[school district and community partner logos]

**Industry Recognized Credential (IRC): Advanced Urban and Community Forestry**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ completed 180 hours of advanced urban and community foresty course activities This program was offered by [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: |

|  |
| --- |
| **Industry Partner:** |
| Name: |
| Title: |
| Organization: |
| Email: |

**Summary of Projects**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Site** | **Project Sponsor** | | **Description** | |
|  |  | |  | |
|  |  | |  | |
|  |  | |  | |
|  |  | |  | |
|  |  | |  | |
|  | |  | |  | |

**Agency Support**

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

**Funding Acknowledgment**

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

**Safety,**

**Validation of Competency**

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Topics and Competencies**  **(Light gray highlights those competencies that Industry partners assess)** |  | **Instruction Method(s)** | **Evaluation Method(s)** | **Grade** | **Hours** |
| 1. **Safety, Well-Being, and Teamwork** | |  |  |  |  |
| Receive certification in basic first aid | |  |  |  |  |
| Adhere to community partner’s safety plans (job briefings) and protocols. | |  |  |  |  |
| Use Leave No Trace and low ecological impact practices in the field. | |  |  |  |  |
| Demonstrate safe crew practices (includes skills in listening, following directions, keeping other crew members safe). | |  |  |  |  |
| Locate and track locations using a compass, map, and GPS. | |  |  |  |  |
| Demonstrate safe lifting and ladder safety as stated in the ANSI standards C.1 and 7.5 | |  |  |  |  |
| Role play how to prevent slipping, trips, and falls on wet surface | |  |  |  |  |
| Identify the signs of hypothermia, dehydration, heat exhaustion, and breathing issues due to poor air quality (smoke) | |  |  |  |  |
| Perform field work safely and properly (ex: pacing, adequate food, water, sleep, and use of personal protective equipment including head and hearing protection and proper footwear). | |  |  |  |  |
| Demonstrate an understanding of fundamental electrical hazard safety awareness as described in ANSI 4.1 | |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **2. Trees and People** | | | | |
| Demonstrate understanding of at least one site specific management challenge (ex: Addressing community needs, regional planting priorities, stakeholder engagement). |  |  |  |  |
| Engage with a local community organization that plants trees |  |  |  |  |
| Identify cultivars or varieties bred/chosen for different cultural uses. |  |  |  |  |
| Create a piece of media that instills a sense of civic responsibility in citizens for trees in their community. |  |  |  |  |
| Evaluate the impact of increasing the tree canopy in a section of your community.  Develop predictions for how managing the urban forests of your community will change as the tree canopy increases |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **3. Plant Identification and Taxonomy** | | | | |
| Explain to a community member the beneficial characteristics of a tree from a human perspective and how this information impacts decision-making as to placement in an urban and community setting |  |  |  |  |
| Identify dominant plant species to Family or Genus through images and/or collected specimens by applying understanding of identifying physical features. |  |  |  |  |
| Explain difference between native, non-native, invasive, and noxious species and the potential plant hazards of these species. |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **4. Tree Biology** | | | | |
| Describe basic tree structures and their functions specifically the root structure of trees |  |  |  |  |
| Research at least one example of a local municipal project or initiative related to planting trees resilient to a future climate. |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Industry Assessed** | | | | |
| Use data such as stormwater attenuation rates, carbon sequestration rates and/or urban heat island effect to determine which tree species are best for solving a local environmental problem |  |  |  |  |
| Describe the defense mechanisms of at least one local tree species against pathogens |  |  |  |  |
| Predict how environmental factors could affect a tree’s survival by impacting photosynthesis and respiration |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **5. Tree Planting and Care** | | | | |
| Determine how many trees can be planted in an area based on potential height, canopy, etc. |  |  |  |  |
| Evaluate soil profile (pH, texture, etc.) to inform decisions on soil augmentation and how human activity impacts soil profiles |  |  |  |  |
| Identify electrical hazards (call before you dig) around the planting area |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Industry Assessed** |  |  |  |  |
| Demonstrate proper planting techniques |  |  |  |  |
| Practice basic pruning technique. |  |  |  |  |
| Perform tree health assessment for biotic and abiotic damage. |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **6. Remote Sensing/Data Analysis – Industry Assessed** | | | | |
| Use coordinate points to locate a tree (a legal description and a waypoint in GIS) and make projections for tree planting considerations (ex. Will the tree grow to be too close to the building?) |  |  |  |  |
| Estimate full stand composition using industry-standard sample methods. |  |  |  |  |
| Conduct a basic planting site analysis. |  |  |  |  |
| Use age composition data of a stand to make recommendations based on expected changes to the stand over time |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **7. Career Preparation** | | | | |
| 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/or visual communication in a mock job interview for a natural resources position. |  |  |  |  |

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

Industry Partner Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date of Completion \_\_\_\_\_\_\_\_