## Forestry Alignment Checklist

| Lesson                                            | Task       | Met<br>(Y/N) | ACOS<br># | Standard                                                                                                                                                                                                                           |
|---------------------------------------------------|------------|--------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Foundation                                        | al Standar |              | #         |                                                                                                                                                                                                                                    |
| 1.07, 6.02,<br>6.03                               |            |              | 1         | Incorporate safety procedures in handling, operating, and maintaining tools and machinery; handling materials; utilizing personal protective equipment; maintaining a safe work area; and handling hazardous materials and forces. |
|                                                   |            | - <b>I</b>   | Notes     |                                                                                                                                                                                                                                    |
| 8.01, 8.02,<br>8.03, 8.04,<br>8.05, 8.06,<br>8.07 |            |              | 2         | Demonstrate effective workplace and employability skills, including communication, awareness of diversity, positive work ethic, problem-solving, time management, and teamwork.                                                    |
|                                                   |            |              | Notes     |                                                                                                                                                                                                                                    |
| 8.01, 8.02,<br>8.03, 8.04,<br>8.05, 8.06,<br>8.07 |            |              | 3         | Explore the range of careers available in the field and investigate their educational requirements, and demonstrate job-<br>seeking skills including resume-writing and interviewing.                                              |
|                                                   |            | 1            | Notes     |                                                                                                                                                                                                                                    |
| Student<br>Orientation                            |            |              | 4         | Demonstrate digital literacy by using digital and electronic tools appropriately, safely, and ethically.                                                                                                                           |
|                                                   |            | 1            | Notes     |                                                                                                                                                                                                                                    |
| 8.07                                              |            |              | 5         | Participate in a Career Technical Student Organization (CTSO) to increase knowledge and skills and to enhance leadership and teamwork.                                                                                             |
|                                                   |            | 1            | Notes     |                                                                                                                                                                                                                                    |
| 8.07                                              |            |              | 6         | Participate in Supervised Agricultural Experiences and/or work-based, experiential, and service learning.                                                                                                                          |
|                                                   |            | •            | Notes     |                                                                                                                                                                                                                                    |

| Safety                             |           |       |                                                                                                                                                             |
|------------------------------------|-----------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.06                               |           | 1     | Identify potential hazards to individuals working in Alabama forests.<br>Examples: topographic hazards, venomous snakes, stinging insects, poisonous plants |
|                                    |           | Notes |                                                                                                                                                             |
| 1.07                               |           | 1a    | Describe methods of avoiding potential hazards in Alabama forests.                                                                                          |
|                                    |           | Notes |                                                                                                                                                             |
| History                            |           |       |                                                                                                                                                             |
| 1.01, 1.02,<br>1.03, 1.04,<br>1.05 |           | 2     | Describe historical events that have influenced forestry in Alabama and the United States.                                                                  |
|                                    |           | Notes |                                                                                                                                                             |
| Dendrology                         |           |       |                                                                                                                                                             |
| 2.01, 2.02                         |           | 3     | Describe the parts of a tree and their functions.                                                                                                           |
|                                    |           | Notes |                                                                                                                                                             |
| 2.05, 2.06                         |           | 4     | Identify common tree species of Alabama by their common and scientific names.                                                                               |
|                                    |           | Notes |                                                                                                                                                             |
| 2.03, 2.04                         |           | 4a    | Compare and contrast characteristics of hardwood and softwood trees, and gymnosperms and angiosperms.                                                       |
|                                    |           | Notes |                                                                                                                                                             |
| Silviculture F                     | Practices |       |                                                                                                                                                             |
| 3.06                               |           | 5     | Compare and contrast artificial and natural reforestation methods.                                                                                          |
|                                    |           | Notes |                                                                                                                                                             |
| 3.07                               |           | 5a    | Identify sources of tree seedlings.                                                                                                                         |
|                                    |           | Notes |                                                                                                                                                             |
| 3.07                               |           | 5b    | Describe proper methods for the handling and care of seedlings.                                                                                             |

|                        | Notes |                                                                                                                           |
|------------------------|-------|---------------------------------------------------------------------------------------------------------------------------|
| 3.07                   | 5c    | Compare methods of hand and mechanical planting of seedlings, discussing the advantages and disadvantages of each method. |
|                        | Notes |                                                                                                                           |
| 3.03, 3.04             | 6     | Obtain and share information on the importance of prescribed burning.                                                     |
|                        | Notes |                                                                                                                           |
| 3.01                   | 7     | Compare and contrast habitats of major forest species in Alabama.                                                         |
|                        | Notes |                                                                                                                           |
| 3.02, 3.05,<br>6.04    | 8     | Explain the various management objectives of forest landowners.<br>Examples: timber, wildlife, recreation, aesthetics     |
|                        | Notes |                                                                                                                           |
| 3.06                   | 9     | Identify factors that should be considered before establishing a forest.                                                  |
|                        | Notes |                                                                                                                           |
| 6.01                   | 10    | Compare methods of harvesting timber, including clear, selection, shelterwood, and seed tree cutting.                     |
|                        | Notes |                                                                                                                           |
| Silviculture Practices | S     |                                                                                                                           |
| 4.01, 4.02             | 11    | Describe types of forest fires and explain the methods of controlling them.                                               |
|                        | Notes |                                                                                                                           |
| 4.01, 4.02             | 11a   | Describe the concepts and methods involved in scheduling and conducting controlled burns.                                 |
|                        | Notes |                                                                                                                           |
| 4.03                   | 12    | Identify the major insects and diseases that damage forest trees in Alabama and explain methods of controlling them.      |
|                        | Notes |                                                                                                                           |
| 4.04                   | 13    | Identify undesirable and invasive plant species and explain methods of controlling them.                                  |
|                        | Notes |                                                                                                                           |

| 4.05         |            |           | 14    | Research and share information about conservation easements, land trusts, and other means of preserving forests and other wild areas. |
|--------------|------------|-----------|-------|---------------------------------------------------------------------------------------------------------------------------------------|
|              |            |           | Notes |                                                                                                                                       |
| Forestry Equ | uipment    |           |       |                                                                                                                                       |
| 6.01         |            |           | 15    | Identify types of tree-harvesting equipment and explain their uses.                                                                   |
|              |            |           | Notes |                                                                                                                                       |
| 6.02         |            |           | 16    | Demonstrate the use of forestry hand tools, including pruning saws, bow saws, loppers, and brush cutters.                             |
|              |            |           | Notes |                                                                                                                                       |
| 6.03         |            |           | 17    | Demonstrate procedures for adjusting, operating, and maintaining a chain saw.                                                         |
|              |            |           | Notes |                                                                                                                                       |
| Forest Produ | ucts and N | larketing |       |                                                                                                                                       |
| 7.01         |            |           | 18    | Describe chemical and physical properties of wood.                                                                                    |
|              |            |           | Notes |                                                                                                                                       |
| 7.02         |            |           | 19    | Identify primary and secondary products produced from wood.<br>Examples: primary - lumber, timber; secondary - paper, pine straw      |
|              |            |           | Notes |                                                                                                                                       |
| 7.03         |            |           | 20    | Analyze characteristics of lumber to determine grade.                                                                                 |
|              |            |           | Notes |                                                                                                                                       |
| 7.04         |            |           | 21    | Describe wood treatment processes and discuss environmental issues involved in their use.                                             |
|              |            |           | Notes |                                                                                                                                       |
| Tree Measu   | rement     |           |       |                                                                                                                                       |
| 5.01         |            |           | 22    | Demonstrate the use of tree measurement tools.                                                                                        |
|              |            |           | Notes |                                                                                                                                       |

| 5.01, 5.02,<br>5.03, 5.04,<br>5.05 | 22a   | Describe techniques for measuring tree diameter at breast height (DBH.)                                                                                   |
|------------------------------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                    | Notes |                                                                                                                                                           |
| 5.01, 5.02,<br>5.03, 5.04,<br>5.05 | 22b   | Describe techniques for measuring total tree height.                                                                                                      |
|                                    | Notes |                                                                                                                                                           |
| 5.01, 5.02,<br>5.03, 5.04,<br>5.05 | 22c   | Describe techniques for measuring pulpwood at marketable height.                                                                                          |
|                                    | Notes |                                                                                                                                                           |
| 5.01, 5.02,<br>5.03, 5.04,<br>5.05 | 22d   | Describe techniques for measuring saw logs.                                                                                                               |
| i                                  | Notes |                                                                                                                                                           |
| Mapping                            |       |                                                                                                                                                           |
| 5.06, 5.07                         | 23    | Interpret map characteristics and features.                                                                                                               |
|                                    | Notes |                                                                                                                                                           |
| 5.06, 5.07                         | 23a   | Demonstrate the use of mapping tools, including direction, elevation, and distance-reading tools.                                                         |
|                                    | Notes |                                                                                                                                                           |
| 5.08                               | 24    | Compare and contrast the types and functions of precision and advanced technologies that are used in mapping of the forest.<br>Examples: GIS, GPS, drones |
| '                                  | Notes |                                                                                                                                                           |