[school district and community partner logos]

**Industry Recognized Credential (IRC): Introduction to Forest Management**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ completed 180 hours of introductory forest management field instruction through a Youth Engaged in Sustainable Systems (YESS) program. This program was offered by the [school district], Pacific Education Institute, and [community partner name].

**Supervisor Contact Information**

|  |  |
| --- | --- |
| **School District Teacher**  | **Community Partner Lead** |
| Name: | Name: |
| Title: | Title: |
| Organization: | Organization: |
| Email: | Email: |

**Summary of Projects Completed**

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| --- | --- | --- |
| **Site** | **Project Sponsor** | **Description** |
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**Agency Support**

This document was created in [year] in collaboration with: [partner organizations].

**Funding Acknowledgment**

This program is funded through a collaboration that includes Career Connect Washington, The Office of the Superintendent of Public Instruction, Pacific Education Institute, [the school district, community partner name(s), other funding] organizations.

**Validation of Competency**

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| --- | --- | --- |
| **E =** Education Session**D =** Demonstration | **O =** Observation**V =** Verbal review**T =** Written test | **E =** Excellent **N =** Needs Improvement**S =** Satisfactory **U =** Unsatisfactory |

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| **Topics and Competencies** |  | **Instruction Method(s)**  | **Evaluation Method(s)** | **Grade** | **Comments (include hours where appropriate)** |
| 1. **Safety and Well-Being**
 |
| Practice basic first aid skills through role play activities. |  |  |  |  |
| Adhere to community partner’s safety plans and protocols. |  |  |  |  |
| Use Leave No Trace and low ecological impact practices in the field. |  |  |  |  |
| Demonstrate safe crew practices (ex: listening, following directions, keeping other crew members safe). |  |  |  |  |
| Locate and track locations using a compass, map, and GPS. |  |  |  |  |
| Perform field work safely and properly (ex: pacing, adequate food, water, sleep, use of personal protective equipment, road rights-of-way). |  |  |  |  |
| 1. **Plant Identification**
 |
| Use plant characteristics and field identification keys (including dichotomous keys) to identify at least three major commercial timber species in the field.  |  |  |  |  |
| Identify traits that allow plants to adapt and compete for resources (ex: allelopathy, growth rates, seed viability and germination). |  |  |  |  |
| Use appropriate terminology and scientific names to accurately describe plants in the field. |  |  |  |  |
| 1. **Tree Measurement**
 |
| Read and interpret a given volume table. |  |  |  |  |
| Use a clinometer and diameter tape to measure trees, (ex. calculate tree heights, tree diameters, and eventual board foot volume).  |  |  |  |  |
| Establish a fixed or variable plot radius and calculate trees per acre. |  |  |  |  |
| 1. **Diseases, Insects, and Pathogens**
 |
| Identify a plant disease, insect, or pathogen based on symptoms in a local timber stand or forest. |  |  |  |  |
| Identify possible causes of disease and how disease spreads in a forest. |  |  |  |  |
| Describe protocols used in the field to prevent the spread of disease.  |  |  |  |  |
| 1. **Timber Stand Management and Silviculture**
 |
| Evaluate stand density by applying knowledge of forest inventory methods.  |  |  |  |  |
| Describe the management goals of different harvesting practices (silviculture, clear cut, thinning). |  |  |  |  |
| Calculate number of trees needed to replant a given area. |  |  |  |  |
| Conduct a basic soil test. |  |  |  |  |
| Use a topographical map to move from one location to another and identify the slope, elevation, aspect, and scale. |  |  |  |  |
| Collect data from a site survey and enter it into an Excel spreadsheet. |  |  |  |  |
| 1. **Fire Ecology**
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| In the field, list weather conditions that impact fire behavior. |  |  |  |  |
| Describe the role of fire in the life cycle of one fire-adapted species. |  |  |  |  |
| Participate in a prescribed burn and/or describe the benefits and risks of a prescribed burn. |  |  |  |  |
|  Demonstrate use of sling psychrometer to determine relative humidity. |  |  |  |  |
| 1. **Forest Practice Rules and Laws**
 |
| Read the Forest Practice Rules regarding cultural resources and discuss with community partners how these rules are followed in the field.  |  |  |  |  |
| Evaluate a road for maintenance needs (culverts, road surface, etc.). |  |  |  |  |
| Read the Forest Practice Rules regarding RMZ and wetlands and identify an RMZ and a wetland. |  |  |  |  |
| In the field, review and discuss Washington Endangered Species Act checklist. Discuss species which may be impacted by harvest. |  |  |  |  |
| 1. **Career Pathways**
 |
| Create a list of gained individual skills and experiences that are relevant to natural resource jobs. |  |  |  |  |
| Complete a practice job application. |  |  |  |  |
| Produce clear, reasoned and coherent written and visual communication in a mock job interview for a natural resources position. |  |  |  |  |

Community Partner Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date of Completion\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Teacher Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date of Completion \_\_\_\_\_\_\_\_\_\_\_\_\_