



## **Form 4.1 Performance Indicators and Results for Program Learning Outcomes November 2021**

This form is a critical component that identifies the metrics used to document attainment of the required Program Learning Outcomes (PLO's). In many cases your existing Programmatic Assessment measures can be used in documenting this requirement. For each PLO, you are asked to identify one or more measurable metrics used, and the process of their measure, to evaluate the attainment of that PLO. Refer to the Standards Section V.a. for expectations and definitions.

Metrics are characterized as a Direct or Indirect measurement process (1a). Direct measures are defined as evaluation of student products or abilities that measure their accomplishment of the PLO. Indirect measures are the assessment of perceptions of a student's ability to accomplish the PLO. Define the measurable metric in 1b. Item 1c defines the target/goal of the measured criteria and 1d reports the current status of the program towards meeting this target. If a metric is currently part of the existing Assessment documents, identify where in the document (provided in Appendix 4.2) it is found (1e). Many examples of measurable performance metrics (direct and indirect) are available in the literature. You are also encouraged to use innovative and novel measures specifically designed for your program as well.

Some PLO's will have multiple Performance Metrics and all PLO's must have at least 1. Metrics associated with specific courses will also link to the curriculum mapping (Tables 4.4 and 4.5) which identify courses within the curriculum where assessment of performance metrics occur.

**Program Learning Outcome 1: Demonstrate the ability to integrate knowledge of animal science disciplines: nutrition, reproduction, physiology, breeding, genetics, meat science, animal health, food safety, animal behavior and animal well-being for the improvement of animal production practices, products and services.**

For each metric used, provide the following Information:

Performance Metric(s): (Identify the specific data collected/analyzed)

1. Identify Program's First Metric for PLO 1.
  - a. Metric Process: Direct, Indirect (select one)
  - b. Metric:
  - c. Target: (provide measurable criteria as goal/target)
  - d. Current Results: (provide results towards attainment of this metric)
  - e. If this metric is part of current Programmatic Assessment, note where it is in Appendix 4.2.
  
2. Identify Program's Second Metric for PLO 1.
  - a. Metric Process: Direct, Indirect
  - b. Metric:
  - c. Target:
  - d. Current Results:
  - e. Location in Appendix 4.2 (if applicable)

Continue this format for additional metrics used for assessing student learning for PLO 1 and for PLO 2 – PLO 7.

**Program Learning Outcome 2: Demonstrate the ability to evaluate and communicate the application of innovative technology and scientific knowledge and how it can benefit animal science and society.**

1. Identify Metric Used
  - a. Metric Process: Direct, Indirect
  - b. Metric:
  - c. Target:
  - d. Current Results:
  - e. Location in Appendix 4.2 (if applicable)

**Program Learning Outcome 3: Demonstrate the ability to implement diverse animal production systems to sustain economic and environmental resources in a socially responsible manner. This requires the ability to analyze and interpret data.**

1. Identify Metric Used
  - a. Metric Process: Direct, Indirect
  - b. Metric:
  - c. Target:
  - d. Current Results:

- e. Location in Appendix 4.2 (if applicable)

**Program Learning Outcome 4: Demonstrate critical thinking to identify, evaluate and communicate global and contemporary issues impacting animal science and production animal agriculture.**

1. Identify Metric Used
  - a. Metric Process: Direct, Indirect
  - b. Metric:
  - c. Target:
  - d. Current Results:
  - e. Location in Appendix 4.2 (if applicable)

**Program Learning Outcome 5: Communicate the contributions of animals, animal products and animal services to society across multifaceted mediums.**

1. Identify Metric Used
  - a. Metric Process: Direct, Indirect
  - b. Metric:
  - c. Target:
  - d. Current Results:
  - e. Location in Appendix 4.2 (if applicable)

**Program Learning Outcome 6: Understand how laws and regulatory issues guide the professional and ethical use of animals in society.**

1. Identify Metric Used
  - a. Metric Process: Direct, Indirect
  - b. Metric:
  - c. Target:
  - d. Current Results:
  - e. Location in Appendix 4.2 (if applicable)

**Program Learning Outcome 7: Engage in experiential learning or hands-on experience in the animal sciences that promotes lifelong learning.**

1. Identify Metric Used
  - a. Metric Process: Direct, Indirect
  - b. Metric:
  - c. Target:
  - d. Current Results:
  - e. Location in Appendix 4.2 (if applicable)