

# **Agriculture, Food, and Natural Resources (Grades 6-12) Evaluation Worksheet** Demonstration of Professional Competencies and Depth of Content Knowledge

## **Applicant**

Legal name:  Click or tap here to enter text. Date: Click or tap here to enter text.

## **Requirements**

Content competency must be demonstrated *for each row within each table* by at least one of the following measures (see below).

In the “Course #/Title/Grade” column, you may include any classes you have taken where you have earned a grade of B- or higher. In your submission, you must also upload official transcripts and an official course syllabus from the term in which the course was taken. If you include multiple transcripts, please specify on which transcript reviewers can find the listed course.

You may consider supplementing your submission with portfolio artifacts that demonstrate professional competencies and content knowledge, including candidate-created unit plans, teaching videos, demonstrated classroom experience in which a rubric review was utilized, etc. These will be listed in the “Portfolio Artifact(s)” column. All portfolio evidence *must* be accompanied by written rationale, indicating how each artifact provided shows content competency of the corresponding concept. Please note, portfolio artifacts are meant to show that you know the *content*, not pedagogy, of your desired endorsement area.

In addition, it is key to use a 1:1 naming convention between the items listed in the artifacts column and the documents you upload in the Colorado Online Licensing system (COOL). For instance, if you write “Animal Systems Unit Plan” on the worksheet, there must be a corresponding upload titled “Animal Systems Unit Plan” in COOL.

The same artifact/course *may* be used to show competency for multiple concepts; however, the written rationale for portfolio artifacts must be specifically aligned to the concept in that row. If you are submitting a portfolio, multiple pieces of evidence are encouraged per row.

**Agriculture, Food, and Natural Resources:**

* Coursework: Minimum of B-; syllabi and official transcript required
* Portfolio: Artifacts demonstrating attainment of standards outlined below

\*\*\* If you hold a bachelor’s degree or higher in Agriculture, you may submit your application in COOL without doing Multiple Measures.

\*\*\* If you have 24 semester hours of coursework as identified on the [Agriculture Endorsement Worksheet](https://www.cde.state.co.us/cdeprof/endorsementrequirements), you may submit your application in COOL without doing Multiple Measures.

## **Agriculture, Food, and Natural Resources**

### **Agribusiness Systems:**

| **Candidates must demonstrate knowledge of each of the following concepts:** | **Course #/Title/Grade** | **Portfolio Artifact(s)**  **AND**  **Rationale** |
| --- | --- | --- |
| Agribusiness industry to include standards, business models, marketing, management skills, and record keeping | Click or tap here to enter text. | Click or tap here to enter text. |
| Financial aspects of agribusiness | Click or tap here to enter text. | Click or tap here to enter text. |

### **Animal Systems:**

| **Candidates must demonstrate knowledge of each of the following concepts:** | **Course #/Title/Grade** | **Portfolio Artifact(s)**  **AND**  **Rationale** |
| --- | --- | --- |
| History and trends of animal systems industry as well as animal production and management | Click or tap here to enter text. | Click or tap here to enter text. |
| Classification of animals, animal behavior, reproduction, and proper health care and nutrition | Click or tap here to enter text. | Click or tap here to enter text. |
| Proper design, facility use, and equipment use for safe and efficient production | Click or tap here to enter text. | Click or tap here to enter text. |
| Environment, animal welfare and rights, as well as associated responsibilities as a producer | Click or tap here to enter text. | Click or tap here to enter text. |

### **Food Science and Biotechnology Systems:**

| **Candidates must possess knowledge of each of the following concepts:** | **Course #/Title/Grade** | **Portfolio Artifact(s)**  **AND**  **Rationale** |
| --- | --- | --- |
| Issues and trends affecting food products and the processing industry | Click or tap here to enter text. | Click or tap here to enter text. |
| Food safety, sanitation, and management practices | Click or tap here to enter text. | Click or tap here to enter text. |
| Innovations, historical developments, applications, and ethics of biotechnology | Click or tap here to enter text. | Click or tap here to enter text. |
| Genetic engineering | Click or tap here to enter text. | Click or tap here to enter text. |

### **Environmental and Natural Resource Systems:**

| **Candidates must possess knowledge of each of the following concepts:** | **Course #/Title/Grade** | **Portfolio Artifact(s)**  **AND**  **Rationale** |
| --- | --- | --- |
| Environmental science and natural resources | Click or tap here to enter text. | Click or tap here to enter text. |
| Proper safety and protective equipment usage | Click or tap here to enter text. | Click or tap here to enter text. |
| Sustainable production, environmental analytical procedures, policies and regulations | Click or tap here to enter text. | Click or tap here to enter text. |

### **Plant Systems:**

| **Candidates must possess knowledge of each of the following concepts:** | **Course #/Title/Grade** | **Portfolio Artifact(s)**  **AND**  **Rationale** |
| --- | --- | --- |
| Plant science, systems, classification, anatomy, soil characteristics | Click or tap here to enter text. | Click or tap here to enter text. |
| Plant production and management and associated environmental factors for horticultural and agronomic crops | Click or tap here to enter text. | Click or tap here to enter text. |

### **Power, Structural, and Technical Systems:**

| **Candidates must possess knowledge of each of the following concepts:** | **Course #/Title/Grade** | **Portfolio Artifact(s)**  **AND**  **Rationale** |
| --- | --- | --- |
| Various power and energy principles, sources, and systems | Click or tap here to enter text. | Click or tap here to enter text. |
| Proper management of hazardous materials and safe operation of equipment | Click or tap here to enter text. | Click or tap here to enter text. |
| Principles of mechanics, structures, metal/welding, and water systems | Click or tap here to enter text. | Click or tap here to enter text. |

### **Leadership and Career Development:**

| **Candidates must possess knowledge of each of the following concepts:** | **Course #/Title/Grade** | **Portfolio Artifact(s)**  **AND**  **Rationale** |
| --- | --- | --- |
| Leadership principles, career development and opportunities, communication skills, and research skills | Click or tap here to enter text. | Click or tap here to enter text. |
| The National Future Farmers of America (FFA) Organization and supervised agricultural experiences, as well as local programs and management | Click or tap here to enter text. | Click or tap here to enter text. |

08.01.2025 | Determination of qualification will be made by CDE upon evaluation of a complete submission