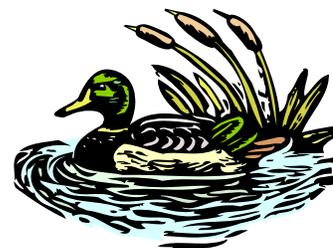


## Middle School Wetland Ecology Description of Classes

Inside/Outside

3 – 3 ½ hours

During this hand-on field study, students will be briefed on the different types of wetlands, three factors that make a wetland and how to explore and gather data in the wetland. Field and lab studies will include water quality testing, macroinvertebrate collection and identification, and plant identification. Students will determine the water quality of the wetland by analyzing and interpreting the data collected in the field. Macroinvertebrates and the biotic and abiotic factors affecting their health will be the highlighted during the lesson. Each group will receive appropriate tools to gather and analyze the data collected. The blackland prairie and wetland ecosystems will also be discussed with direct observation of the ecotone between them. Emphasis will be given to research, observation, and data collection.



### 6<sup>th</sup> Grade Science TEKS

The student, for at least 40% of instructional time, conducts laboratory and field investigations (1)

The student uses scientific practices during laboratory and field investigations. (2)

Design and implement experimental investigations by making observations, asking well defined questions, formulating testable hypotheses, and using appropriate equipment and technology. (2.B)

construct tables and graphs, using repeated trials and means, to organize data and identify patterns. (2.D)

Analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends. (2.E)

### 7<sup>th</sup> Grade TEKS

The student, for at least 40% of the instructional time, conducts laboratory and field investigations. (1)

The student uses scientific practices during laboratory and field investigations.

Plan and implement comparative and descriptive investigations by making observations, asking well defined questions, and using appropriate equipment and technology. (2.A)

Design and implement experimental investigations by making observations, asking well defined questions, formulating testable hypotheses, and using appropriate equipment and technology. (2.B)

D) construct tables and graphs, using repeated trials and means, to organize data and identify patterns. (2.D)

Analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends. (2.E)

Examine organisms or their structures such as insects or leaves and use dichotomous keys for identification. (11.A)

Organisms and environments. The student knows that populations and species demonstrate variation and inherit many of their unique traits through gradual processes over many generations. (11)



## 8<sup>th</sup> Grade Science TEKS

The student, for at least 40% of instructional time, conducts laboratory and field investigations. (1)

The student uses scientific practices during laboratory and field investigations. (2)

Plan and implement comparative and descriptive investigations by making observations, asking well defined questions, and using appropriate equipment and technology. (2.A)

Design and implement experimental investigations by making observations, asking well defined questions, formulating testable hypotheses, and using appropriate equipment and technology. (2.B)

Construct tables and graphs, using repeated trials and means, to organize data and identify patterns. (2.D)

Analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends. (2.E)

