Applicable State of Michigan Grade Level Content Expectations (GLCEs)

Below is a list of content standards, statements, and grade level expectations applicable to the program “Plant Identification and Ecology.”

Grade Levels 3-7:
Note: No GLCE Standards are available for Grade 8

Michigan Grade Level Content Expectations: Science

- **Discipline 1: Science Processes**
  - **K-7 Standard: Inquiry Process (IP)**
    - **Grades 3-4** Expectations:
      - S.IP.03.11 & S.IP.04.11-Make purposeful observation of the natural world using the appropriate senses.
      - S.IP.03.12 & S.IP.04.12-Generate questions based on observations.
      - S.IP.03.14 & S.IP.04.14-Manipulate simple tools that aid observation and data collection (for example: hand lens, balance, ruler, meter stick, measuring cup, thermometer, spring scale, stop watch/timer, graduated cylinder/beaker).
    - **Grades 5-7** Expectations:
      - S.IP.05.11, S.IP.06.11 & S.IP.07.11-Generate scientific questions based on observations, investigations, and research.
      - S.IP.05.13, S.IP.06.13 & S.IP.07.13-Use tools and equipment (spring scales, stop watches, meter sticks and tapes, models, hand lens) appropriate to scientific investigations.
  - **K-7 Standard: Inquiry Analysis and Communication (IA)**
    - **Grades 3-4** Expectations: General Concepts of Above Standard Covered.
    - **Grades 5-7** Expectations:
      - S.IA.05.13, S.IA.06.13 & S.IA.07.13 Communicate and defend findings of observations and investigations using evidence.

- **Discipline 3: Life Science**
  - **K-7 Standard: Organization of Living Things (OL)**
    - **Grade 3** Expectation:
      - L.OL.03.41 Classify plants on the basis of observable physical characteristics (roots, leaves, stems, and flowers).
    - **Grade 4** Expectation:
      - L.OL.04.15 Determine that plants require air, water, light, and a source of energy and building material for growth and repair.
    - **Grade 5** Expectations: General Concepts of Above Standard Covered.
    - **Grade 6** Expectations:
      - L.OL.06.51 Classify producers, consumers, and decomposers based on their source of food (the source of energy and building materials).
      - L.OL.06.52 Distinguish between the ways in which consumers and decomposers obtain energy.
Grade 7 Expectation:
- L.OL.07.63 Describe evidence that plants make, use and store food.

K-7 Standard: Evolution (E)

Grade 3 Expectation:
- L.EV.03.11 Relate characteristics and functions of observable parts in a variety of plants that allow them to live in their environment (leaf shape, thorns, odor, color).

Grade 4 Expectation:
- L.EV.04.21 Identify individual differences (color, leg length, size, wing size, leaf shape) in organisms of the same kind.

Grade 5 Expectation:
- L.EV.05.12 Describe the physical characteristics (traits) of organisms that help them survive in their environment.

Grades 6-7 Expectations: General Concepts of Above Standard Covered.

K-7 Standard: Ecosystem (EC)

Grades 3-5, 7 Expectations: General Concepts of Above Standard Covered.

Grade 6 Expectations:
- (see L.EC.M.1) L.EC.06.11 Identify and describe examples of populations, communities, and ecosystems including the Great Lakes region.
- (see L.EC.M.2) L.EC.06.22 Explain how two populations of organisms can be mutually beneficial and how that can lead to interdependency.
- (see L.EC.M.3) L.EC.06.31 Identify the living (biotic) and nonliving (abiotic) components of an ecosystem