If a student does no work on an assignment or assessment, the teacher will assign a grade of zero.

### ***Assessment Information***

There will be a minimum of 6 separate assignments, plus the mandatory Laboratory-Field Notebook, and Quarterly Exam.

### ***ERM Policy Statement:***

A student who exhibits academic dishonesty, as determined by the teacher and administrator will receive a zero grade on the particular assessment and/ or assignment in question. Violation of the Academic Integrity Policy and Regulation may result in disciplinary action. Consequences for violations may vary according to the severity of the violation and shall follow the progressive interventions and discipline as outline in the Student Code of Conduct.

### ***CAT-North Work Habits Policy:***

Takes responsibility for lateness/absences, comes prepared for classroom/lab instruction, gives full attention to teacher, directions-instructions; works to complete all assigned tasks with minimal supervision; uses tools equipment and materials effectively and safely; completes all class and lab routines efficiently and correctly; demonstrates cooperative, positive attitude; works well as a member of student group or team; demonstrates respect for teachers, staff, and fellow students; demonstrates initiative and motivation.

0-Never, 1-Seldom, 2-Occasionally, 3-Frequently, 4-Consistently

### ***Academic Integrity (AACPS, Student Handbook, pg. 19):***

Learning occurs best in an environment with academic integrity. Academic integrity is a fundamental value of teaching, learning, and scholarship. Academic integrity is defined as exhibiting honesty in all academic exercises and assignments. Academic integrity is an integral part of promoting self-respect, trust, student achievement, and positive relationships among all stakeholders in our school community. Students are expected to exhibit academic integrity with regard to all academic exercises and assignments.

### ***Conduct in Class/Field and Laboratory:***

- Enter classroom quietly and take your seat, and wait for further instructions.
- Be respectful to other students, teachers and staff.
- No eating or drinking in the classroom or laboratory, refrain from cell phone use in classroom, field and lab.
- We will be using smart phone technology for class, field or laboratory exercises
- Safety First! Please listen closely to directions in the field, lab and classroom.
- Reading, class, lab and field assignments are very important to passing the exams, pay close attention to all material provided.
- While moving from classroom to field- do so in a quiet and orderly fashion, time is limited.

### ***Teacher Information***

Email: [dlmuller@aacps.org](mailto:dlmuller@aacps.org)

Phone: 410-969-3100

Parent/Teacher conference by appointment

Grades: ParentConnect: <https://parentconnect.aacps.org/>

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

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

**Parent Contact Information**

<b>Name</b>	<b>Phone</b>	<b>Email</b>	<b>Notes</b>