ENVIRONMENTAL SCIENCE & TECHNOLOGY:
INTRODUCTION TO ECOLOGY
Pierce County Careers Connection
Dual Credit Articulation Agreement

Upon completion of high school course(s) equivalent to the following competencies:

- ☐ Explain the following Basic Ecology terms:
  - Organism
  - Population
  - Habitat
  - Community
  - Biotic
  - Abiotic
  - Energy
  - Ectone
  - Climate
  - Biomes
  - Biodiversity
    ~Genetic diversity
    ~Species diversity
    ~Ecological diversity
  - Indicator Species
  - Producers
  - Consumers
  - Autotrophs
  - Heterotrophs
  - Phytoplankton
  - Photosynthesis
  - Herbivore
  - Primary consumer
  - Carnivore
  - Secondary consumer
  - Detritivore
  - Omnivore
  - Scavenger
  - Decomposer
  - Biodegradable
  - Range of Tolerance
  - Tolerance limits
  - Acclimation
  - Limiting Factor
  - Trophic Levels
  - Biomass
  - Primary productivity
  - Net Primary productivity
  - Niche
  - Resource Partitioning
  - Native species
  - Exotic species
  - Succession
  - Population Dynamics
  - Redd
  - Alevin
  - Fry
  - Smolt/smolting
  - Anadromous
  - Catadromous
  - Escapement
  - ESA

  Terms: (cont'd)
  - Harvest
  - ESU
  - Hatchery
  - Hydropower
  - Habitat

- ☐ Create a visual/written diagram to illustrate the following:
  - Carbon Cycle
  - Nitrogen Cycle
  - Phosphorous Cycle
  - Hydrologic Cycle

- ☐ Describe 3 of the following Habitats and do a field investigation of those Habitats:
  - Field investigation of Second Growth Forest with field journal
  - Field investigation of Prairie Ecosystem w/ habitat restoration project
  - Field investigation of Oak Savannah with field journal
  - Field investigation of river/riparian ecosystem
  - Describe the role of fire in forest ecosystem
  - Field investigation of rocky shore with transect lab

- ☐ Define the following:
  - Lentic
  - Lotic
  - Littoral zone
  - Limnetic zone
  - Profundal zone
  - Benthic zone
  - Oligotrophic
  - Eutrophic
  - Mesotrophic
  - Thermal stratification
  - Epilimnion
  - Hypolimnion
  - Fall turnover
  - Spring turnover
  - Euphotic zone
  - Estuary
  - Bathyl
  - Abyssal
  - Sessile
  - Brackish
  - Phytoplankton
  - Zooplankton
  - Neckton
  - Benthos

- ☐ Survey Prominent Microbiology Groups and Species
  - Use compound microscope to observe sketch, prepared slides and wet mounts.
  - Prepare wet mounts

A student earning a "B" grade or better may earn college credit at the following college:

College	Course	Credits
Clover Park Technical College	ENV 109 (CIP Code: 15.0507)	4

Reviewed: 11/2016