

**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/smoltling
 - 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 "C" grade or better may earn college credit at the following college:

<u>College</u>	<u>Course</u>	<u>Credits</u>
Clover Park Technical College	ENV 108 (CIP Code: 15.0507)	5